

# **Social determinants of self-rated health and cardiovascular disease among the Sami and other Arctic indigenous peoples**

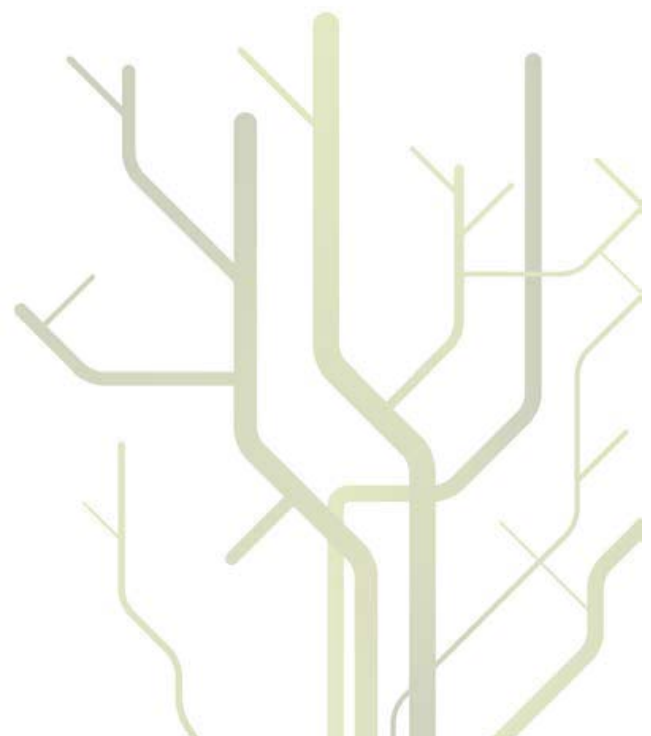
**The SLiCA study and the SAMINOR study**



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A dissertation for the degree of  
Philosophiae Doctor

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**Social determinants of self-rated health and  
cardiovascular disease among the Sami and other  
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**The SLiCA study and the SAMINOR study**

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## Table of contents

Acknowledgements .....	7
Summary .....	9
Sammendrag.....	11
List of papers.....	13
Abbreviations .....	14
1 Introduction.....	15
2 Background.....	19
2.1. The indigenous peoples: history and autonomy .....	19
2.1.1. The Iñupiat of Alaska.....	20
2.1.2. The Inuit of Greenland .....	20
2.1.3. The Sami of Norway .....	21
2.2. Cardiovascular disease and self-rated health, and their social determinants.....	24
3 Aims of the thesis.....	32
4. Material and methods.....	34
4.1. Data sources and study population .....	34
4.2. Paper I.....	34
4.2.1. Alaska.....	35
4.2.2. Greenland .....	38
4.2.3. Norway .....	40
4.2.4. Questionnaire .....	43
4.3. Papers II and III .....	45
4.3.1. Questionnaires .....	47
4.4. Statistical analyses .....	51
4.5. Ethical aspects .....	51
5. Summary of results .....	53
5.1. Paper I: Acculturation and self-rated health among Arctic indigenous peoples: a population-based cross-sectional study .....	53
5.2. Paper II: Marginalisation and cardiovascular disease among rural Sami in Northern Norway: a population-based cross-sectional study .....	54
5.3. Paper III: Ethnic difference in the prevalence of angina pectoris in Sami and non-Sami populations: the SAMINOR study .....	54
6. Discussion.....	56

6.1. Methodological considerations.....	56
6.2. Selection bias.....	58
6.2.1. Paper I.....	58
6.2.2. Papers II and III.....	62
6.3. Information bias.....	65
6.3.1. Paper I.....	66
6.3.2. Papers II and III.....	67
6.4. Confounding, intermediate variables and interaction.....	71
6.4.1. Paper I.....	72
6.4.2. Papers II and III.....	74
6.5. External validity.....	75
6.6. Statistical associations.....	75
7. Brief discussion of main results and future research.....	77
8. Implications for future public health practice.....	79
9. Errata.....	81
Literature.....	82

Papers I, II and III

Appendices

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## Summary

The post-World War II years in the Arctic were characterised by an intensification of sociocultural change. Previous studies among indigenous peoples show that colonialism, rapid modernisation and subsequent marginalisation and sociocultural change are accompanied by overall ill health and a negative cardiovascular risk profile and disease burden. The aims of this thesis were to explore the relationship between acculturation and self-rated health in the Sami population of Norway and the Inuit populations of Alaska and Greenland (Paper I), assess the relationship between marginalisation and burden of lifetime total cardiovascular disease by minority/majority status in the Sami population of northern Norway (Paper II), and measure the population prevalence of angina pectoris and explore potential ethnic disparity in its distribution with regard to traditional risk factors in areas with both Sami and non-Sami populations (Paper III). Self-rated health (SRH) and cardiovascular disease (CVD) are both considered important public health indicators.

Paper I was based on data from the international research project the Survey of Living Conditions in the Arctic (SLiCA). A total of 797, 1440 and 788 persons were invited in Alaska, Greenland, and Norway, respectively (Table 2). Among these, 663 (83.2%), 1197 (83.1%) and 445 (56.5%) individuals participated, respectively. This study showed that aggregate acculturation was a strong risk factor for poorer SRH among the Greenlandic Inuit and female Iñupiat of Alaska.

Papers II and III were based on data from the population-based survey in areas with Sami and non-Sami populations (SAMINOR), conducted in 2003-2004. In the age group 36-79 years, 27,151 were invited and 16,538 (60.9%) participated. Paper II (n=4027) showed that marginalised Sami living in Norwegian dominated areas were more than twice as likely (OR 2.10) as non-marginalised Sami from Sami majority areas to report lifetime CVD. Moderate to no intermediate effects were seen after including established CVD risk factors, which suggest little difference in lifestyle related factors. Chronic stress exposure following marginalisation may however be a plausible explanation for some of the observed excess of CVD.

Paper III (n=15,206) showed an excess of angina pectoris symptoms (APS), self-reported angina, and a combination of these in Sami women and men relative to non-Sami women and men. Total cholesterol, metabolic syndrome, smoking, family history of cardiovascular disease, and moderate alcohol consumption explained little or none of the ethnic variation in APS. The excess burden of APS was in Sami women principally due to known cases of angina pectoris. In men however the discrepancy in prevalent angina symptoms may be due to an excess burden of undiagnosed disease among the Sami. These results may indicate under-utilisation of health care services among Sami men which suggest that social determinants play a role in the distribution of APS in this population. The results in Paper II also suggest that marginalisation and subsequent chronic stress may be an additional driving force influencing the population burden of lifetime cardiovascular disease among the Sami.

The results in Papers II and III shed light on important social determinants of health in the Sami population of rural Norway that may be important in explaining some of the distribution of chronic disease within this group. These are issues that need to be addressed in future research

and perhaps in public health initiatives. The results found in Paper I also support further exploration of the social determinants of ill health in other indigenous populations.

## Sammendrag

Etterkrigstiden i Arktis har vært kjennetegnet av økt sosiokulturell forandring. Forskning på urfolk viser at kolonialisme, rask modernisering og påfølgende marginalisering og sosiokulturell forandring, sammenfaller med overordnet dårligere helse og en uheldig kardiovaskulær risikoprofil og sykdomsbyrde. Hovedmålene med denne avhandlingen var å utforske sammenhengen mellom indikatorer på sosiokulturell forandring og selvrapportert helse i den samiske befolkningen i Norge og inuitbefolkningene i Alaska og Grønland (artikkel I), undersøke forholdet mellom marginalisering og prevalensen av total hjerte- og karsykdom stratifisert på samisk minoritets- og majoritetsstatus i den samiske befolkning i Nord-Norge (artikkel II), og måle prevalensen av angina pectoris, samt utforske mulige etniske forskjeller i dets fordeling med hensyn til tradisjonelle risikofaktorer i områder med samisk og ikke-samisk befolkning. Selvrapportert helse og hjerte- og karsykdom er vurdert som viktige folkehelseindikatorer.

I artikkel I ble det brukt data fra det internasjonale forskningsprosjektet Survey of Living Conditions in the Arctic (SLiCA). Totalt ble det invitert 797, 1440 og 788 personer i de respektive landene/regionene Alaska, Grønland og Norge. Blant disse deltok respektivt 663 (83.2%), 1197 (83.1) og 445 (56.5). Studien viste at overordnede indikatorer på sosiokulturell forandring er en sterk risikofaktor for dårligere SRH blant Grønlandere og kvinnelige Iñupiaq i Alaska.

I artikler II og III ble det brukt data fra befolkningsundersøkelsen i områder med samisk og ikke-samiske befolkning (SAMINOR) som ble gjennomført i 2003-2004. I aldersgruppen 36-79 år ble 27,151 invitert; blant disse deltok 16,538 (60.9%). Artikkel II (n=4027) viste at marginaliserte samer med tilhold i norskdominerte områder hadde over dobbelt så stor sannsynlighet (OR 2.10) som ikke-marginaliserte samer i samisk-dominerte områder for å rapportere hjerte- og karsykdom. Moderat eller ingen intermediær effekt var observert etter å ha inkluderte tradisjonelle risikofaktorer; dette indikerer liten forskjell i livstil. Kronisk stresseksposering som en følge av marginalisering kan imidlertid være en plausibel forklaring på noe av overvekten av observert hjerte- og karsykdom i denne gruppa.

Resultatene i artikkel III (n=15,206) viste en overvekt av angina pectoris-symptomer, selvrapportert angina og en kombinasjon av disse to målene blant samiske kvinner og menn sammenliknet med ikke-samiske kvinner og menn. Totalkollesterol, metabolsk syndrom, røyking og hjerte- og karsykdom i familien, bruk av kolesterolsenkende preparater og alkoholkonsum forklarte lite eller ingenting av den etniske variasjonen i angina pectoris-symptomer. Videre analyser viste at overvekten av symptomer blant kvinner skyldtes i all hovedsak kjent sykdom, mens den etniske forskjellen blant menn kan skyldes en overvekt av ukjent sykdom. Resultatene indikerer et underforbruk av helsetjenester blant samiske menn. Imidlertid viste resultatene i artikkel II at marginalisering og antatt påfølgende stress også kan være en tilleggsfaktor som påvirker forekomsten av hjerte- og karsykdom blant samer. Resultatene i disse artiklene kaster lys på viktige sosiale determinanter for helse i den samiske befolkninga i distrikts-Norge som muligens kan forklare noe av fordelingen av kronisk sykdom i denne gruppa. Dette er problemstillinger som bør følges opp i framtidig forskning og muligens i konkrete folkehelseiltak. Resultatene i artikkel I støtter også videre forskning på de samfunnsmessige determinantene for dårlig helse i andre urfolkspopulasjoner.



## List of papers

The thesis is based on the following papers, hereafter referred in the text as Papers I, II and III.

### Paper I

Eliassen BM, Braaten T, Melhus M, Hansen KL, Broderstad AR.

**Acculturation and self-rated health among Arctic indigenous peoples: a population-based cross-sectional study.** *BMC Public Health* 2012, 12:948. PubMed: PMID 23127197

### Paper II

Eliassen BM, Melhus M, Hansen KL, Broderstad AR.

**Marginalisation and cardiovascular disease among rural Sami in Northern Norway: a population-based cross-sectional study.** *BMC Public Health* 2013, 13:522. PubMed: PMID 23718264

### Paper III

Eliassen BM, Graff-Iversen S, Melhus M, Hansen KL, Løchen ML, Broderstad AR.

**Ethnic difference in the prevalence of angina pectoris in Sami and non-Sami populations: The SAMINOR study.**

[Submitted]

## Abbreviations

SLiCA	Survey of Living Conditions in the Arctic: Inuit, Sami and the indigenous peoples of Chukotka
SAMINOR	Population-based study of health and living conditions in areas with both Sami and Norwegian populations
IHD	Ischaemic heart disease
MI	Myocardial infarction
BMI	Body mass index
ANCSA	Alaska Native Claims Settlement Act
WWII	World War II
SRH	Self-rated health
CVD	Cardiovascular disease
HDL	High-density lipoprotein
PAR	Population attributable risk
RAQ	Rose angina questionnaire
NA	Northwest Arctic
NS	North Slope
BS	Bering Strait
AIAN	American Indians and Alaska Natives
SILA	Spoken indigenous language ability
STATA	StataCorp, College Station, TX
OR	Odds ratio
CI	Confidence interval
APS	Angina pectoris symptoms
SAP	Stable angina pectoris
MRI	Magnetic resonance imaging
CT	Computer tomography
TIA	Transient ischaemic attack
PPV	Positive predictive value
GP	General Practitioner
MuI	Multiple imputation

# 1 Introduction

The overall aim of the thesis is to assess the effects of acculturation and marginalisation on health among Arctic indigenous peoples with a special focus on the Sami of Norway, and measure the prevalence of cardiovascular disease among the Sami of rural Norway. We used data from the Survey of Living Conditions in the Arctic: Inuit, Sami and the indigenous peoples of Chukotka (SLiCA) to assess the relationship between acculturation and self-rated health among the Iñupiaq of northern Alaska, Inuit of Greenland and Sami of Norway. Data from the population-based study of health and living conditions in areas with both Sami and Norwegian populations (SAMINOR) was used to explore the relationship between marginalisation and cardiovascular disease (CVD) by Sami minority/majority status in northern Norway. The SAMINOR data was also applied to investigate potential differences in prevalence of angina pectoris in Sami and non-Sami populations in rural Norway.

The thesis is influenced by theoretical perspectives in the fields of social anthropology, sociology and social epidemiology (psychosocial theory, socio-political theory and social determinants of health theory). The many frameworks and perspectives within social epidemiology have their merits; these shall not be pinpointed but integrated in the text as a basis of the background descriptions and discussions. They all emphasise the relevance of social structures and processes in disease distribution in populations.

Arctic indigenous peoples share a common, though independently unique, history of colonialism and have throughout history been victims of state and church driven forced assimilation [1-4]. Forced assimilation has resulted in loss or extensive change of traditional practices, native languages, and norms and beliefs [5]. As part of this process, concentration of the populations in larger settlements provided most circumpolar indigenous peoples with schooling, health care, housing, water, sanitation, and imported foods and consumer products [4, 6, 7]. The post-World War II years in the Arctic were characterised by an intensification of social and cultural change [4]. Increasing urbanisation has taken place [4] and mining, industrial fishing and the discovery of oil transformed – to a varying degree – the economies [8]. Today the transition from hunting and small scale fishing to a mixed cash/harvesting economy is seen all across the Arctic [7]. This development has resulted in a rapid decline in infectious diseases and a corresponding increase in

chronic diseases such as heart disease. This development is often termed the “epidemiological transition” [9].

In the period 1959-75, ischaemic heart disease (IHD) mortality in Norway was highest in Finnmark County [10]. This led to a total of six cardiovascular screenings, the first one being conducted in 1974 and the latest in 1996. The last three surveys comprised municipalities mainly from coastal areas in Finnmark. Thus, inland areas with large Sami populations were not included [11]. In the first Finnmark study [12], Sami/Kven men aged 35-49 years reported on average a 40% higher cardiovascular risk score compared with Norwegians. The score was based on sex, serum total cholesterol, systolic blood pressure and current cigarette smoking [12]. Despite this risk profile, only 8.8 expected prevalent cases of previous myocardial infarction (MI) in Sami were observed compared with 32.4 in Norwegians ( $p>0.05$ ) [12]. Since then, several cardiovascular screenings have been conducted; prevalence and follow-up data have shown no or only minor differences in risk factors and risk of cardiovascular disease [13-17]. In these surveys, Sami ethnicity was defined as having two or more grandparents of Sami origin.

As part of the seventh cardiovascular screening in Finnmark, the SAMINOR study has shown a higher prevalence of obesity among Sami women compared with Norwegian women [18] and a somewhat higher apoB/apoA-1 ratio and cholesterol level in middle-aged Sami men and women compared with non-Sami men and women [11]. However, few general health discrepancies between Sami and ethnic Norwegians are detected today [19].

Since the 1970s the mortality rate of cardiovascular diseases in Norway has decreased, especially for myocardial infarction (MI) [20]. In terms of MI, a decrease in both mortality and morbidity for those aged  $<80$  years has been reported [21, 22]. This is mostly due to better treatment and an overall reduction in cholesterol, smoking and blood pressure [23]. However, the mean body mass index (BMI) and the amount of physical inactivity have increased. In Finnmark, the trend towards a decrease in risk factors seems to be 10 to 15 years behind other Norwegian counties and high values of cholesterol, a high smoking levels, and high consumption of unfiltered coffee are still common [20].



In terms of mortality from CVD, conflicting results have been presented on the differences between Sami and non-Sami; using Finnmark data from 1974-75, Tverdal [24] found a reduced risk for cardiovascular death in Sami men compared with Norwegian men after controlling for known risk factors. Linking the 1970 national census to the national death register, Tynes et al [25] found a slightly increased risk in Sami men and women for death due to diseases of the circulatory system. While Tverdal used the previously mentioned definition of Sami ethnicity, Tynes et al adopted a much wider definition. In Sweden a somewhat higher Sami mortality rate due to IHD in women has been reported [26, 27]. In Finland, however, a lower mortality rate from CVD among Sami has been found compared with non-Sami [28, 29].

In the past 50 years the absolute burden of mortality and morbidity has decreased substantially in the Inuit populations, measured in terms of life expectancy at birth, infant mortality rate, and in the occurrence of infectious diseases. Though a great deal of variation exists across regions and between communities, there are still considerable disparities between the health status of the indigenous populations and the general population of the nation states to which they belong [30]. The key features of the health transition experienced by the Inuit are: 1) a rapid decline in infectious diseases (such as tuberculosis), which have now stabilised at a level that remains higher than in the general national populations and 2) a corresponding increase in chronic diseases such as heart disease. The increase in chronic disease is in part due to an aging population, greater reliance on imported junk food, a decreased level of physical activity and increased prevalence of obesity [31]. However, among the most important health problems, especially in those  $\leq 35$  years of age, are the so-called social pathologies: violence, accidents, suicide, and alcohol and substance abuse [30].

The SLiCA study was initiated in 2003 and adopted by the Centre for Sami Health Research in 2006. SLiCA was not designed as an epidemiological study; the survey is an international research project on health and other aspects of the living conditions of indigenous peoples in Alaska, Canada, Greenland, Norway, Sweden and Russia. The motivation for launching SLiCA was the ambition to describe these aspects with regard to indigenous language, traditions and resource utilisation. Though disease-specific data is lacking in SLiCA, overall health measures were collected such as self-rated health. Paper I in this thesis is based on data collected among

the Iñupiaq people (Alaska), Greenlandic Inuit and Sami of Norway as detailed information on data collection and processing was available for these samples.

The Norwegian Institute of Public Health planned a seventh cardiovascular screening in Finnmark in 2000. At the same time the Centre for Sami Health Research was established as knowledge about the health and living conditions of the Sami population in Norway was limited. The collaboration between these two institutes was initiated in the SAMINOR study with the purpose of promoting more knowledge about the health issues of the Sami population which also included areas south of Finnmark [11]. The SAMINOR study enables analyses of disease-specific data.

## 2 Background

### 2.1. The indigenous peoples: history and autonomy

Indigenous livelihood systems in Northwest Alaska and Greenland are mixed cash-subsistence economies; the economy is based on hunting, trapping and fishing as well as paid work [32].

Though there are regional differences, unemployment is a problem in many Inuit communities.

Hunting and fishing are values held high among the Sami also [33]. Most Sami today work in service industries [34]; only about 3000 are associated with reindeer husbandry [35, 36].

However, the number working in the primary industries is higher among the Sami than in the Norwegian population [34]. In 2004 unemployment was generally low in Norway but higher in the northernmost regions compared with the national average [37]. The premises for good health differ between these populations and great care has been taken in data collection (Chapter 4) and analysis and interpretation of results (Chapter 6) in order to facilitate overall comparison in SLiCA.

The Inuit are a number of close related indigenous population groups inhabiting the circumpolar region in Greenland, Canada, Alaska and Siberia. In Alaska there are some 47,000 Inuit [38]. Approximately 30% of these are Iñupiat [38-40] inhabiting the northern and western coasts as far south as Norton Sound [38]. Greenland is home to about 57,000 people, of which about 90% are Kalaallit (Greenlandic Inuit). The majority of Greenland's population live on the south-central west coast. Only 3500 live on the east coast and less than 1000 are located in the far north. Kalaallisut (the Greenlandic language which is the official language in Greenland) is closely related to the Iñupiaq language spoken by Iñupiat in Alaska [41].

The Sami are an indigenous people whose settlement area covers the northern parts of Norway, Sweden and Finland, and Russia's Kola Peninsula. The traditional Sami settlement area (Sápmi) in Norway stretches from Finnmark in the north to Engerdal in Hedmark County in the south [42]. No reliable or updated demographic record on the Sami exists. The very deficient estimates of the total number of Sami in Norway usually vary between 40,000 and 50,000 [43]. Belonging

to the Finno-Ugric language group, the Sami language in Norway consists of several dialects and three distinct written languages, i.e. Northern Sami, Lule Sami and South Sami.

### **2.1.1. The Iñupiat of Alaska**

The U.S. government pursued a policy of assimilation towards Alaska Natives through schools and missions [38]; teachers were encouraged to change the Iñupiat traditional practices and the children were to be taught in the English language rather than in Iñupiaq [1]. The Iñupiaq were to be “civilised” and Christianity continued to be a powerful theme throughout the history of Alaskan indigenous education [44]. In the early 1950s a relocation programme encouraged Native Americans to leave their communities and settle in urban areas, and educational boarding schools were set up to train indigenous primary school graduates in practical arts and sciences. Until the late 1970s school facilities on Alaska’s North Slope were available only up to ninth grade and high school students had to attend boarding schools far from home [1]. Since then high schools have been established in rural villages, where Iñupiaq language and culture are incorporated in the curriculum [1]. However, the Iñupiaq language is challenged by increasing English language dominance in the public sphere [3]. The discovery of oil at Prudhoe Bay initiated the negotiations of indigenous land claims which in turn formed the basis of today’s political organisations and the passing of the Alaska Native Claims Settlement Act (ANCSA) of 1971. ANCSA transferred fee simple title to settlement lands to new for-profit corporations owned by Alaska Natives. ANCSA also extinguished aboriginal hunting and fishing rights and it failed to address the question of indigenous governance or sovereignty. However, ANCSA constituted another form of self-determination by giving Alaska Natives the opportunities for economic advancement and hence a measure of political power [45]; this has been used to support cultural and social measures contrary to the assimilationist objectives of the settlement [45, 46].

### **2.1.2. The Inuit of Greenland**

In 1979 Greenland was granted Home Rule. Today Greenlanders elect a Parliament, enact their own laws and have full autonomy in all matters except for foreign and security policy, judicial

and financial matters. Autonomy was further expanded in 2009. Greenland's economy has since WWII increasingly become dependent upon commercial fishing, which represent 90% of the region's export income (in 2000) [3]. The economy is however dependent upon subsidies from Denmark which amount to about 50% of public spending and export of fish and related products in Greenland [3, 41]. As among the Iñupiat, there are regional disparities in personal income and between Greenlanders and the non-indigenous inhabitants [41]. In the years leading up to Home Rule, the Greenlanders experienced a period of profound change over which they felt little control. Danish modernisation programmes of the 1950s and 1960s included shutting down many small settlements so that residents there could become workers in fish-processing plants in larger communities. During this period, the use of the Greenlandic language suffered at the expense of Danish, which was emphasised in school teaching as a means to assimilating the Greenlandic [3].

### **2.1.3. The Sami of Norway**

The traditional Sami settlement area in Norway is characterised by a variety in Sami population structure, language situation and traditions. Reindeer husbandry and the combination of small-scale fishing and agriculture have traditionally been the economic backbone in Sami communities [47-49]. To this day these means of livelihood remain essential for the Sami economy, culture and language. Like other indigenous peoples, the Sami have been exposed to great pressure of colonisation and assimilation; from about 1850 the Norwegian government intensified their minority policy; motivated by Social Darwinist and national romantic ideologies, the government launched several initiatives whose endpoint was to assimilate the Sami and Kven populations [50]. The efforts were first and foremost focused on the areas bordering Russia and Finland and coastal Sami areas of Northern Troms and Finnmark [47, 49-51]. By the last half of the 19<sup>th</sup> century Sami language was already in retreat from Ofoten and southwards [52]. Education became the central stage of this policy; Sami language was banned in schools, and boarding schools were set up as a means to remove Sami children from their cultural and linguistic surroundings [2, 53]. Additional initiatives were also executed within several areas, and Norwegianisation has later become the term referring to the various actions carried out in an effort to assimilate the High North and its populations [50].

Compared with the Sami population of Inner Finnmark, the coastal Sami were more susceptible to the government policy of assimilation. From 1835 to 1900 the total population in Finnmark tripled, which can partly be explained by the authorities' wish for a larger Norwegian population in the county; legal amendments were passed to assimilate the Sami and increase immigration to Finnmark. A large number of Norwegians settled in coastal Sami areas as fishers and farmers and the coastal Sami soon became a minority in their traditional settlement areas [49]. Furthermore, by the late 1800s and early 1900s the coastal Sami were rapidly being overpowered by the market economy as the fishing fleet became increasingly mechanised [47, 54, 55].

The evacuation of the coastal population to the south at the end of WWII, coupled with the intense modernisation process and structural changes in the workforce of post-war years, put further pressure on the Sami language and culture [47, 49]. In coastal Sami areas, the proportion employed in primary industries decreased, with a corresponding increase in the number of workers in secondary and tertiary industries. Poor recruitment to the primary industries continues today. New jobs were primarily found in local administrative centres, which were usually dominated by ethnic Norwegians. The structural changes had an unintended effect; the Norwegian-dominated administrative centres on the coast were strengthened while the Sami communities were weakened in terms of job opportunities and resources. The changes in employment opportunities did not only affect the settlement structure and the workforce in the Sami communities, they also affected Sami culture and language. The new jobs in the public sector and service industries were based on the Norwegian language and culture and to a large extent staffed by monolingual Norwegians. These developments have thus resulted in a decrease in settings where the Sami language dominates [49]. Tana and Nesseby are exceptions to the general trend for Sami coastal communities, having managed to keep a stable fjord fishing fleet in this period [56] and a relatively large proportion of Sami-speaking individuals. Nevertheless, overall the number of registered fishers and production units in agriculture has decreased dramatically since WWII. Less activity in Sami fjord fishing and agriculture has led to a reduction in social settings where Sami language and culture have a natural place [49].

Most residents of Kautokeino, Karasjok, Nesseby and Tana were not evacuated to the south at the end of the war [57], and were thus not subjected to the influences of Norwegian language and

culture to the same degree. However, the changes in the workforce experienced in the minority areas were also seen initially in the majority areas. In a study of Karasjok from 1970, Aubert and Mook [58] found that the new jobs that became available in the post-WWII years were by and large staffed by the minority group of Norwegians. However, the pro-Sami movement of the 1960s and governmental policy changes were able to reverse this trend. Growing Sami awareness was also instrumental in realising the building of Sami institutions in Karasjok and Kautokeino in the 1970s [59]. These municipalities were also, together with Nesseby, Tana and Porsanger, included from the start in the designated area of the Sami Development Fund (introduced in 1975) and the Sami Language Administrative Area (effectuated in 1992). The initial actions to revitalise Sami language and culture generally took place in these areas [49].

Despite the overall strengthening of Sami language, culture and primary industries in Norway since the 1970s, a growing Sami civil society today is perhaps more obvious in the majority area than in the minority area; the establishment of important Sami institutions inland (e.g. the Sami Parliament, Sami High School, Sami Research Centre, and Sami radio, newspapers and museums) revitalised and strengthened the Sami language and culture. In the 1990s, several culture and language centres were established both inland and at the coast. However, the majority of institutions were formed inland (such as the Sami University College, Sami Theatre and various resource centres). Furthermore, in terms of health care, specialist services such as cardiology and psychiatry incorporating Sami culture and language are provided inland [60]. All the institutions mentioned have been efficient tools to counter outmigration as they have provided important services to the public and to some extent replaced the jobs lost in the primary industries, as well as providing employment for young Sami with a university education and fluency in the Sami language. In contrast, the minority areas are suffering from a strong outmigration. The strengthening of the interior Sami areas has contributed to their growth and has created a modern Sami society with various important functions for its population [49]. Nevertheless, while coastal Sami agriculture and fjord fishing are clearly struggling, the majority areas have also seen problems such as continued pasture encroachments and difficulty in recruiting personnel to reindeer husbandry. Also, tendencies towards adopting the Norwegian language were apparent even in Karasjok and Kautokeino in the post-war years [49].

## **2.2. Cardiovascular disease and self-rated health, and their social determinants**

The major factors that influence ethnic disparities in health are culture, environmental quality and protection, and social, educational and economic status, and lifestyle factors; genetic factors influence outcomes to a minor extent and only a small number of diseases are caused by genetic factors [61]. Self-rated health and cardiovascular disease are both considered important public health indicators [62].

Acculturation is for indigenous peoples [63] related to the process of colonisation over centuries [5]. Being one of the most cited definitions [64], Redfield, Linton and Herskovits [65] define acculturation as “those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (p. 149). In health research the concept of acculturation has usually been applied to assess the health effects resulting from contact between people belonging to different ethnic groups; but the concept has also shown to be useful in exploring health implications among people subjected to rapid modernisation and subsequent social and cultural change [66]. As described by Turi [67], Berry [68, 69] and Sam [64] argue that individuals and minority groups can choose among four different strategies in the process of acculturation. They can be motivated either to assimilate (reject their own culture and participate in the new culture), be culturally integrated (participate in both cultures), to be separated from it (reject the new culture and maintain their heritage culture) or reject both cultures, which is called marginalisation (p. 10). In this way, marginalisation and the other strategies may be perceived as dimensions of acculturation. For some, the process of acculturation is assumed to cause acculturative stress and thus contribute to producing health differences; integration is assumed to be associated with the best psychosocial outcome among the four strategies [67]. The acculturation theory has however been criticised for lacking consistency in study designs. Lack of consistency in results is also a concern as the literature reflects that acculturation can have either positive or negative health effects or no relationship at all. A further criticism of the acculturation theory is that it is ethnocentric in nature; the theory rests on the assumption that it fits all contexts and all ethnic groups [67].



The association between acculturation, determinants of health status, and health status is conceptually thought to be mediated by health care use and health behaviours [70]. A relationship between marginalisation and depression/anxiety was found in a study among rural Sami adolescent males [71]. Similarly, in Greenland it was found that better mental health status was associated with growing up in a town and being fully bilingual, as opposed to growing up in a small village and only speaking Greenlandic [72]. Spein et al [73] found that more assimilated Sami adolescents reported more smoking and drinking compared with less assimilated Sami peers. Wolsko et al found that among Alaska Yup'ik, higher levels of acculturation was associated with greater psychosocial stress, less happiness, and greater use of drugs and alcohol [74, 75]. Wexler reports a relationship between loss of traditional knowledge, alcohol abuse, and low education attainment among Iñupiat in Northwest Alaska [76]. Several studies have observed a relationship between acculturation and CVD in immigrant groups [77]. All these studies operationalised acculturation differently.

Although numerous studies have explored how acculturation is related to various health outcomes, it still remains unclear how acculturation may be related to self-rated health (SRH) [70]. As summarised by Hansen et al [78], even after a variety of physical, sociodemographic and psychosocial health status indices are controlled for [79], SRH significantly predicts mortality and morbidity and subsequent use of health services [80]. In sum, SRH conceptually functions as a composite measure of mental and physical health [70], and becomes thus a relevant variable in primary health care and in general public health assessments and monitoring [81]. Recent studies have found acculturation to promote good SRH in Puerto Rican and Hispanic populations in the US [70, 82].

Self-rated health (SRH) has in a number of studies been linked with cardiovascular disease morbidity and mortality. In 2005, the World Health Organization projected that 60% of the deaths worldwide would be caused by chronic diseases [83]. The top four chronic diseases are: cardiovascular disease, cancer, chronic respiratory disease and diabetes [83]. CVDs are the number one cause of death globally; one third of all global deaths is due to CVD [83]. This is also the case in Norway (2008) [84]. On average, every fourth GP patient has CVD related

problems in Norway. In addition to these patients is the growing number of individuals at risk of developing CVD [85]. It is thus safe to say that physical and mental strain, discomfort and symptoms due to prevalent CVD represent a substantial part of people's self-assessment of health. Several studies support this; after controlling for conventional risk factors and several potential confounders, Møller et al [86] found poorer SRH to be strongly and independently associated with fatal and non-fatal IHD. Tibblin et al. [87] observed an association between SRH and myocardial infarction, heart failure, and stroke. Angina pectoris affects a patient's perceived health, physical and psychosocial capacity, enjoyment and wellbeing [88]. Maeland and Havik [89] found a reduction in SRH after myocardial infarction. In another study, Idler reported that angina pectoris, heart attack, and stroke influenced patient's perceived health [90]. Johnson and Wolinsky [91] found a relationship between IHD and poor SRH. Among women with suspected myocardial ischemia, self-rated health predicted major CVD events independent of demographic factors, CVD risk factors, and angiogram-defined disease severity [92]; functional impairment however seemed to explain much of the self-rated health association.

Only limited data are available explaining the relationship between biological processes relevant to CVD and self-rated health. A strong association between inflammatory cytokines and poor SRH [93-95] has been found and a consistent relationship between HDL cholesterol and good SRH has been reported in the Oslo health study [96]. Todorova et al [82] found high allostatic load to be significantly correlated with poor SRH after adjusting for a number of confounders. Furthermore, a recent study among Canadian Inuit found associations between poor self-rated health and CVD related biomarkers [97]. Another recent study found a significant relationship between poorer self-rated health and increasing prevalence of stroke, ischaemic heart disease and dyslipidaemia [98]. Idler et al. [99] compared the relationship between self-ratings of health and mortality in various groups; within a healthy sample, there was no adjusted mortality hazard difference between those with poor, fair, and good versus excellent self-rated health. Within the circulatory system disorder group, adjusted mortality hazards for poor self-rated health (compared to excellent) were higher for individuals with self-reported symptoms and history of heart disease, and lower or absent for individuals newly diagnosed at the time of the physical examination. Idler et al. thus concluded that the health and illness experience of a group contributes to the quality of information in self-ratings.

Ischaemic heart disease and stroke are related to atherosclerosis. A strong relationship between carotid atherosclerosis and atherosclerosis in the coronary arteries and the aorta has been confirmed [100]. The first manifestations of atherosclerosis are the so-called fatty streaks, i.e. the formation of cholesterol rich lesion build-up in the arteries. These gradually develop into atherosclerotic plaques and stenosis which disrupts the blood flow through the arteries and causes ischaemia (Figure 1) [101].

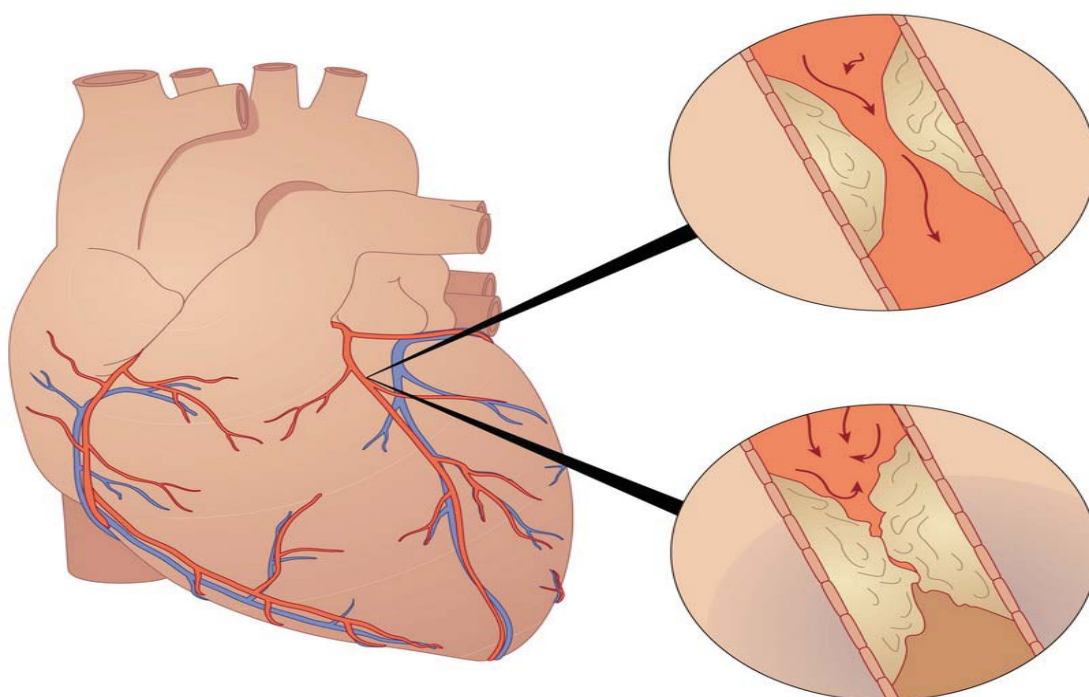


Figure 1. Science Photo Library, NTB Scanpix: <http://ndla.no/nb/node/110181>

Angina pectoris is a symptom of ischaemic heart disease (IHD) and reflects atherosclerotic build-up in the coronary arteries that supply the heart with oxygen rich blood. Angina is accompanied by discomfort located in the chest, jaw, shoulders or arms, usually experienced during physical activity and abating within 10 minutes following cessation or use of nitro-glycerine [102].

Myocardial infarction (MI) is an acute coronary event most commonly caused by increasing atherosclerotic build-up and atherosclerotic plaque rupture that interrupts blood supply to the heart causing muscle damage or death [103]. The main risk factors for IHD are abnormal blood lipids level, smoking, and high blood pressure, followed by diabetes, abdominal obesity and physical inactivity [22]. The INTERHEART study have detected nine modifiable risk factors which explain more than 95% of the population attributable risk (PAR) of acute MI among women and men from all regions of the world (ApoB/ApoA-1 ratio, current smoking, hypertension, diabetes, abdominal obesity, stress, physical activity, alcohol and high risk diet) [104].

Stroke is a heterogeneous group of disorders and is classified into ischaemic stroke (cerebral infarction) and haemorrhagic stroke. Cerebral infarction is the largest component (80-85%), followed by primary intracerebral haemorrhage and subarachnoid haemorrhage [105]. The most common cause of cerebral infarction is atherosclerosis in the pre-cerebral arteries [106]. High blood pressure and cigarette smoking are the most important modifiable risk factors for stroke. Serum cholesterol is positively associated with cerebral infarction, but not with intracerebral haemorrhage [105].

Colonisation, ethnic discrimination, rapid modernisation and subsequent marginalisation are increasingly being recognised as underlying factors in the development of ill health and increasing chronic disease burden among indigenous peoples [107-109]. However, the description of the epidemiological transition experienced among Arctic indigenous peoples linking modernisation to a general shift from infectious diseases to chronic diseases in these populations may be an oversimplification of the process; to perceive indigenous peoples as helpless victims of modernity is to underestimate their possibility of independent and rational choice. Even in situations of inferior power relations, people take initiative, make decisions and strive to make the best of a challenging situation [110]. One may thus argue that a characteristic of a vibrant culture is the ability to incorporate new technology and other elements which follow from modernisation [111]. The trend of an epidemiological transition among Arctic indigenous peoples is nevertheless evident; but instead of attributing this change to modernisation and a subsequent change in lifestyle alone, one must rather ask why people choose to adopt elements of

lifestyles associated with ill health. Why individuals at risk of IHD or with a IHD diagnosis would not take the necessary behavioural steps to eliminate the disease indicates an issue of motivation or stress [112].

Marginalised individuals or groups of people are often subjected to inequity due to their social status or “group memberships” [113]. This may again result in exclusion from economic, social and political means of promoting personal health and well-being. Whole societies can be marginalised at the global level while classes and communities can be marginalised from the dominant social order. Similarly, ethnic groups, families or individuals can be marginalised in particular localities [114]. Implicit for many indigenous peoples in this situation is increased exposure to chronic and acculturative stress [5, 7]. Acculturative stress may be perceived as a response to life events associated with acculturation and/or marginalisation [66]. However, acculturation as a concept represents a simplification of the process to which it is referring, as described above [115]. I am thus becoming increasingly sceptical towards using acculturation as a concept and predictor of health and disease. Acculturation is nevertheless referring to complex social processes that may be associated with increased stress and subsequent health effects.

An extensive and growing body of literature acknowledges chronic stress as a causal factor in the development of ischaemic heart disease and other atherosclerotic manifestations, as well as in the development of hypertension and metabolic disturbances which fuel the atherosclerotic process [116]. However, biological stress responses do not act in isolation, but in combination with a number of genetic, physiological and lifestyle risk factors [117]. Stress responses arise when demands on people exceed their psychosocial resources or adaptive capacity [118]. Stress may be acute and last for minutes to hours, or chronic, i.e. lasting for months to years [119]. Elements of the biological response to stress that plausibly contribute to the progression of IHD are raised blood pressure, reduced insulin sensitivity, increased haemostasis and endothelial dysfunction [118]. Stress can also influence IHD risk indirectly by contributing to increased smoking, reduced probability of smoking cessation, physical inactivity and exaggerated alcohol consumption. In combination, these relationships suggest both direct and indirect mechanisms for the relationship between chronic stress and IHD [118].

Figure 2 illustrates how some acute and chronic risk factors contribute to increasing the probability of cardiac events. Triggers are defined as activities or stimuli that exacerbate the acute physiological and pathophysiological processes that initiate cardiac events such as acute MI or sudden cardiac death and stroke [118]. Triggers may include emotional stress, physical exertion, exposure to air pollution, respiratory infection, heat and excessive alcohol consumption. Triggering takes place against a background of advanced atherosclerosis, and is therefore rare in people with little underlying IHD [118].

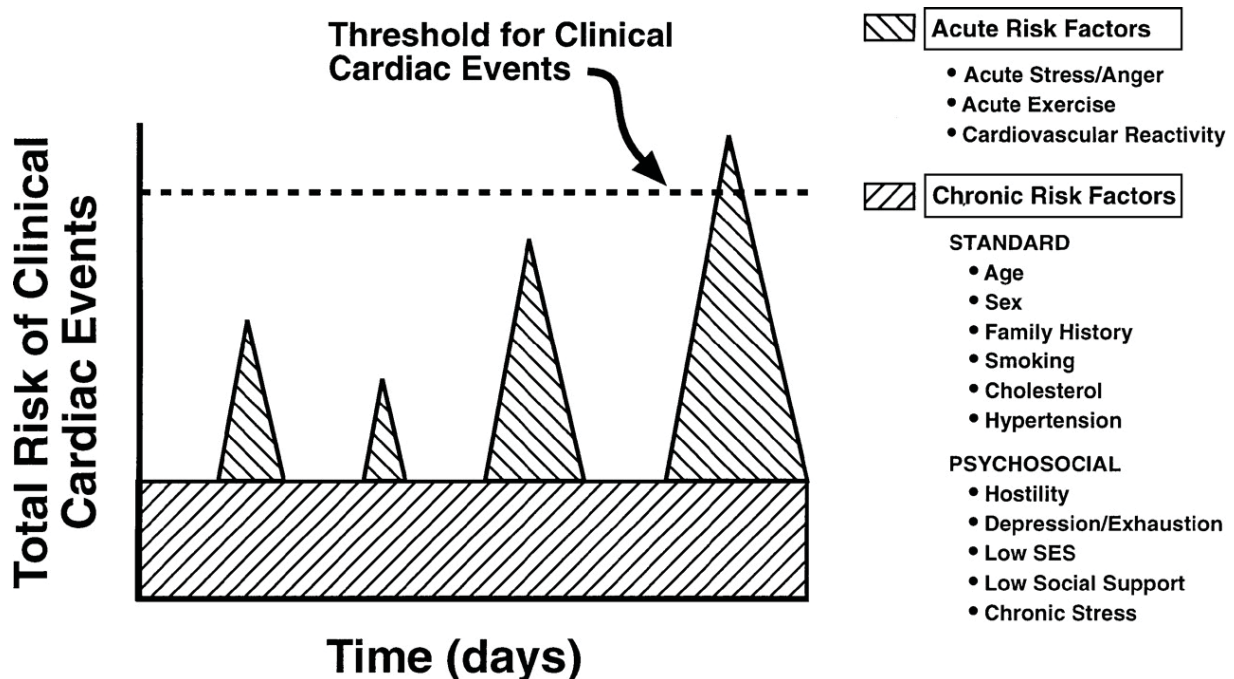


Figure 2. Acute and chronic risk factors combine to reach threshold for clinical cardiac events (myocardial ischaemia, myocardial infarction, arrhythmia) [120]. Republished with permission of Annual Review of Psychology, from Krantz, D.S. & McCeney, M., *Annual Review of Psychology*, 53, 341-369 (2002); permission conveyed through Copyright Clearance Center, Inc.

Epidemiological research is becoming increasingly focused on what Geoffrey Rose has termed the causes of the causes; i.e. the social conditions driving the distribution of non-communicable disease whether acting through unhealthy behaviours or through the effects of impossibly stressful lives [121]. Brown et al [109] argue that exposure to many of the more important cardiovascular risk factors at a group level is generated through social and behavioural factors whose causation, persistence and reproduction are both complex and multi-layered. In the case of

indigenous peoples it is possible that these processes are both different from, and more complex than, those that affect non-indigenous populations. Referring to several indigenous populations they argue that there are temporal associations between the loss of traditional lifestyles and culture and the adoption of Westernised lifestyles, with an associated increase in the prevalence and sequelae of conventional risk factors for cardiovascular disease.

### **3 Aims of the thesis**

The overall aim of this thesis is to assess the effects of acculturation and marginalisation on health and measure the prevalence of cardiovascular disease in the rural Sami population of Norway. The specific aims of the thesis are to:

- a) Explore the relationship between acculturation and self-rated health in the Sami population of Norway and Inuit populations of Alaska and Greenland.
- b) Assess the relationship between marginalisation and prevalence of lifetime total cardiovascular disease by minority/majority status in the Sami population of northern Norway.
- c) Measure the population prevalence of angina pectoris and explore potential ethnic disparity in its distribution with regard to traditional risk factors in areas with both Sami and non-Sami populations.



Table 1. Data sources

	<b>Paper I (n=2152)</b>	<b>Paper II (n=4027)</b>	<b>Paper III (n=15,206)</b>
<b>Project</b>	The SLiCA study	The SAMINOR study	The SAMINOR study
<b>Study design</b>	Cross-sectional	Cross-sectional	Cross-sectional
<b>Tool</b>	Questionnaire-based interview	Self-administered questionnaire, clinical examination	Self-administered questionnaire, clinical examination
<b>Outcome</b>	Self-rated health	Self-reported life-time cardiovascular disease	Self-reported angina pectoris, angina pectoris symptoms
<b>Measurement</b>	Five-point Likert item recoded into three categories	Yes/No	Yes/No, Two-item RAQ <sup>a</sup>
<b>Main exposure</b>	Aggregate acculturation	Marginalisation and Sami minority/majority areas	Comparison between different ethnic groups
<b>Measurement</b>	Subsistence score & language ability	Dichotomised score & municipality	Language, ethnic background, self-perceived ethnicity
<b>Study population</b>	Rural Sami (Norway) Urban/rural Kalaallit (Greenland) Urban/rural Inupiat (Alaska)	Rural Sami (Norway)	Rural Sami (Norway) Rural non-Sami (Norway)

<sup>a</sup> The Rose Angina Questionnaire

## 4. Material and methods

### 4.1. Data sources and study population

This PhD project is based on two different population surveys, i.e. the SLiCA study and the SAMINOR study.

### 4.2. Paper I

The sections in this chapter referring to the SLiCA study have been published elsewhere in a somewhat modified form [122]. The principal method in all SLiCA countries was standardised face-to-face interviews using a questionnaire (Appendix A). The SLiCA target population was indigenous individuals aged  $\geq 16$  years ( $\geq 15$  years in Canada and Greenland) residing in traditional settlements (Maps 1-3). The duration of each interview in Alaska, Greenland, and Norway was approximately 1.5-2 hours, and the respondents were almost exclusively interviewed in their homes. Most interviews in Greenland were conducted in Greenlandic. In Norway, a Sami speaking interviewer was assigned to interviews where the interviewee preferred Sami; 45 of the 445 interviews were conducted in Sami. In Alaska, only the cue cards were translated.

A total of 797, 1440 and 788 persons were invited in Alaska, Greenland and Norway, respectively (Table 2). Among these, 663 (83.2%), 1197 (83.1%) and 445 (56.5%) individuals participated, respectively. A total of 135 participants in Greenland and 18 in Norway were excluded due to non-indigenous backgrounds. Participation rates by age and sex are unavailable in Norway and Alaska due to the sampling methods used.

Table 2\*. Participation by region/country

Country/ region	Original sample	Total participants (%)	Indigenous sample	Indigenous participants (%)
<b>Alaska</b>	1151		797	663 (83.2)
<b>Greenland</b>	1440	1197 (83.1)		1062
<b>Norway</b>	788	445 (56.5)		427

In Alaska non-indigenous persons were excluded prior to invitation. In Greenland and Norway, however, information on ethnic background was not known in advance. Thus, total participants include persons who did not report indigenous background. Of the 663 participants in Alaska, 67 in the Bering Strait and 2 in the Northwest Arctic reported exclusively Yupik background (data not shown). \*Table adopted from Eliassen et al [122].

### **4.2.1. Alaska**

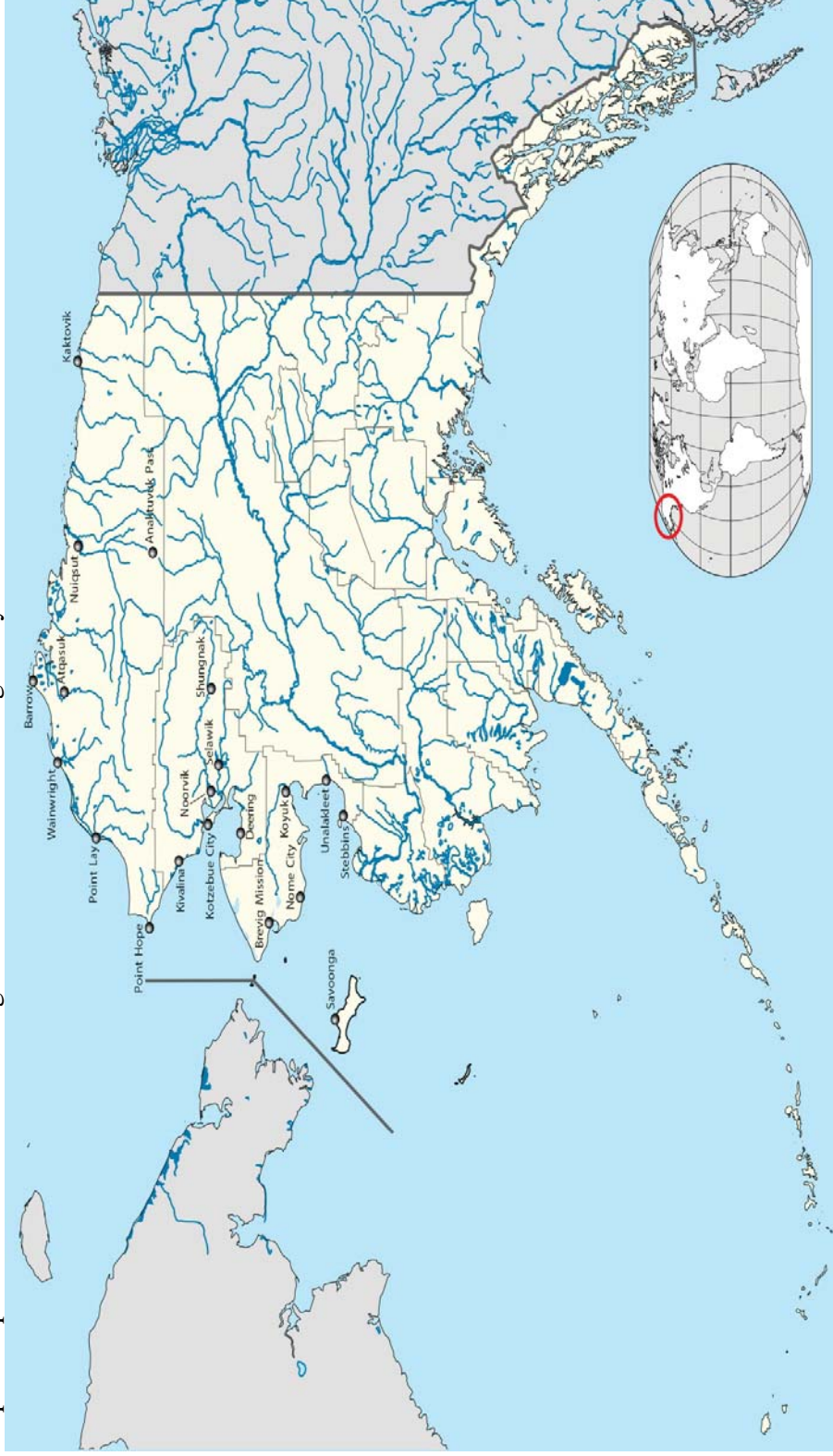
Most of the Iñupiat communities can only be reached by boat and plane [123]. Interviewers travelled by car within the regional centres while all respondents lived within walking distance in the villages. Respondents were contacted by house visits and the interviewer gave a brief description of the study to the person answering the door, and asked to speak to the person who had the next birthday. If that person was not available, contact information (e.g. phone numbers) would then be obtained and attempts made to contact the selected person. Those who failed to attend scheduled interviews were contacted to reschedule.

Data collection took place from January 2002 to February 2003. In Alaska we did not have access to the U.S. Census 2000 population lists. Thus, the sample frame consisted of four components, i.e. regions and communities, blocks, housing units, and individuals. The sample is a probability multi-stage sample [124]. The Iñupiat regions of Northwest Arctic (NA), North Slope (NS), and Bering Strait (BS) were all selected in advance. In each of the three regions one started with two strata, i.e. regional centres and villages. The regional centres of Kotzebue (NA), Barrow (NS), and Nome (BS) were all included. Villages in Northwest Arctic and Bering Strait were sampled and stratified as coastal or inland. All villages on the North Slope were included since there are only eight. In the regional centres one applied a two-stage area probability sampling approach. Firstly, a probability sample of blocks with probabilities proportionate to the number of Iñupiat households was selected. Secondly, a probability sample of Inuit households in each sample block was done. A local Innu colleague identified the Inuit households in the sample blocks. Finally, Iñupiat adults within each sampled household were sampled according to the person with the next birthday. We observed a bias in favour of females that was addressed as a final sampling weight.

According to the U.S. Census 2000, a total of 4581, 3082, and 3505 persons lived in the regional centres of Barrow, Kotzebue and Nome, respectively. The total population number in the villages varied between 136 in Deering and 772 in Selawik [125]. In the villages the American Indians/Alaska Natives (AIAN) make up close to 100% of the population. In Barrow, Kotzebue

and Nome 64%, 77%, and 59% of the population reported AIAN ethnicity, respectively. Here and in the villages the AIAN category almost exclusively refers to people of Iñupiaq ethnicity.

Map 1. Map of Alaska and towns/villages visited in SLiCA. Designed by Rod Wolstenholme.



## 4.2.2. Greenland

In Greenland the towns and villages are isolated from one another and can only be reached by boat or plane [126]. As in Alaska, cars were used for transport in the towns, while interviewers could walk to interview appointments in the villages. Selected individuals were contacted and invited to participate by phone. If contact was not established by phone, interviewers would contact the person at home. Those not attending scheduled interviews were re-contacted and new interviews were planned.

Data collection was performed from December 2003 to August 2006 by Statistics Greenland. The project was later transferred to Ilisimatusarfik, the University of Greenland, in 2006.

The Greenlandic population may be divided according to place of birth, i.e. in or outside Greenland. For the adult population, this variable roughly refers to an ethnic categorisation of Greenlanders and Danes [127]. Based on the official regional division by Greenland Statistics, eight municipalities and their main towns were selected in advance. The main towns were: Nanotarlik, Qaqortoq, Paamiut, Nuuk, Aasiaat, Ilulissat, Upernavik and Tasiilaq. Villages were chosen at random in the selected municipalities. In the selected towns and villages a random sample of persons born in Greenland was drawn from the population register. As a minority of Greenlanders live in small settlements of fewer than 500 inhabitants (17% in 2005) [41, 128], a greater sample weight was given to this population [129]. In 2006 the total population in the main towns varied from 1133 inhabitants in Upernavik to 14,583 in Nuuk, and in the villages from 47 in Saarloq to 404 in Kullorsuaq and Kuummiut [130]. In Greenland, town status is not determined by population size but by the presence of the municipality headquarters, a hospital or health centre, and a school [41]. The sampling in Greenland is also described elsewhere [129].

Map 2. Map of Greenland and towns/villages visited in SLiCA. Designed by Rod Wolstenholme.



### 4.2.3. Norway

Data collection was commenced by the Centre for Sami Studies, University of Tromsø, in 2003. The study has been administered and run by the Centre for Sami Health Research since 2006. The majority of the material was collected between June 2006 and June 2008 and a smaller amount (n=67) in 2003. The areas included were chosen in advance, based on knowledge of Sami settlement patterns.

Sami respondents in Finnmark were selected through the representative data base of the SAMINOR study (see below). A random sample was drawn from the sample frame of all SAMINOR participants in Kautokeino, Karasjok, and Nesseby who reported Sami ethnicity and gave consent to be contacted in future studies. This method was unavailable in Sami settlement areas south of Finnmark as permission to contact these participants was not obtained during SAMINOR. Instead a non-probability snowball sampling technique [131, 132] was applied to list Sami living in Sami settlement areas in Troms, Nordland and the Trøndelag counties. From this sample frame random samples were drawn. This method was also applied in Finnmark to recruit individuals in the youngest age strata, as SAMINOR only included participants aged 30 and 36-79 years in 2003-2004. Sticking to a random sample became challenging in areas where the Sami population is a minority and lives scattered across great distances. The South Sami area is one such example. Due to funding issues, a scattered population structure and the few Sami living in each community, we had to interview a certain number of persons in each place to reach an adequate total number of completed interviews. Multi-stage probability sampling was not possible for the same reasons. Except for Røros (N=5683), all the municipalities and communities had fewer than 3000 inhabitants in 2008 [133].

All communities are accessible by car. In Norway invitation to participate in the study was presented in two ways. Firstly, SAMINOR-sampled individuals in Finnmark received a letter of invitation containing information on the study, a written consent form, and a return envelope (Appendix A). The recipients were asked to return the signed consent form and provide their telephone number. Those who consented were contacted by phone to schedule the time and date for the interview. Those who did not return the consent form were tried contacted over the phone if their telephone number was accessible. Secondly, south of Finnmark, people were invited by



phone only. During the phone conversation the study was presented and if preliminary consent was obtained, time and place of the interview were agreed. Those who failed to attend scheduled interviews were contacted by phone to reschedule.

Map 3. Map of Norway and municipalities visited in SLiCA and SAMINOR. Designed by Marita Melhus.

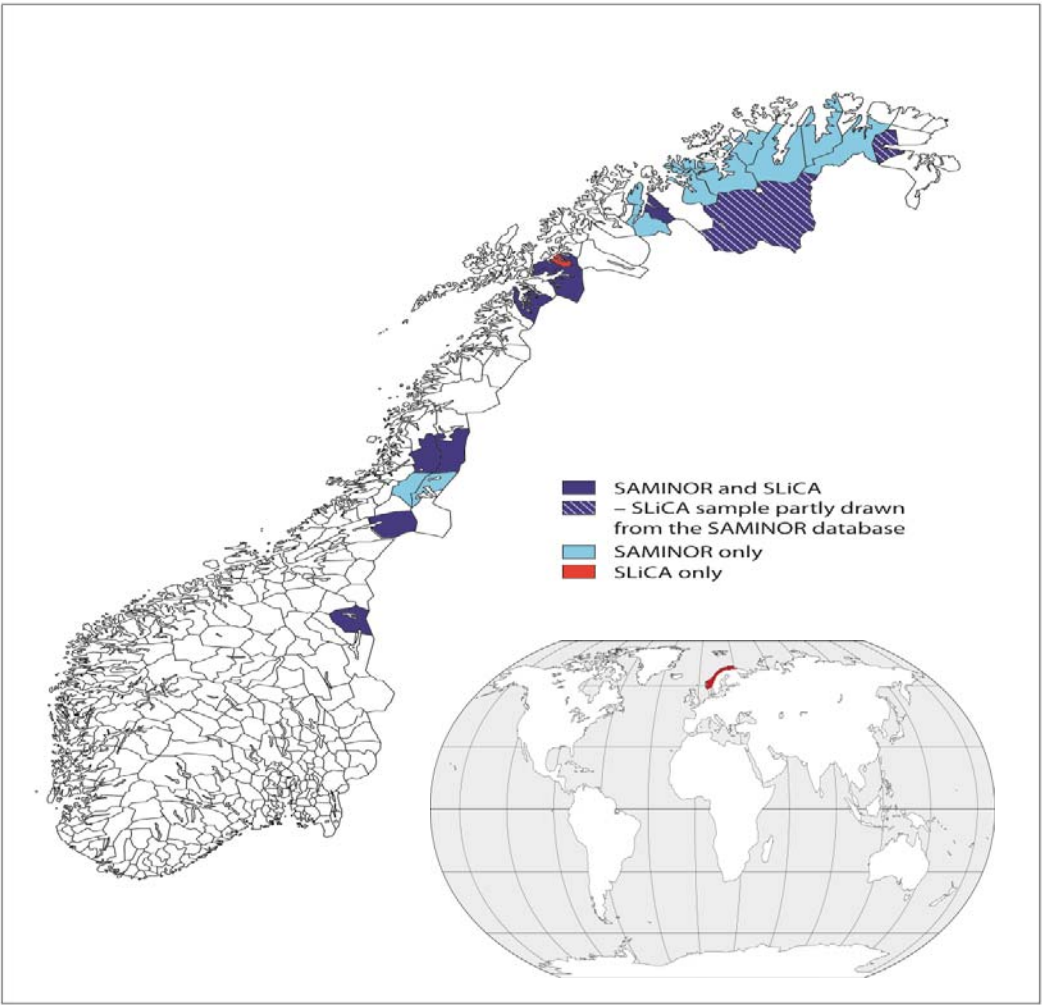
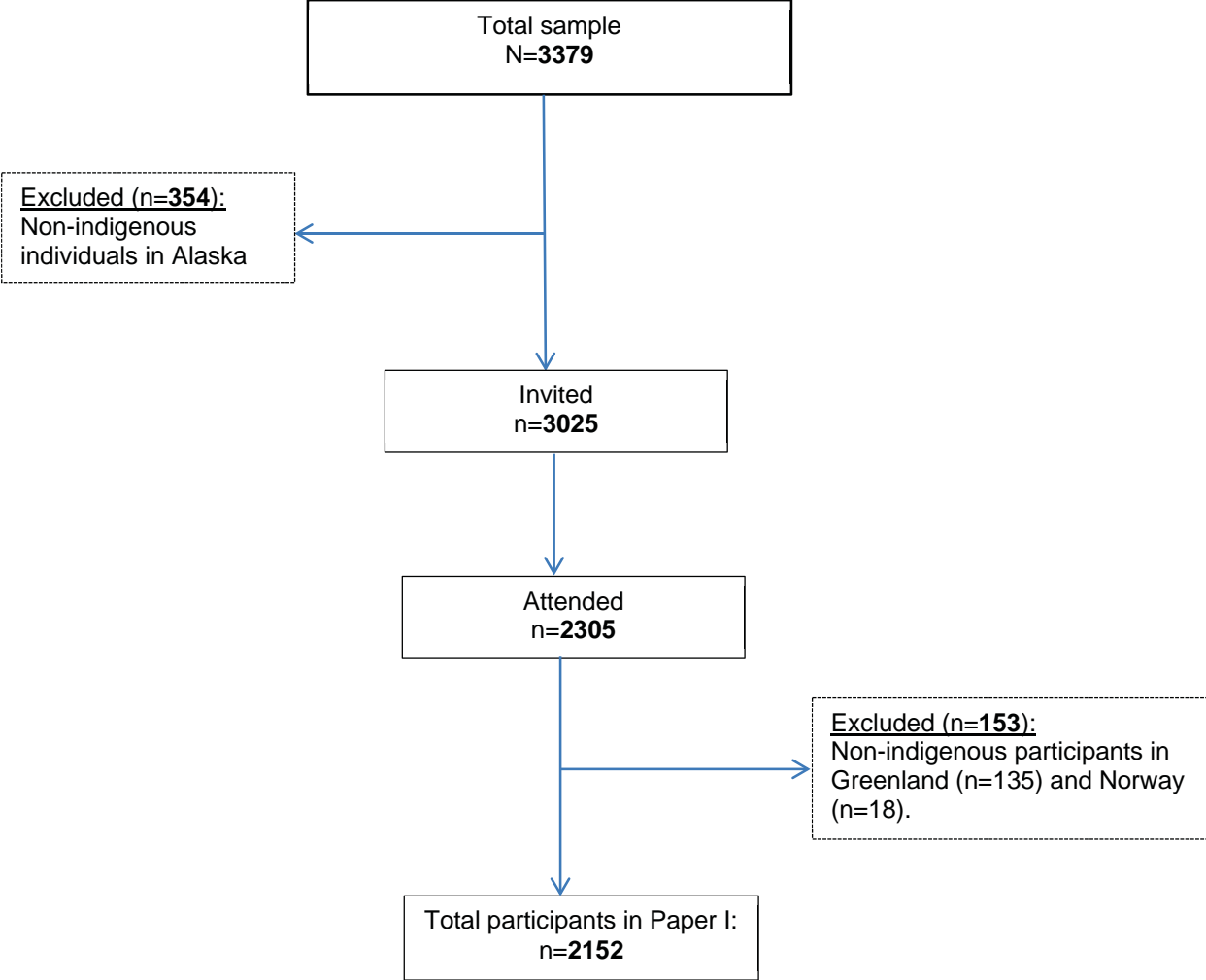


Figure 3. Study data in Paper I.



#### 4.2.4. Questionnaire

The core questionnaire consisted of four parts: the main questionnaire, three household charts intended to facilitate responses to questions concerning household members, and a self-administered questionnaire used for sensitive questions. The self-administered questionnaire was not used in this study. Finally, cue cards were used to efficiently present respondents with response choices. The core questionnaire was produced in collaboration with indigenous representatives and field tested in all countries/regions. English was used as a common language for questionnaire development. Country/region-specific questions were produced to address issues, items and perspectives relevant to the respective country/region. All fieldworkers in SLiCA were trained in interviewing techniques and procedures. An interview guide was produced to optimise standardisation and training. In Norway and Greenland the core questionnaire was translated into respectively Northern Sami and Kalaallisut (Greenlandic), while only the cue cards were translated into Iñupiaq in Alaska.

The main questionnaire had the following main topics: 1) family, 2) language, 3) traditional skills, 4) socioeconomic status, 5) health, 6) smoking, 7) housing and living conditions, 8) social activities, 9) values, religion and spirituality and 10) the local community and environment. The questions used in Paper I are found in Appendix A and are also listed in the paper.

In SLiCA, the respondents could report more than one ethnic backgrounds and Sami/Inuit ethnicity was defined in Paper I as persons reporting Sami/Inuit ethnicity alone or in combination with any other ethnicity. Information on ethnicity was gathered by reading the following: “In the next set of questions, I’d like to ask about the people who currently live in this household (Hand the respondent the household chart (Figure 4)). Here is what we call a household chart to help complete this section. Starting with yourself, and then oldest to youngest, please tell me the first names of each person currently living in your household. As you can see, for each person, I’d like to know their relationship to you, their age, their gender, and what they consider their ethnic background to be”.

Self-rated health was measured by the question: How would you describe your health in general: *Excellent, Very good, Good, Fair, or Poor?* The labelling of categories varied somewhat in

Greenland, i.e. *Very good, Good, Fair, Poor, Very poor*. In Norway and Alaska the variable was in the analyses coded: 0) *Excellent*, 1) *Very good*, 2) *Good/Fair/Poor*. In Greenland SRH was coded: 0) *Very good*, 1) *Good*, 2) *Fair/Poor/Very Poor*. The consequence of this discrepancy is discussed in detail in Paper I.

Established as essential Inuit and Sami culture values and identity markers, 12 standardised ordered categorical variables (G1: a, b, c, d, f, g, h, i, k, l, n, o) measuring the importance (0=*Very important* to 3=*Not at all important*) of certain traditional subsistence activities (Appendix A), were chosen to measure acculturation. The items were selected in advance as they were considered relevant in all three countries. A score ranging from 0 to 36 was produced by adding the 12 variables, from which respective score averages were generated.

Spoken indigenous language ability (SILA) was included as language represents an integral part of a person's cultural identity [1]. In the analyses, SILA was dichotomised due to small sample sizes; and as distributions differed, the variable was dichotomised differently. The question was: How would you rate your ability to speak Inuit/Sami? In Norway and Greenland the recoding was: 0) *Very well*, 1) *Relatively well/With effort/A few words/Not at all*. In Alaska the variable was dichotomised into: 0) *Very well/Relatively well* 1) *With effort/A few words/Not at all*.

Figure 3 illustrate how the data file was prepared prior to the analysis.

Figure 4. Household chart.

INTWR ID _____	INT NO. _____	CONTROL NO.			
<b>Household Chart Form A</b>					
PERSON NUMBER	FIRST NAME	RELATIONSHIP TO RESPONDENT	AGE	GENDER	ETHNIC BACKGROUND OR BACKGROUNDS
1		RESPONDENT			
2					
3					
4					
5					
6					
7					
8					
9					

### 4.3. Papers II and III

The SAMINOR study was designed as a cardiovascular screening study and was conducted in 2003-2004. The study was conducted by the Centre for Sami Health Research in collaboration with the Norwegian Institute of Public Health. Its overall aim was to explore possible differences in cardiovascular health and living conditions in areas with both Sami and non-Sami populations. The participants are of Sami, Kven and Norwegian descent. The defined SAMINOR area included municipalities and settlements which in the 1970 Census had 5-10% Sami population density. Additionally, some census wards with a lower density were included as updated ethnographic data showed a substantial Sami population. The study included five counties: Finnmark, Troms, Nordland, Nord-Trøndelag and Sør-Trøndelag. With the exception of Alta

(N=17,000), the number of inhabitants in each included municipality and settlement was  $\leq 3000$  (Map 3) [11, 34].

In 2003, eligible inhabitants were born between 1925 and 1967 and in 1973. In 2004, residents were included if born between 1925 and 1968 and in 1974. This generated age intervals of 30 and 36-78 years in 2003, and 30 and 37-79 years in 2004. A total of 27,987 persons were invited and 16,865 (60.3%) participated [11, 34].

The SAMINOR study included three questionnaires. The Centre for Sami Health Research designed a two-page initial questionnaire (Q1) and an additional questionnaire consisting of four pages (Q3). The Norwegian Institute of Public Health performed the screening, which included a three-page questionnaire (Q2) and a clinical examination. The clinical examinations took place in two buses travelling between the municipalities. The survey was launched in Finnmark in Tana, Nesseby, Karasjok and Kautokeino. Here people received a letter of invitation containing the Q1. Those who agreed to attend the screening returned the questionnaire to the Norwegian Institute of Public Health. These later received an invitation to the clinical examination and the Q2. After the consultation the participants were asked to complete the Q3 [11, 34].

Due to initial low response rates in these four municipalities, the study design was modified somewhat. In the rest of the survey, the invitation with the time and date for the clinical examination was sent together with a five-page questionnaire (the Q1 and Q2 combined). In Finnmark and Troms, those who did not attend the first screening received a reminder prior to the return of the buses; and participants in Tana, Nesseby, Karasjok and Kautokeino, who attended the physical examinations and did not complete the Q1, received a short questionnaire concerning language and ethnicity in the spring of 2006; only 106 of the 322 posted short questionnaires were completed and returned. No reminder was sent in Nordland and Trøndelag. Different response rates may be due to the varying procedures described. In Finnmark 63% attended, while the response rates in Troms and Nordland were 60% and 46%, respectively. With no reminder, however, the Trøndelag counties reached a response rate of 65% [11, 34].

### 4.3.1. Questionnaires

The initial questionnaire (Q1) included these main topics: 1) use of health and care services, 2) injuries and accidents, 3) language and ethnicity, 4) socioeconomic status, 5) bullying and discrimination, 6) smoking and tobacco use and 7) physical activity. The screening questionnaire (Q2) had the following main questions: 8) current and/or previous disease, 9) mental health, 10) family history of disease, 11) use of medication and 12) diet and alcohol consumption. The additional questionnaire (Q3) included the following items: 13) various symptoms, 14) additional questions concerning diet, 15) upbringing, family constellation and religion, 16) values and 17) value questions specifically for those with Sami background [11, 34].

The questions measuring ethnicity were checked for consistency and missing values at the physical examination. All questionnaires and the informed consent were available in the Sami and Norwegian languages. The Sami questionnaire was translated by a professional and tested on a few individuals; for some questions the lack of equivalent terminology in the Sami language made certain items challenging to translate [11, 34]. However, only 1.6% of the participants chose to use the Sami version of the questionnaire.

Ethnicity was ascertained by asking questions (Figure 6) concerning the language used at home, ethnic background and self-perceived ethnicity. Based on these variables we generated two ethnic categories, i.e. Sami and non-Sami. The Sami category included respondents reporting at least one Sami identity mark (Sami language spoken by the respondent or at least one parent or grandparent, or Sami ethnic background or self-perceived Sami ethnicity) while Norwegians and Kvens were included in the non-Sami group. In Paper II the non-Sami group was excluded from the analyses [11, 34].

Self-reported lifetime cardiovascular disease was measured by three questions: *Do you have, or have you had*: “Myocardial infarction (heart attack)? (Yes/No)”, “Angina pectoris (heart cramp)? (Yes/No)”, or “Cerebral stroke/brain haemorrhage (Yes/No)”? Missing values in Paper II (MI: n=133; Angina pectoris: n=130; Cerebral stroke/brain haemorrhage: n=140) were considered negative responses. In Paper III, missing values were also considered as negative responses

(n=636). Angina pectoris symptoms (APS) were measured by the following questions: 1) *Do you get pain or discomfort in the chest when walking up hills or stairs, or walking fast on level ground?* (Yes/No) and 2) *Do you get such pain or discomfort even if you are resting?* (Yes/No). We defined APS as a positive response to the former and a negative one to the latter [134]. Missing values (n=526 and n=2240, respectively) were considered negative responses.

In Paper II, marginalisation was measured by asking the following three questions: *Do you feel you are being forced from your work/trade?*: “To a large extent”, “To some extent”, “To a small extent”, “Absolutely not”. Using the same response options, the second question was: *Do you feel that modern development displaces the Sami culture?* The third and final question was: *Have you experienced bullying/discrimination due to your ethnic (Sami, Kven, Russian, Tamil, Norwegian, etc.) background?*: “Many times”, “Sometimes”, “Rarely”, “Never”. After recoding, the items were combined in a score ranging from 0–9 which based on its distribution was dichotomised into “unexposed to marginalisation” (scores 0–3) and “exposed to marginalisation” (scores 4–9). Missing values were given the value “0” (null), provided that information was given on at least two of the three variables. Where the information supplied was from fewer than two variables, the data were coded as missing (n=262).

The laboratory analysis and anthropometric measurements are described in detail by Lund et al and Nystad et al [11, 135]. Figure 5 illustrate how the data file was prepared prior to the analysis in Paper II and III.



Figure 5. Study data in Papers II and III.

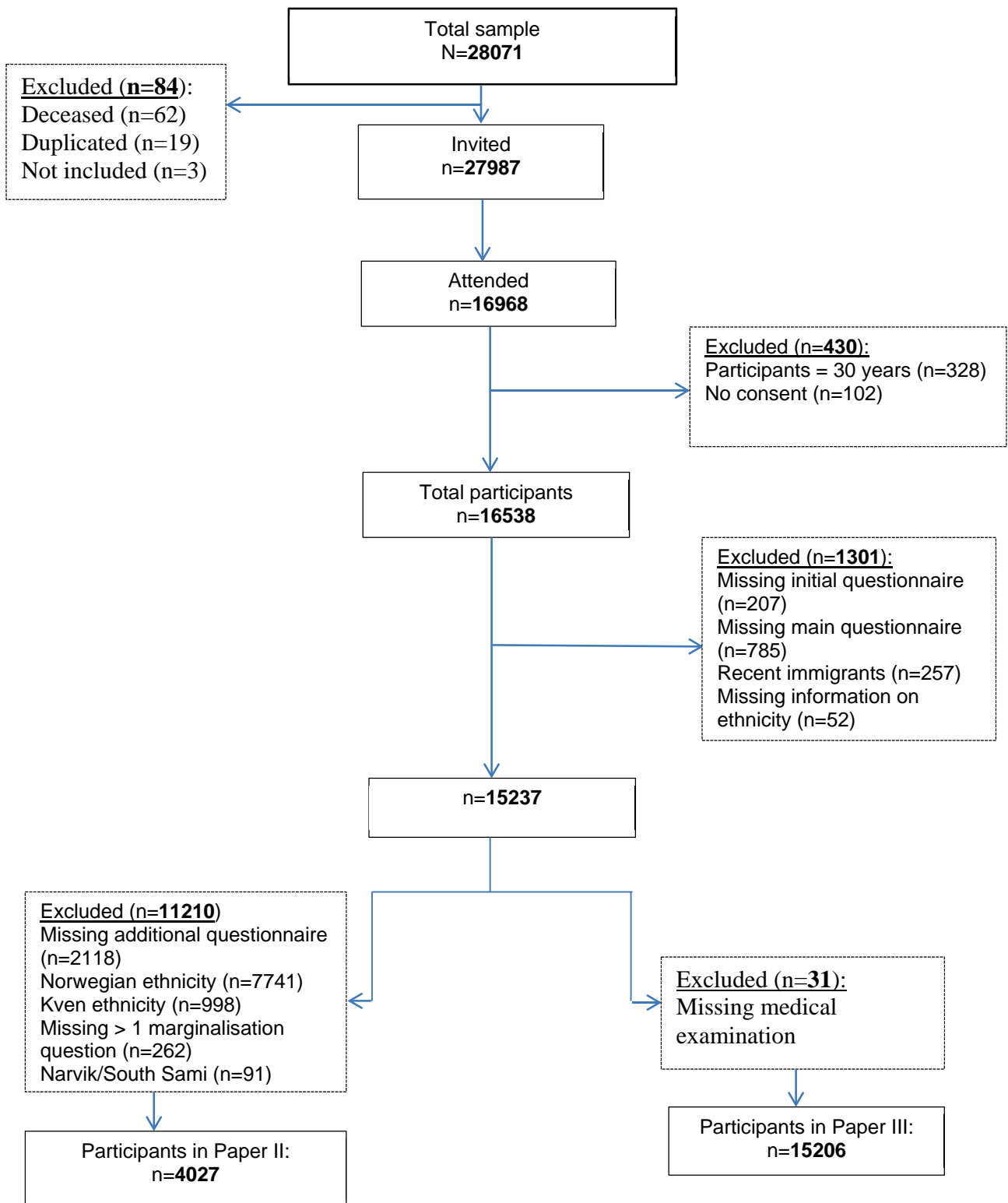


Figure 6.\* Questions on language and ethnic background.

In Northern Norway there live people of different ethnic backgrounds. That is, they speak different languages and have different cultures. Examples of ethnic background, or ethnic groups are Norwegian, Sami and Kven.

What language do/did you, your parents and your grandparents use at home?

	Norwegian	Sámi	Kven	Other
Mother's father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother's mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father's father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father's mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What is your, your father's and your mother's ethnic background?

	Norwegian	Sámi	Kven	Other
My ethnic background is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father's ethnic background is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother's ethnic background is	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Norwegian	Sámi	Kven	Other
I consider myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\*Figure adopted from Lund et al. [34].

#### **4.4. Statistical analyses**

Data management and statistical analyses were performed using STATA version 12.0 (Paper I) and 12.1 (Papers II and III) (StataCorp, College Station, TX). The significance level was chosen at  $p < 0.05$ . The statistical procedures are described in the respective papers. Post-estimation tests of model fit were performed. In paper I, as sample sizes were small, multiple imputation (MuI) was performed to improve precision. The complete regression model was applied throughout the imputation process. Wald tests of regression parameters showed no evidence of systematic differences between imputed and non-imputed data (data not shown).

#### **4.5. Ethical aspects**

In Norway, the SLiCA study was accredited by the Norwegian Social Science Data Service and the National Committee for Research Ethics in the Social Sciences and the Humanities. In Alaska the study was approved by the University of Alaska Institutional Review Board. In Greenland approval from the Research Ethics Committee in Greenland was not obtained because this is routinely only required for medical research projects. Being responsible for data collection, Statistics Greenland guaranteed an ethical handling of individual data and that rules and regulations ensuring confidentiality for respondents were followed.

Representatives of the Inuit Circumpolar Conference, the Sami Council, and the Russian Association of Indigenous Peoples of the North have formed advisory boards to oversee the SLiCA study [136]. Indigenous steering committees approved the final questionnaire [32]. Detailed information on the project was given to the participants orally and in writing, and written informed consent was obtained before interviews took place. We obtained written informed consent from parents or legal guardians before respondents under the age of 18 years took part in the study (Appendix A).

The SAMINOR study was approved by the Regional Committee for Medical and Health Research Ethics in Northern Norway and a Sami consultant did not have any objection. The National Data Inspectorate gave permission to store the data material. All attendees gave signed

informed consent. The participants were asked whether the information they provided and/or their blood samples could be used in future research (Appendix B).

## 5. Summary of results

### 5.1. Paper I: Acculturation and self-rated health among Arctic indigenous peoples: a population-based cross-sectional study

In this study we explored how acculturation, operationalised as a score of Inuit and Sami culture values and identity markers, and spoken indigenous language ability (SILA), was associated with SRH by gender among the Iñupiat of Alaska, Kalaallit of Greenland, and Sami of Norway.

Acculturation significantly predicted poorer SRH in Greenland, and the relative effects of acculturation were stronger for men than for women, though this modification of effects was not significant (data not shown). An increased acculturation score gave an OR of 2.32 ( $P < 0.001$ ) for reporting poorer SRH among Greenlandic men, while an increased score for Greenlandic women generated an OR of 1.71 ( $P = 0.01$ ). Poorer SILA produced an OR of 1.59 in men ( $p = 0.03$ ) and 1.43 in women ( $p = 0.07$ ). In Alaska, no evidence of acculturation effects was detected among Iñupiaq men. Among Iñupiaq women, an increased score represented increased odds of 73% ( $p = 0.026$ ) for reporting poorer SRH. No significant effects of acculturation were detected in Norway. However, SILA was close to significant ( $p = 0.068$ ) among Sami men, thus suggesting a substantial effect of acculturation on SRH (OR=1.74).

Overall, no modifying effect of the subsistence score by levels of SILA was detected (data not shown). Furthermore, we found no evidence of education confounding or modifying the effect of acculturation (data not shown).

This study shows that aggregate acculturation is a strong risk factor for poorer SRH among the Kalaallit of Greenland and female Iñupiat of Alaska, but our cross-sectional study design does not allow any conclusion with regard to causality. However, limitations with regard to wording, categorisations, assumed cultural differences in the conceptualisation of SRH, and confounding effects of health care use, SES and discrimination, make it difficult to appropriately assess the strength of this effect. Acculturation is indeed a process that takes place over time; longitudinal research and large samples are therefore required to examine the effect of acculturation on SRH

within multiple dimensions among these populations, while simultaneously exploring how SES may play into this relationship.

## **5.2. Paper II: Marginalisation and cardiovascular disease among rural Sami in Northern Norway: a population-based cross-sectional study**

The primary objective of this study was to assess the relationship between exposure to marginalisation and self-reported lifetime cardiovascular disease (CVD) by minority/majority status in the rural Sami population of Norway. In this paper, CVD was used as an indicator of overall health in the indigenous people of northern Norway.

No difference between the exposed and unexposed groups in the total burden of CVD was found in women. Among men, a significant difference ( $p=0.02$ ) was found among Sami settled in Norwegian dominated areas (Sami minority areas). In the unexposed group, 10.0% reported having ever had cardiovascular disease compared to 15.8% in the exposed group.

The regression showed a significant effect of exposed minority status when compared to unexposed majority status (OR 2.19, 95% CI: 1.53-3.15). This effect continued after controlling for confounding and intermediate variables (OR 2.10, 95% CI: 1.40-3.14). A moderate confounding effect of leisure-time light physical activity was observed. Without the variable in the model, the OR was attenuated to 1.83 (data not shown). The regression was not stratified by sex, as initial analyses showed no significant sex difference (data not shown). Moderate to no intermediate effects were seen after including established CVD risk factors, which suggests little difference in lifestyle related factors. Chronic stress exposure following marginalisation may however be a plausible explanation for some of the observed excess of CVD.

## **5.3. Paper III: Ethnic difference in the prevalence of angina pectoris in Sami and non-Sami populations: the SAMINOR study**

The primary objective of this study was to assess the relationship between ethnicity and the prevalence of angina pectoris symptoms (APS) in the rural population of northern Norway by

using a two-item version of the Rose angina questionnaire (RAQ). If differences were found between Sami and non-Sami populations, we aimed at evaluating the role of established cardiovascular risk factors and educational attainment as mediating factors for such differences. We also measured the burden of self-reported angina pectoris alone and in combination with the RAQ. In this paper, angina pectoris was used as an indicator of overall health in the study populations.

Overall ethnic differences in prevalence were found in men and women for angina pectoris symptoms (APS), self-reported angina and a combination of these ( $p < 0.001$ ), and a pattern of higher estimates in the Sami population was revealed in nearly all age strata in both men and women. The combined burden of angina pectoris was 8.3% and 11.7% in non-Sami and Sami men, respectively. In women, the rate for non-Sami was 6.2% and for Sami 9.0%.

Odds ratios (OR) for angina pectoris symptoms (APS) including all cases of self-reported angina in Sami women were 1.42 ( $p < 0.001$ ) and in men 1.62 ( $p < 0.001$ ) after controlling for age (Model 1). When also controlling for moderate alcohol consumption (Model 2), no change was observed in men, while in women the OR was reduced to 1.35 ( $p < 0.01$ ). Metabolic syndrome, total cholesterol, use of statins, family history of cardiovascular disease and smoking explained little or none of the relationship between APS and ethnicity (Model 3). When self-reported angina was included in the model as a covariate, little difference was observed in men. In women, however, the relationship between ethnicity and APS was attenuated (OR 1.21) and became insignificant ( $p = 0.08$ ).

This study showed that the excess burden of APS was in Sami women principally due to known cases of angina pectoris. In men, however, the discrepancy in prevalent angina symptoms may be due to an excess burden of undiagnosed disease among the Sami which suggest that social determinants play a role in the distribution of APS in this population.

## 6. Discussion

### 6.1. Methodological considerations

The cross-sectional design does not allow any causal inference; results from SLiCA and SAMINOR can however generate new hypotheses that can be tested in prospective studies. As a variable in itself, ethnicity is rarely a source of causal knowledge but is directly or indirectly related to factors such as culture, socioeconomic status, diet, lifestyle, access to and concordance with health care advice, and stress [61]. Thomas Hylland-Eriksen[137] defines ethnicity as.... “an aspect of social relationship between persons who consider themselves as essentially distinctive from members of other groups of whom they are aware and with whom they enter into relationships. It can thus also be defined as a social identity...” (p.16-17). Ethnicity is socially construed; it does not refer to “objective” cultural differences but rather to the social communication of cultural differences. What constitutes a relevant ethnic difference may vary. Criteria for what cultural differences are made relevant by people, i.e. what constitutes ethnicity, may be classifications based on skin colour, clothing, economic adaptation, religion, language or combinations of these [110].

The aim of any epidemiological study is to be valid. Validity is usually assessed with regard to both the internal and external validity of the study. Internal validity indicates that the results are correct for the sample of people being studied. An externally valid study can be generalised to some other groups who were not actually studied [138]. Epidemiological studies are usually hampered with two types of errors, i.e. systematic errors and random errors. Systematic errors, i.e. bias, are errors that affect comparison groups unequally [139]. Bias may be introduced through the ways individuals have been selected (selection bias), the way study variables have been measured (information bias) or some confounding factor that is not completely controlled [140]. Random errors affect the reliability of the measurements and the precision of the estimate. These can be avoided by increasing the sample size [140].

Also, sensitive questions tend to produce comparatively higher non-response rates or larger measurement error in responses than questions on other topics [141]. Sensitive questions may be defined as being intrusive and invasive. Sensitive questions may also involve the threat of



disclosure; individuals may be concerned about the possible consequences of giving a truthful answer should the information be revealed to a third party. A third aspect of question sensitivity is closely related to the traditional concept of social desirability, i.e. the extent to which a question elicits answers that are socially unacceptable or socially undesirable. Sensitive questions are thought to affect three important survey outcomes: a) overall response rate, b) item non-response rates and c) response accuracy, i.e. the percentage of respondents who answer the question truthfully (information bias) [141].

In a recent PhD thesis [142] it was reported that Sami speaking persons in Finnmark prefer not to speak about health and disease. To speak openly of these matters is regarded as disparaging and diagnostic disease concepts are perceived as condemning. Local concepts that describe health and disease are considered milder. Health and disease are issues approached indirectly and in silence and there are also strong norms of independent coping among the Sami. Differences in how body and disease are conceptualised, i.e. how illness is operationalised, may produce problems when Sami patients experience the Norwegian health care system. I believe that these are issues that may also affect results and participation in population-based epidemiological studies.

Body, health and disease are cultural phenomena; there is no universal connection between a medical condition and the way it is experienced. It is thus useful to distinguish illness and disease as related but opposing analytical concepts. The former refers to a patient's experience of his or her own symptoms, while the latter refers to the physician's diagnosis [143]. People's experiences of body and disease vary as the concepts underlying these differ. Every life form or cultural ordering generates concepts that shape experiences and self-perceptions. In some cultures or societies body and disease are integrated into a cosmology wherein pain and wellness are experienced differently from other cultures. Bodily experiences are conceptualised and dependent upon culture; this does not mean that some people are without the ability to feel immediate physical pain and react instantly to it; however, the experience and the subsequent communication of this experience are culturally dependent. Our first experience of physical pain is expressed authentically; we know that the baby feels pain or discomfort because it expresses it through crying. The new-born only relates to the pain by crying as no other option exists; with time, however, the child expresses discomfort through words, gestures etc. Our experiences

gradually and increasingly connect to concepts and language; and as we are gradually bounded by our concepts, we thus become unable to access our original and authentic experiences [144]. Consequently, experiences, perceptions and communications of pain and wellness are contextual and culturally constructed within realities constituted by their own logic.

The goal of standardised measurements is central to survey research and it has been considered essential to keep the wording of questions constant across respondents [145]. But even the same question may mean different things to different people which may produce bias. Culture influences how information is processed and conceptualised [146] and meaning is by no means determined by words alone [147]. These are issues that may influence both participation and response accuracy in population studies.

## **6.2. Selection bias**

Selection bias is present when individuals have different probabilities of being included in the study sample according to relevant study characteristics, i.e. the exposure and the outcome of interest [148]. This may generate biased prevalence estimates and distort the measure of the association between exposures and the outcome studied.

### **6.2.1. Paper I**

High overall participation rates were obtained in Greenland and Alaska, whilst a more conventional rate was observed in Norway. Based on previous research [149] and the US Census 2000 [150, 151], few or no threats to validity are detected in the data from Alaska and Greenland. This is explained by probability sampling and high participation rates.

A conventional participation rate and non-probability sampling may have introduced selection bias in the Sami sample. Available literature stresses that person-to-person approaches usually give higher participation rates than initial telephone contacts [124, 152]. The different methods used in the recruitment phase may thus explain some of the observed discrepancy in participation

rates between the countries/regions. In Norway the participation rates in Finnmark were systematically lower than the rates from Troms, Nordland, and Trøndelag (Table 5); the snowball sampling may have led us to the more motivated respondents in these three counties. The only information on Sami non-responders available to us is their sex and place of residence. Nevertheless, it has been documented that the differences between responders and non-responders generally are important but seldom so great that studies are irrevocably undermined [139].

The Sami sample is a non-probability sample [122]. Those invited were not chosen at random; we cannot rule out the possibility that our participants differ systematically from the population we want our sample to reflect [153, 154]. Selection bias is generally a problem if the priority is to describe the distribution of variables in the population [155]. In Paper I the objective was not to present the distribution of SRH in the population but instead to explore the relationships between health and indicators of sociocultural change. Nonetheless, any association may well be biased if the study participants have a different distribution of confounding factors than the non-participants (see Chapter 6.3) [155]. Preliminary assessments suggest, however, that selection bias in the Sami sample is plausible but not a major threat when comparing educational attainment with SAMINOR data.

**Table 3\***. Participation by region and town/village in Alaska, n = 663.

<b>Town/village/Region</b>	<b>Sample</b>	<b>Participants</b>	<b>Participation rate (%)</b>
Anaktuvuk Pass	15	10	66.7
Atqasuk	11	11	100
Barrow	122	100	82.0
Kaktovik	16	13	81.3
Nuiqsut	20	16	80.0
Point Hope	30	26	86.7
Point Lay	11	11	100
Wainwright	34	25	73.5
<b><i>North Slope totals</i></b>	<b>259</b>	<b>212</b>	<b>81.9</b>
Deering	27	20	74.1
Kivalina	22	20	90.9
Kotzebue City	142	106	74.6
Noorvik	23	21	91.3
Selawik	22	21	95.5
Shungnak	23	16	69.6
<b><i>Northwest Arctic totals</i></b>	<b>259</b>	<b>204</b>	<b>78.8</b>
Brevig Mission	21	21	100
Koyuk	23	20	87.0
Nome City	164	144	87.8
Savoonga	28	25	89.3
Stebbins	21	19	90.5
Unalakleet	22	18	81.8
<b><i>Bering Strait totals</i></b>	<b>279</b>	<b>247</b>	<b>88.5</b>

\*Table adopted from Eliassen et al [122]

**Table 4\***. Participation by region and town/village in Greenland, n = 1197

<b>Town/village/region</b>	<b>Sample</b>	<b>Participants</b>	<b>Participation rate (%)</b>
Qaqortoq	80	76	95.0
Nanortalik	73	67	91.8
Alluitsup Paa	38	29	76.3
Tasiusaq (Nan)	8	7	87.5
Aappilattoq (Nan)	14	11	78.6
Saarloq	4	4	100.0
Egalugaarsuit	13	13	100.0
<b><i>South Greenland totals</i></b>	<b>230</b>	<b>207</b>	<b>90.0</b>
Paamiut	78	56	71.8
Nuuk	481	382	79.4
Arsuk	24	20	83.3
Kapisillit	16	15	93.8
Qeqertarsuatsiaat	63	54	85.7
<b><i>Mid Greenland totals</i></b>	<b>662</b>	<b>527</b>	<b>79.6</b>
Ilulissat	118	111	94.1
Aasiaat	101	40	39.6
Kitsissuarsuit	9	8	88.9
Akunnaaq	10	7	70.0
Ilimanaq	4	4	100.0
Oqaatsut	3	3	100.0
Qeqertaq	12	11	91.7
Saqqaq	16	11	68.8
<b><i>Disko Bay totals</i></b>	<b>273</b>	<b>195</b>	<b>71.4</b>
Upernavik	25	25	100.0
Kangersuatsiaq	37	37	100.0
Innaarsuit	19	19	100.0
Nuussuaq (Upernavik)	17	14	82.4
Kullorsuaq	55	55	100.0
<b><i>North Greenland totals</i></b>	<b>153</b>	<b>150</b>	<b>98.0</b>
Tasiilaq	53	53	100.0
Isortoq (Tas)	10	10	100.0
Kulusuk	14	13	92.9
Kuummiut	27	25	92.6
Sermiligaaq	18	17	94.4
<b><i>East Greenland totals</i></b>	<b>122</b>	<b>118</b>	<b>96.7</b>

\*Table adopted from Eliassen et al [122]

**Table 5\***. Participation by municipality and county in Norway, n = 445.

<b>Municipality/Region</b>	<b>Sample</b>	<b>Participants</b>	<b>Participation rate (%)</b>
Kautokeino	192	99	51.6
Karasjok	207	99	47.8
Nesseby	81	46	56.8
<b><i>Finnmark totals</i><sup>a</sup></b>	<b>480</b>	<b>244</b>	<b>50.8</b>
Kåfjord	84	51	60.7
Gratangen	12	8	66.7
Lavangen	12	4	33.3
Skånland/Evenes <sup>b</sup>	26	22	84.6
<b><i>Troms totals</i><sup>a</sup></b>	<b>134</b>	<b>85</b>	<b>63.4</b>
Vassdalen <sup>c</sup>	5	3	60.0
Tysfjord	72	43	59.7
Grane/Majavatn	15	10	66.7
Hattfjelldal	27	24	88.9
<b><i>Nordland totals</i><sup>a</sup></b>	<b>119</b>	<b>80</b>	<b>67.2</b>
Snåsa	21	15	71.4
Røros	34	21	61.8
<b><i>Trøndelag totals</i><sup>a</sup></b>	<b>55</b>	<b>36</b>	<b>65.5</b>

<sup>a</sup> The four northernmost counties in Norway. Trøndelag is in this table a joint category of the two counties Nord-Trøndelag and Sør-Trøndelag.

<sup>b</sup> Evenes is located in the northernmost part of Nordland County. The Evenes Sami, however, are of the same people as the neighbouring Skånland Sami.

<sup>c</sup> Vassdalen is a small community in the Municipality of Narvik.

\*Table adopted from Eliassen et al [122].

## 6.2.2. Papers II and III

The participation rate of 61% could have introduced non-response bias. The SAMINOR study was announced as a cardiovascular screening which may have inspired the more health conscious to participate; the observed prevalence rates of CVD may thus be underestimated. It is also possible that the subjects participated because of a higher risk for cardiovascular disease since the study was described as focusing on this particular group of diseases. Consequently, our participants may contribute to either a higher or lower estimate of the burden of disease and exposures in the population. It is difficult to assess the direction of the selection bias while we lack information on the non-participants' ethnicity, risk profile and disease status [11]. However,

if motivation for participating in SAMINOR was dependent upon ethnicity, the observed effect measures may have been biased, either away from or toward the null.

We do not know the overall response rate by ethnicity but it is possible that the overall response may be lower in the Sami population than in the non-Sami as health and disease issues may be a more delicate subject in the former. Approximately 40% of the invited cohort did not participate. Responders are often healthier and differ in lifestyle compared with non-responders [156]; the observed difference between Sami and non-Sami in Paper III may thus be due to an alleged higher response rate in the latter group. We are however able to assess if item non-response rates differ by ethnicity among those who participated in SAMINOR. With regard to self-reported angina and angina pectoris symptoms, we found no significant difference in the distribution of item non-response when comparing Sami and non-Sami (data not shown). This may indicate that the overall response rates would not necessarily differ.

Table 6. Characteristics of the invited cohort, participants and the sub groups analysed in the SAMINOR study.

	Invited (%)	Participants (%) <sup>a</sup>	Ethnicity (%)	Paper II (%)	Paper III (%)
Participants (n)	27,151	16,538	16,267	4027	15,206
Attendance (%)	100	60.9	59.9	14.8	56.0
Sex					
Women	13037 (48)	8553 (52)	8413 (52)	2013 (50)	7884 (52)
Men	14114 (52)	7985 (48)	7854 (48)	2014 (50)	7322 (48)
Age					
36-49	10748 (40)	6040 (37)	5955 (37)	1502 (37)	5488 (36)
50-64	10534 (39)	6966 (42)	6852 (42)	1692 (42)	6443 (42)
65-79	5869 (22)	3532 (21)	3460 (21)	833 (21)	3275 (22)
County					
Trøndelag	1501 (6)	984 (6)	973 (6)	Excluded	963(6)
Nordland	2605 (10)	1205 (7)	1203 (7)	119 (3) <sup>b</sup>	1188 (8)
Troms	6556 (24)	3938 (24)	3921 (24)	921 (23)	3856 (25)
Finnmark	16489 (61)	10411 (63)	10170 (63)	2987 (74)	9199 (61)
Marital status					
Single	6472 (24)	3202 (19)	3137 (19)	948 (24)	2847 (19)
Married	15175 (56)	10259 (62)	10099 (62)	2356 (59)	9519 (63)
Widow(er)	1826 (7)	1066 (6)	1040 (6)	226 (6)	978 (6)
Divorced	3054 (11)	1704 (10)	1688 (10)	426 (11)	1584 (10)
Separated	623 (2)	307 (2)	303 (2)	71 (2)	278 (2)
Ethnicity					
Sami			5796 (36)	4027 (100)	5187 (34)
Kven			1176 (7)	Excluded	1137 (8)
Norwegian			9023 (55)	Excluded	8882 (58)
Foreigner			272 (2)	Excluded	Excluded
Education					
0-7 years			2472 (17)	808 (21)	2453 (17)
8-12 years			7370 (51)	1833 (48)	7270 (51)
13+ years			4706 (32)	1170 (31)	4552 (32)

<sup>a</sup> Participants completed at least one questionnaire or attended the clinical examination.

<sup>b</sup> Participants in Narvik, Hattfjelldal and Grane were excluded.



### **6.3. Information bias**

Bias in a study can arise because the information collected about or from study subjects is erroneous [140]. Such information is often referred to as being misclassified. Misclassification can be differential or non-differential. In terms of outcome misclassification, non-differential misclassification is present if it is unrelated to the exposure of interest. Exposure misclassification is non-differential if the misclassification is not associated with the outcome [140]. Non-differential misclassification tends to bias the association toward the null hypothesis, while differential misclassification may bias the association either toward or away from 1 [148].

Recall bias resulting from inaccurate recall of past exposure is common in cross-sectional studies and may cause differential misclassification as people with the disease of interest report exposures differently from people without the disease[140]. Misclassification of disease status with regard to self-reported cardiovascular disease (Yes/No) and Rose angina is an issue that has been debated in the literature to a great extent (Chapter 6.3.2).

Language problems may have been an issue in both SLiCA and SAMINOR. As mentioned above, in SLiCA, most interviews in Greenland were conducted in Greenlandic. In Norway, a Sami speaking interviewer was assigned to interviews where the interviewee preferred Sami; 45 of the 445 interviews were conducted in Sami. In Alaska, only the cue cards were translated but most Iñupiat speak English. We believe that any language difficulties are of little importance in SLiCA.

In SAMINOR language difficulties may also be a source of bias. Many elderly Sami have difficulty in reading and writing both Norwegian and Sami. As mentioned previously, the questionnaire was translated. However, only 1.6% of the participants chose to use the Sami version of the questionnaire. In this particular study, language problems were probably of little importance in SAMINOR.

Stress was in Papers I and II discussed as contributing factors to ill health. However, stress was not measure but rather assumed to be involved. Advancements in stress research have enabled the

use of multidimensional assessments of both stressor and stress response. Stress may be measured by complex questionnaires or through biological parameters. Instruments have been developed that differentiate major life stressors, stressful events that occur on a daily basis, and stress experienced during the course of a given day. Advancements on the biological level have had major impact in expanding the set of measurable biological parameters. In addition to these newly emerged biological stress indices, there have been significant improvements in the assessment of more traditional ones; classic stress hormones, such as cortisol and the catecholamines, epinephrine and norepinephrine, are amenable to increasingly precise measurements based on an expanded set of sources [157]. We were unable to quantify the impact of stress in our studies as biological parameters and appropriate questionnaire items were lacking.

### **6.3.1. Paper I**

Multiple imputation (MuI) was performed to improve precision. The goal of MuI is to use all the available information in the observed data to estimate the most probable values of the imputed data [158]. This method is assumed to be more valid than conventional ad hoc imputation methods. By using MuI we have been able to improve the sample size in the final analyses as well as minimising the probability of introducing information bias.

Interviewer bias is a form of observer bias. Interviewer bias may be a consequence of trying to “clarify” questions when such clarifications are not part of the study protocol, failing to follow the protocol-determined probing, or skipping rules of questionnaires [148]. All field workers in SLiCA were trained in interviewing techniques and procedures, and an interview guide was produced to optimise standardisation and training [122]. Interviewer bias is thus unlikely.

A recent review article concluded that SRH appears to be a valid measure for assessing health and health related quality of life in a number of indigenous populations [159]. There are however potential cultural differences in how SRH is conceptualised and the determinants that factor into self-assessments of health [159]. In that respect, caution must be shown when comparing the relative distribution of SRH among the Sami, Inūpiat and Greenlanders. We know from Bongo’s [142] thesis that the Sami and Norwegians may conceptualises health and disease somewhat

differently. These differences may however be more distinct among the middle-aged and the elderly. Contemporary Inuit concepts of health, illness and the body have been reported to differ from the concepts of their respective national majority populations [160]. However, very little has been published on these matters [160] and no studies are available on the conceptualisation of SRH in the Sami, Iñupiaq and Greenlandic populations. Thus, what constitutes poor and good health in these populations may differ, which in turn may produce non-differential misclassification with regard to ethnicity of SRH in this study, i.e. that SRH does not necessarily reflect the same amount of risk and morbidity in the three populations compared.

As mentioned in Chapter 2.2, using acculturation as a predictor of health outcomes has received criticism. Social and or cultural change is a complex process affected by a number of factors [161]; using it as a single exposure is in many ways a simplification of the process. SLiCA was not exclusively and specifically designed for conducting acculturation studies and measure acculturation strategies; we thus had to settle for a conventional scale-based analysis. When survey researchers aim at quantifying and “measuring” culture, there is often a danger of stereotyping it [115]; the questions used to operationalise acculturation may have measured completely different elements in the three samples regardless of the strong internal consistency observed (see Paper I). The fact that acculturation only significantly predicted poorer SRH in three out of six strata may suggest poor validity.

### *Ethnicity*

In addition to the self-reported method used to measure ethnicity, we used language ability as a way of ascertaining ethnic belonging. The participants excluded from the analysis did not indicate any Sami or Inuit affiliation whatsoever.

### **6.3.2. Papers II and III**

In these two papers we used ad hoc methods for imputing missing dichotomous outcome values; those missing were coded “no”, i.e. not having cardiovascular disease. This may have introduced information bias. However, everyone included in the analyses had completed the questionnaires

and it is plausible that the participants only ticked the boxes of the diseases they actually had or had ever had. After consulting colleagues in the department I have been informed that this trend has also been observed in other population studies. We thus decided to use this imputation method in Papers II and III. We did not perform sensitivity analyses with and without imputed data in paper II as sample sizes in some of the strata were extremely small. However, sensitivity analyses in Paper III showed no difference between imputed and non-imputed data. Given the plausible assumption made and the result of the sensitivity analyses in Paper III, I believe that misclassification of outcome data due to imputation in these papers is improbable.

Papers II and III are especially prone to recall bias; the outcome in these studies was CVD and was known to the subjects. This may have produced systematically different answers in the two groups that could have under- or overestimated the association between risk factors and CVD.

Based on the above, it is also plausible that the Sami respondents may have perceived the questions about cardiovascular disease as more intrusive than the non-Sami and thus underreported actual disease. In that case it is possible that our estimates in Paper III are biased toward the null. However, previous research assessing non-response in sensitive questions has reported that this is more of an issue in interview surveys than in self-administered questionnaires. What seems to make a difference is whether the respondent has to report his or her answer to another person [141]. We thus believe that a differential ethnic misclassification of disease outcome is unlikely in SAMINOR.

Studies of stable angina pectoris (SAP) prevalence have used a number of measures and the rates have varied between 0.73-14.4% [162]. To what extent these estimates reflect true differences or limitations of the different measures used is unclear. Epidemiological studies have usually used one of three approaches to measure SAP: documented clinical diagnosis, self-reported diagnosis or screening for probable SAP [162].

Several screening tools have been developed. The gold standard for diagnosing clinically relevant IHD is conventional coronary angiography (evidence of >70% occlusion of  $\geq 1$  coronary arteries). However, this method is invasive and includes potentially harmful contrast. Non-invasive

coronary angiography (e.g. MRI and multislice CT) may replace invasive methods if issues related to radiation exposure, image resolution and cost are resolved [162].

Many population-based studies have used questionnaires to survey the self-report of an SAP diagnosis. This approach is less costly and is useful when access to records is not possible. However, the self-reported method cannot detect people with undiagnosed symptoms and is also limited by recall bias. About 30% of cardiovascular disease events are misclassified by respondents, and people tend to confuse myocardial infarction and angina [162].

The Rose angina questionnaire (RAQ) was developed in the 1960s as a screening tool to detect SAP in population studies. Since then, many versions of the RAQ have been used to identify chest pain or discomfort consistent with SAP. Rose defined SAP as having chest pain or discomfort that fulfilled the following four criteria: 1) the symptoms are located in either the sternum or in the left arm and left anterior chest wall, 2) the symptoms are provoked by hurrying or walking uphill, or occur when walking on level ground if the person never attempts more, 3) the symptoms are relieved by rest or glyceryl nitrate and 4) the symptoms disappear in  $\leq 10$  minutes when standing still. These criteria closely approximate the clinical classification of typical angina. The four criteria originally defined by Rose are often referred to as constituting definite Rose angina. An alternative classification of exertional chest pain has been used for people who fulfil the three latter criteria. This definition invites variation in the presentation of SAP and is especially useful for women, who can experience angina discomfort differently from men [162].

The validity of the RAQ is very much debated; its sensitivity, specificity, and positive and negative predictive value have varied depending on the gold standard used. Its validity for women, in particular younger women, has been especially questioned. In spite of this, the literature is convincing and suggests that positive Rose angina predicts major ischaemic heart disease in men and mortality associated with IHD in men and women. For studies of lifetime prevalence of SAP, the RAQ in combination with confirmed diagnosis and self-report of ever having received a diagnosis of SAP are preferable, because these measures will identify the majority of people who have ever experienced symptoms of SAP at some time during the course

of IHD [162]. In Paper III we used this approach but without having access to confirmed diagnoses.

In Paper III we used a two-item version of the RAQ which to my knowledge has not been validated. On the basis of our review above, we can assert that the estimate of total angina burden in the Sami and non-Sami populations is probably overestimated as the two-item version also invites further misclassification of disease, since the given symptoms may reflect positive cases of several other diseases than the ones mentioned, e.g. cancer and gastric ulcer [163, 164]. Chronic bronchitis and bronchial asthma may be reasons for positive RAQ outcomes [165, 166]. Graff-Iversen et al [167] found that angina measured with a three-item version of the RAQ was linked with lung symptoms and increased mortality from pulmonary disease. We found no effect on our point estimates when controlling for self-reported chronic bronchitis/emphysema/obstructive pulmonary disease. It is nevertheless plausible to assume that the symptoms refer in the majority of cases to angina.

In Paper II we used self-reported stroke, MI and angina as a measure of total CVD. The reported accuracy of these self-reported diagnoses is inconsistent in the literature, but population studies in northern Norway support agreement between self-reported MI and medical records [168, 169]. Utsi et al [13] found self-reported angina and MI among Sami in Finnmark to correspond well with medical records and ECG. This may provide some support to the validity of the self-reported data.

There is more uncertainty with regard to the validity of self-reported strokes. Patients often confuse stroke with transient ischaemic attack [170]. In a postal survey in Finnmark [168] one found considerable over-reporting of strokes (only 65.5% were verified), largely explained by the phrasing of the question to include (TIA). In the Tromsø study [170], sensitivity of self-report for a combination of semi-structured interview, clinical examination, hospital medical records and CT scans was approximately 80% in participants aged  $\geq 40$  years. Specificity and PPV were 99% and 79%, respectively. Tretli et al [169] found poor agreement between self-reported stroke and medical records in the Finnmark population.

In light of this, and results from previous studies using comparable formulation of questions in similar populations [13, 169, 170], we believe that our estimates are valid, given that our ambition was to identify individuals who have ever experienced angina, MI and/or stroke/brain haemorrhage. We did not use Rose angina in our angina estimates in Paper II; this may have resulted in an underestimation of the angina prevalence. However, due to a somewhat small sample size and the danger of false positive Rose angina (due to the two-item version available), we decided not to include this info. Considerable effort was made to adjust for misclassification in Paper III as the sample size was large.

### *Ethnicity*

In Papers II and III Sami participants were identified if they reported at least one Sami identity mark (Sami language spoken by the respondent or at least one parent or grandparent, or Sami ethnic background or self-perceived Sami ethnicity). In Paper III sensitivity analyses were conducted by dichotomising Sami ethnicity into Sami I (Sami language used as home language by all grandparents, parents and the participant) and Sami II (at least one Sami identity mark, i.e. Sami language spoken by the respondent or at least one parent or grandparent, or Sami ethnic background or self-perceived Sami ethnicity). Additionally, sensitivity analyses with regard to geography were done by performing the analyses separately for inland and coastal municipalities. Thus, some misclassification of ethnicity is probable but does not represent a major threat. As both self-reported and objective language criteria were used in all three papers, I believe that Sami ethnicity is comparable in these studies.

## **6.4. Confounding, intermediate variables and interaction**

The term confounding refers to a situation in which a non-causal association between a given exposure and an outcome is observed as a result of the influence of a third variable (or group of variables), usually termed as a confounding variable, or merely a confounder [148]. The essential nature of this phenomenon can be stated as follows: the confounding variable is causally associated with the outcome and non-causally or casually associated with the exposure, but is not an intermediate variable in the causal pathway between the exposure and the outcome [148].

It is inappropriate to adjust for intermediate variables. Exceptions to this rule of thumb may be made when one wishes to explore alternative mechanisms that could explain the association between the exposure and the outcome of interest [148].

Stratification and adjustment are used to assess the presence of confounding. The former involves assessing the exposure-outcome association within the strata of the presumed confounding variable; if the association seen in the crude analysis has the same direction and magnitude as the association seen within the strata of the confounding variable, then confounding due to this third variable is unlikely. The latter method involves controlling or adjusting for the presumed confounding variable. If the crude and the adjusted estimate are similar, confounding is unlikely [148]. The confounder can explain all or some of the observed associations. A general rule of thumb states that if a change in estimate  $> 10\%$  occurs when the covariate is included in the model, the covariate may be classified as a confounder.

Sex and age are well known confounders. In all three papers, we used stratifications by sex and age. Multivariable analyses were also used in all three papers with possible confounders and intermediate variables included as covariates in the model.

### **6.4.1. Paper I**

The overall comparability in this study is somewhat reduced as the populations differ with regard to living conditions and the distribution of general risk factors; comparing the associations between acculturation and SRH may be flawed if the Inuit and Sami differ with regard to the distribution of confounding factors. This may however be statistically corrected for by adjusting for known and relevant confounding variables [155]. We have assessed and accounted for several potential major confounders, but not all. We adjusted for age, education, smoking, chronic physical or mental health problem, housing condition and living in village or town/living in Finnmark or not. In Norway, we did not control for housing condition as it was no variation in this variable. We controlled for these variables as they to a varying degree are associated with SRH and acculturation, and as these associations may vary in strength between the countries.



Infectious disease is for example relevant among the Iñupiat and Greenlandic Inuit but not among the Sami. Thus, housing condition which is an important living condition parameter is also associated with infectious disease such as tuberculosis.

Access to health care also differs; all three populations are provided publicly funded health care but the combination of public and private health care is more common in Alaska. Greenland has a poor infrastructure and is the largest island in the world, covering 2,2 million km<sup>2</sup>, of which 90% is covered by ice [126]. The available daily service ranges from consulting a health worker with very limited formal health training in the smaller villages to consulting a specialist at the national hospital in Nuuk. Telecommunication has severely improved health care delivery but health service is hampered by difficulties in recruiting personnel [126].

Alaska has also substantial challenges to providing access to health care in its remote communities. Sixty percent of Alaska's indigenous people live in small villages of 20-1700 people scattered across about 1,5 million km<sup>2</sup> [171]. In Alaska, the tribal system partially addresses access with its network of community, regional and tertiary care providers, but preventive care and early treatment of disease, as well as timely treatment of acute disease, continue to be compromised [172]. A 2007 study found vacancy rates among primary care providers of 20% or higher and nursing vacancy rates above 15% in rural Alaska [172]. This shortage exacerbates the geographical challenges [172]. Culturally sensitive health care is also to a lesser degree implemented in Greenland and among the Iñupiaq which may impact access.

In Norway, local municipalities provide primary care and GPs are based in local health centres and serve specific geographic areas. For specialised care, a health centre physician may refer to a hospital within the municipality or to a centralised hospital [171]. The infrastructure is completely different from Alaska and Greenland as distances are small in comparison and all municipalities are reachable by car. Sami culture sensitive health care is established to a certain degree. Differences in health care were in the analyses tried handled by controlling for "living in town or village". However, residual confounding is plausible as described in Paper I.

In sum, comparison of health between these three populations is difficult when considering what is described above. The premise for good health is rather diverse. We believe however that the directions of the associations, or the qualitative relationships, between acculturation and SRH are comparable as we controlled for several confounding factors.

The peoples involved represent a wide variety of ways of life with unique histories, experiences, communities and languages. These are issues that have been addressed in SLiCA and a joint effort from involved researchers and indigenous representatives have maximised consistency of meaning in the questionnaire. Standardisation in SLiCA was also possible as the indigenous peoples involved share common concepts with regard to the role of household production, their strong ties to the environment, and the continuing role of extended informal and formal social relationships [32].

#### **6.4.2. Papers II and III**

In these papers we conceptualised the conventional risk factors as intermediate (explanatory) variables as ethnicity is rarely a source of causal knowledge in itself [61].

In Paper II, we found that marginalised minority Sami were more physically active than non-marginalised majority Sami, as the OR for CVD was attenuated from 2.10 to 1.84 when the variable was removed from the model. One may argue that the variable is an intermediate variable in that it explains and does not confuse the relationship between ethnicity and CVD. Leisure-time light physical activity was more common in the minority area, which afforded some protection to the Sami living there. Further analysis showed that this effect was independent of marginalisation status and largely due to a generally higher level of leisure-time light physical activity in the minority area compared with the majority area (data not shown).

In Paper III we were unable to explain any of the differences between non-Sami and Sami in men. In women we found a small intermediate effect due to moderate alcohol consumption; the proportion of abstainers was significantly higher in Sami than in non-Sami which reduced the OR

from 1.42 to 1.35. The inclusion of self-reported angina explained the entire relationship between ethnicity and APS in women.

Interaction is present when two or more risk factors modify the effect of each other with regard to the occurrence or level of a given outcome [148]. There are two methods for assessing interaction, i.e. including an interaction term in regression models or by stratification. A significant interaction term or significant difference in level of effects by stratification indicates true effect modification. In Paper II we found that the effect of marginalisation on CVD was dependent on majority/minority status; marginalisation as an exposure had no effect in areas dominated by Sami ethnicity. Mechanisms that may possibly explain this are described in the respective paper (Paper II).

## **6.5. External validity**

As described by Nystad [11], external validity or generalisability in SAMINOR refers to whether the general population in the defined SAMINOR area systematically differs from the population in general in northern Norway, and whether those who participated in the study systematically differed from those not included. We believe that our results can be generalised to the Sami and non-Sami living in the rural areas of Finnmark, Troms and Trøndelag (Map 3). However, they may be less valid for the population in Nordland due to the low response rate in this region.

The external validity in SLiCA is more troublesome. The Norwegian sample differs most likely somewhat from the Sami population in general in the municipalities included in the study. The samples from Alaska and Greenland have a high external validity as a result of probability sampling and high response rates.

## **6.6. Statistical associations**

In Papers I and II we were hampered with small sample sizes which reduced the precision in the estimates. However, due to other methodological issues in Paper I, we assured the reader at an early stage that comparisons of effect estimates were unwise. Precision in small samples is

affected by random error, i.e. variability in the data that we cannot explain [140]. Increasing sample sizes tend to reduce the amount of random errors. Thus, in Paper III, where the sample was large (n=15,206), precision was increased and we had the statistical power to detect potential small differences between the groups.

Statistical inference involves making a generalisation about a larger group of individuals based on a subsample of that group. Statistical significance testing assesses whether chance (random error) may account for the observed results. The p-value is a measure of the strength of evidence against the null hypothesis. The confidence interval also provides information about the strength of evidence against the null hypothesis as well as the precision of the point estimates [140].

## **7. Brief discussion of main results and future research**

The respective results are discussed in detail in Papers I-III. The following discussion is focused on what the papers collectively add to the knowledge of indigenous population health in Norway and in the circumpolar region. The methodological discussions revealed some limitations which should be considered when interpreting the findings.

In Paper I we found that acculturation was associated with poorer self-rated health among Greenlandic men and women and Iñupiaq women. A close to significant relationship was found for poorer language ability and poorer SRH in Sami men. These results indicate that rapid modernisation and a history of colonisation may be important when assessing the overall burden of ill health in Arctic circumpolar populations. The null results observed among Iñupiaq men and Sami men and women may be because our operationalisation of acculturation measured the phenomenon poorly in these strata. Acculturation, marginalisation and stress are related concepts (Chapter 2.2). Both chronic stress and SRH have in earlier studies been shown to predict cardiovascular disease morbidity which is high in most circumpolar populations, including the Sami of Norway.

The newly established cardiovascular disease registry at the Norwegian Institute of Public Health will in the future also provide reliable data on the burden of cardiovascular disease in Sami areas. The results in Paper III indicate an excess of angina pectoris in the Sami population compared with the non-Sami population in Norway; in men, this may be due to underuse of health care services by the Sami. However, the findings in Paper II suggest that marginalisation and subsequent chronic stress may be an additional driving force influencing the population burden of lifetime cardiovascular disease among the Sami. The results in these two papers shed light on important social determinants of health in the Sami population of Norway that may be important in explaining the distribution of chronic disease within the Sami population and possible differences in disease burden compared with the non-Sami population in rural Norway. The findings in Paper I also support further explorations of the social determinants of ill health in other indigenous populations.

Although a vast body of research has provided important findings in the field of the social determinates of health, this effort must be intensified. In terms of Sami health, it is the responsibility of the Centre for Sami Health Research to show the way. This implies that social determinants are reflected in research questions and in the design stage of future population studies and that sufficient funds are allocated to this field of research.

## **8. Implications for future public health practice**

This study has shown that some social determinants may be important in explaining population distribution of health and chronic disease among three Arctic indigenous populations. The history of these peoples and subsequent consequences may explain some of the burden of disease and ill health on a population level. To reduce the health differences between indigenous peoples and the respective national population to which they belong, authorities must also recognise the latent factors that in part drive the levels of the main risk factors. Health intervention can be directed at high risk individuals only or be applied to the entire population (population strategy). The largest benefit has been obtained through the population strategy [138]. This study indicates that public health initiatives may in indigenous areas also be combined with continued support for indigenous languages and culture through legislation and financial support. The planning of health promotion depends also on the manageability and efficiency of primary health care. Within such a scheme is the need for culture sensitive primary and specialist health care based on indigenous language. This must be solved in context specific ways among the Iñupiaq, Greenlandic Inuit and Sami of Norway.

Previous research in SAMINOR has found small ethnic differences in risk factors for CVD. The close interaction and similar standard of living between the ethnic subgroups might be the explanation. It is likely that the mentioned lifestyle changes have occurred in all parts of the rural population in northern Norway independently of ethnicity [11]. In Papers II and III we found however a rather clear-cut disease pattern within the Sami population and between the Sami and non-Sami population which understandably could not be explained by the conventional risk factors. We have suggested that social determinants may play a vital role in disease distribution in these populations. In the Sami population special attention must be given to factors associated with marginalisation, and under-utilisation of health care services. The stability of GPs in the primary health care service has been poor in many Sami districts. Recruiting Sami-speaking GPs to these areas has proven difficult. Nystad et al [173] have reported higher dissatisfaction with health care services among the Sami-speaking population compared with Norwegians. Language competent and stable GP services, and further support of Sami language, culture and subsistence economy may have positive public health ramifications. The scope of this study does not allow

any suggestions for possible public health initiatives aimed at the Iñupiaq and Greenlandic Inuit. However, increased support of local economic adaptations, and cultural and linguistic infrastructure may also be a sound long-term investment in improved public health in these populations.



## 9. Errata

One mistake has occurred in Paper I with regard to the sample size from Alaska. This mistake has occurred during the multiple imputation process.

### Paper I. Sample from Alaska

Sex	Participants	Paper I (Table 3)
Men	283	284
Women	379	380
Missing	1	0
Total	663	664

The multiple imputation was conducted separately for men and women as described in Paper I; the single observation with item-non response in sex was included both in the imputation among the men and among the women. This is unfortunate but does not affect the overall results since this concerns only one observation. The only practical implication is that the total sample size has increased by one observation ( $n=664$ ).

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## PAPER I



Eliassen BM, Braaten T, Melhus, M, Hansen KL, Broderstad AR.  
**Acculturation and self-rated health among Arctic indigenous peoples: a population-based cross-sectional study.** *BMC Public Health* 2012, 12:948.  
PubMed: PMID 23127197



## PAPER II



Eliassen BM, Melhus, M, Hansen KL, Broderstad AR.

**Marginalisation and cardiovascular disease among rural Sami in Northern Norway: a population-based cross-sectional study.**

*BMC Public Health* 2013, 13:522.

PubMed: PMID 23718264





## PAPER III



Eliassen BM, Graff-Iversen S, Melhus, M, Hansen KL, Løchen ML,  
Broderstad AR.

**Ethnic difference in the prevalence of angina pectoris in Sami and non-Sami populations: The SAMINOR study.**

*[Submitted]*



# Appendix A

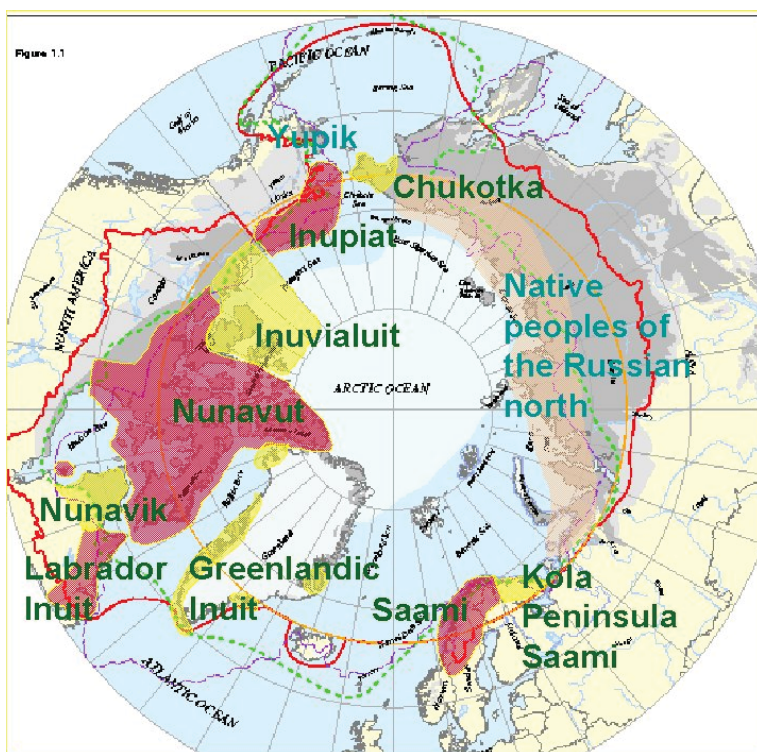


## SLiCA

- Information letter
- Informed consent
- Mailed invitation letter/informed consent used in Finnmark.
- Questionnaires



## Forespørsel om å delta i forskningsprosjekt på levekår blant urfolk i Arktis



”Survey of Living Conditions in the Arctic: Inuit, Saami and the Indigenous Peoples of Chukotka (SLiCA) (Levekårsundersøkelse i Arktis: Inuitter, samer og urbefolkningen i Tsjukotka (SLiCA)) er et internasjonalt forskningsprosjekt på levekår blant urfolk i Arktis. Urfolk i Alaska, Canada, Grønland, Norge, Sverige, Finland og Russland overvåker prosjektet, og har hjulpet til med å utforme spørsmålene.

Ved å underskrive og returnere vedlagte samtykkeerklæring samtykker du i å bli kontaktet av en av medarbeiderne ved Senter for samisk helseforskning. I løpet av mai vil du da bli forespurt om å delta i forskningsprosjektet. Prosjektet vil foregå som et ansikt-til-ansikt intervju, der du svarer på spørsmål om dine levekår til en av våre ansatte intervjuere. I tillegg består intervjuet av et kort spørreskjema som du frivillig kan fylle ut. Spørsmålene som vil bli stilt omhandler samiske levekår; som bolig

og levestandard, arbeid og aktiviteter, familien, helse, alkohol og rusmidler.

Det er frivillig å delta i intervjuet; du kan til enhver tid trekke deg og få opplysningene om deg slettet. Opplysningene fra intervjuet er strengt konfidensielle og behandles anonymt. Intervjuet varer omtrent i én og en halv time.

Resultatene fra spørreundersøkelsen kan blant annet brukes til å påvirke både samiske og norske beslutningstakere. Etter at forskningsprosjektet er avsluttet, vil alle spørreskjemaer kondemneres etter at de er registrert i en datamatrikse. Universitetet i Tromsø vil publisere resultatene fra undersøkelsen i anonymisert form. All data i datamatriksen anonymiseres og tallmaterialet fra undersøkelsen vil publiseres i form av rapporter som utgis i løpet av de kommende år. De anonymiserte rapportene vil gis tilbake til det samiske samfunnet; til organisasjoner som Arktisk Råd og samiske institusjoner.

Ditt hushold er et av de utvalgte i denne regionen. Dersom du ønsker å delta i forskningsprosjektet, ber vi om at du undertegner og daterer samtykkeerklæringen og returnerer den i vedlagte svarkonvolutt. Oppgi i så fall ditt telefonnummer, slik at vi kan kontakte deg og avtale tidspunkt og sted for intervjuet.

Prosjektet har tidligere mottatt støtte fra Kommunal- og regionaldepartementet og Landsdelsutvalget. Senter for samisk helseforskning ved Institutt for Samfunnsmedisin, Universitetet i Tromsø, administrerer, finansier og er i dag ansvarlig for prosjektet. Prosjektmedarbeiderne Bent-Martin Eliassen og Thomas Ole Andersen er ansatt i full stilling og jobber administrativt i prosjektet. Professor og prosjektleder Eiliv Lund har det faglige ansvaret for prosjektet.

På forhånd takk!

Thomas Ole Andersen, prosjektmedarbeider  
Bent-Martin Eliassen, prosjektmedarbeider

mobil: 95 74 95 21      jobb: 77646636  
mobil: 97 53 44 73      jobb: 77646636



## SAMTYKKEERKLÆRING

Med å underskrive denne samtykkeerklæringa forstår og samtykker jeg i:

Å delta i forskningsprosjektet "Survey of Living Conditions in the Arctic (SLiCA), (Forskningsprosjekt på levekår blant urfolk i Arktis (SLiCA))." Jeg forstår at deltakelsen er frivillig og at jeg når som helst kan trekke meg fra undersøkelsen.

Alle personlige opplysninger om meg, min familie og hushold, vil holdes strengt konfidensielt. Etter at undersøkelsen er avsluttet, kondemneres alle opplysninger om meg. All informasjon som jeg gir vil bli analysert og publisert i anonymisert form.

Universitetet i Tromsø vil publisere resultatene fra undersøkelsen, og rapportene vil gis tilbake til det samiske samfunnet. Resultatene kan blant annet brukes til å påvirke samiske og norske beslutningstakere.

Respondentens signatur: \_\_\_\_\_

Dato: \_\_\_\_\_

IER ID: _____	IV NR: _____	KONTROLLNUMMER: _____
---------------	--------------	-----------------------







**Sámi dearvvašvuođadutkama  
guovddáš**  
Senter for samisk helseforskning

## SAMTYKKEERKLÆRING

Med å underskrive og returnere denne samtykkeerklæringen forstår jeg og gir mitt samtykke til:

Å bli kontaktet av representanter for Senter for samisk helseforskning med forespørsel om å delta i forskningsprosjektet "Survey of Living Conditions in the Arctic (SLiCA), (Forskningsprosjekt på levekår blant urfolk i Arktis (SLiCA))." Jeg forstår at deltakelsen er frivillig og at jeg når som helst kan trekke meg fra undersøkelsen.

Jeg forstår at alle personlige opplysninger om meg, min familie og hushold, vil holdes strengt konfidensielt. Etter at undersøkelsen er avsluttet, kondemneres alle opplysninger om meg. All informasjon som jeg gir vil bli analysert og publisert i anonymisert form.

Universitetet i Tromsø vil publisere resultatene anonymt fra undersøkelsen, og rapportene vil gis tilbake til det samiske samfunnet. Resultatene kan blant annet brukes til å påvirke samiske og norske beslutningstakere.

Vennligst returnerer dette skjema i vedlagte returkonvolutt.

Respondentens signatur: \_\_\_\_\_

Dato: \_\_\_\_\_

Telefonnummer: \_\_\_\_\_

IER ID: _____	IV NR: _____	KONTROLLNUMMER: _____
---------------	--------------	-----------------------



Intervjuer ID:

Intervjuers ID nummer:

Kontrollnummer:

**SURVEY OF LIVING CONDITIONS IN THE ARCTIC: INUIT,  
SAAMI AND THE INDIGENOUS PEOPLES OF CHUKOTKA**

**Norsk spørreskjema**



A6-A11. I de følgende spørsmål vil jeg spørre deg om menneskene som for tiden tilhører ditt hushold. (GI R HUSHOLDSTABELLEN) Her er det vi kaller for en husholdstabell. Den skal hjelpe oss i å fullføre de neste spørsmålene.

Om du starter med deg selv, og så går fra eldst til yngst, kan du fortelle meg fornavnet til hver person som for tiden tilhører ditt hushold? Som du kan se, så vil jeg vite hver persons forhold og slektskap til deg, deres alder, kjønn og hva de anser sin etniske bakgrunn for å være: same, norsk/svensk/finnsk, eller begge deler. (FULLFØR FØRSTE DEL AV HUSHOLDSTABELLEN.  
OVERFØR SVARENE TIL SPØRRESKJEMAET ETTER INTERVJUET)

PERSON	A6. SLEKTSFORHOLD TIL RESPONDENTEN	A7. ALDER	A8. KJØNN	A9-A11. ETNISK BAKGRUNN(ER)
1	RESPONDENT		1. MANN 2. KVINNE	A9a. <input type="radio"/> 8 VI A10a. <input type="radio"/> 9 IS A11a.
2	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9b. <input type="radio"/> 8 VI A10b. <input type="radio"/> 9 IS A11b.
3	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9c. <input type="radio"/> 8 VI A10c. <input type="radio"/> 9 IS A11c.
4	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9d. <input type="radio"/> 8 VI A10d. <input type="radio"/> 9 IS A11d.
5	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9e. <input type="radio"/> 8 VI A10e. <input type="radio"/> 9 IS A11e.
6	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9f. <input type="radio"/> 8 VI A10f. <input type="radio"/> 9 IS A11f.
7	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9g. <input type="radio"/> 8 VI A10g. <input type="radio"/> 9 IS A11g.
8	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9h. <input type="radio"/> 8 VI A10h. <input type="radio"/> 9 IS A11h.
9	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0 UP	A9i. <input type="radio"/> 8 VI A10i. <input type="radio"/> 9 IS A11i.
10	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9i. <input type="radio"/> 8 VI A10i. <input type="radio"/> 9 IS A11i.
11	<input type="checkbox"/> 8. VI <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	<input type="checkbox"/> 98. VI <input type="checkbox"/> 99. IS <input type="checkbox"/> 00 UP	1. MANN 2. KVINNE <input type="checkbox"/> 9. IS <input type="checkbox"/> 0. UP	A9i. <input type="radio"/> 8 VI A10i. <input type="radio"/> 9 IS A11i.

**B16. (OM R HAR FORELDREANSVAR FOR BARN I HUSHOLDET)**  
Hvilket språk snakker du til dine (ditt) barn?

1. JA	2. NEI	9. IS	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	a. SAMISK
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	b. NORSK
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	c. SVENSK
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	d. FINSK
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	e. ANDRE _____

**B17. Ved å bruke dette kortet, vennligst fortell meg hvordan du vurderer dine ferdigheter til å forstå, snakke, lese eller skrive samisk? (GI R KORT FEM) Fortell meg de numrene som beskriver dine ferdigheter best:**

	1. SVÆRT BRA	2. NOKSÅ BRA	3. MED ANSTRENGELSE	4. NOEN FÅ ORD	5. IKKE I DET HELE TATT	9. IS
a. Forstå?						
b. Snakke?						
c. Lese?						
d. Skrive?						

**B18. Hvordan vurderer du dine ferdigheter til å forstå, snakke, lese og skrive norsk?**

	1. SVÆRT BRA	2. NOKSÅ BRA	3. MED ANSTRENGELSE	4. NOEN FÅ ORD	5. IKKE I DET HELE TATT	9. IS
a. Forstå?						
b. Snakke?						
c. Lese?						
d. Skrive?						

**B19. (GI I KORT TRE) Hvilket nummer på kortet beskriver best hvor ofte du snakker samisk:**

	1. HELE TIDEN	2. MESTEPARTEN AV TIDEN	3. NOEN GANGER	4. SVÆRT SJELDEN	5. IKKE I DET HELE TATT	9. IS
a. Hjemme?						
b. På jobb?						
c. På skolen?						
d. Andre steder?						

B29. Hvilket er det høyeste nivå skole eller utdanning du har fullført?

- 01. BARNESKOLE →
- 02. FRAMHALDSSKOLE/GRUNNSKOLE
- 03. VIDEREGÅENDE SKOLE
- 04. YRKES- ELLER HANDELSSKOLE
- 05. HØYSKOLE ELLER UNIVERSITET – LAVERE GRAD(BACHELOR/CAND.MAG)
- 06. HØYSKOLE ELLER UNIVERSITET – HØYERE GRAD (MASTER/HOVEDFAG)
- 07. HØYSKOLE ELLER UNIVERSITET – DOKTORGRAD
- 97. ANNET: \_\_\_\_\_
- 99. IS

GÅ TIL B54

B29a. Spesifiser hvilken grad eller utdanning ferdigstilt: \_\_\_\_\_

B30. Gikk du i barneskolen hjemmefra?

- 1. JA, HELE BARNESKOLEN
- 2. JA, DELER AV BARNESKOLEN
- 3. NEI
- 9. IS
- 0. UP, GIKK IKKE I BARNESKOLEN

B31. Noen mennesker syntes barneskolen var vanskelig og/eller stressende. For andre igjen var ikke opplevelsen vanskelig. Hvordan opplevde du barneskolen:

- 1. VANSKELIG/STRESSENDE
- 2. IKKE VANSKELIG/  
STRESSENDE →
- 8. VET IKKE
- 9. IS
- 0. UP, GIKK IKKE I BARNESKOLEN

GÅ TIL B33

B32. Om du føler deg bekvem med spørsmålet, kan du fortelle meg mer om dette?

- 98. VET IKKE
- 99. IS
- 00. UP, GIKK IKKE I BARNESKOLEN

## DEL D: HELSE

D1. Nå vil jeg spørre deg om din helsetilstand. Først, hvordan vil du beskrive din generelle helsetilstand?

- 1. UTMERKET
- 2. SVÆRT GOD
- 3. GOD
- 4. MODERAT
- 5. DÅRLIG
  
- 9. IS

D2. (GI R KORT TI.) Hvilke, om noen, av de følgende symptomene har du kjent det siste året? Vennligst bare fortell hvilke(n) bokstav(er) som passer.

- | 1. JA                 | 2. NEI                | 9. IS                 |                                   |
|-----------------------|-----------------------|-----------------------|-----------------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. SMERTER?                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. HOSTE- ELLER PUSTEBESVÆR?      |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. MAGE- ELLER FORDØYELSESBESVÆR? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. FEBER?                         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. MISTET TENNER?                 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. SVIMMELHET?                    |

(OM R NEVNER SMERTER ELLER PROBLEMER)

D3. Hvilke type smerter eller problemer?

- 98. VET IKKE
- 99. IS
- 00. UP

D4. Finnes det lege eller annen type helsepersonell i ditt område som du kan oppsøke?

- 1. JA
- 2. NEI
- 8. VET IKKE
  
- 9. IS
- 0. UP



D21. For hvilke(t) problem(er)?

- 98. VET IKKE
- 99. IS

D22. (GI R KORT TOLV) Hvilke av sykdommene på dette kortet har rammet din familie? Vennligst bare fortell meg bokstavene på kortet.

- | 1. JA                 | 2. NEI                | 9. IS                 |  |
|-----------------------|-----------------------|-----------------------|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. Kreft   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. Hjerte- eller lungesykdommer                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. Øyesykdommer                                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. Mental sykdom                                 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. Ledd- og skjelettsykdommer                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. Leddgikt                                      |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. Skader eller sykdommer etter ulykkestilfeller |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. Alkoholisme eller annen rusmiddelavhengighet  |

D23. Hemmes eller begrenses dine daglige gjøremål av kronisk fysiske eller mentale helseproblemer, sykdommer eller skader?

- 1. JA
- 2. NEI
- 8. VET IKKE
- 9. IS

D24. Har du problemer med hørsel, syn, kommunikasjon, gange, trappegange, bevegelser eller utførelse av lignende aktiviteter?

- 1. JA, AV OG TIL
- 2. JA, OFTE
- 3. NEI
- 9. IS

D25. Dette spørsmålet omhandler røyking. Hvor ofte røyker du sigaretter for tiden?

- 1. DAGLIG
- 2. AV OG TIL → GÅ TIL D28
- 3. ALDRI → GÅ TIL D28
- 9. IS → GÅ TIL D34

D26. Hvor gammel var du da du startet å røyke daglig?

(00)\_\_\_\_(ALDER)

- 97. RØYKER IKKE DAGLIG
- 98. VET IKKE/HUSKER IKKE
  
- 99. IS
- 00. UP

D27. Hvor mange sigaretter røyker du daglig nå?

(00)\_\_\_\_(ANTALL) (00)\_\_\_\_(PAKKER) →

GÅ TIL D34

- 98. VET IKKE
- 99. IS
- 00. UP

D28. Har du røkt 100 sigaretter eller mer i løpet av livet ditt?

- 1. JA
- 2. NEI → → → GÅ TIL D34
- 9. IS → → → → → GÅ TIL D34

(SPØR KUN OM R RØYKER "AV OG TIL")

D29. På de dagene du røyker, omtrent hvor mange sigaretter røyker du da?

(00)\_\_\_\_(ANTALL)

- 98. VET IKKE
- 99. IS
- 00. UP

D30. Har du i noe tidsrom røkt daglig?

- 1. JA
- 2. NEI → GÅ TIL D34
- 9. IS → GÅ TIL D34

D31. Hvor gammel var du da du begynte å røyke daglig?

(01)\_\_\_\_(ALDER)

- 98. VET IKKE/HUSKER IKKE
- 99. IS
- 00. UP

D32. Hvor mange sigaretter røykte du vanligvis hver dag?

(00)\_\_\_\_(ANTALL) (00)\_\_\_\_(PAKKER)

- 98. VET IKKE/HUSKER IKKE
- 99. IS
- 00. UP

D33. Hvor gammel var du da du sluttet å røyke daglig?

(02) \_\_\_\_\_(ALDER)

- 98. VET IKKE/HUSKER IKKE
- 99. IS
- 00. UP

D34. (GI R KORT TRETTE) Hvilke av de følgende, om noen, er et problem for samer i ditt område?

- | 1. JA                 | 2. NEI                | 8. VET IKKE           | 9. IS                 |                              |
|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. Selvmord/selvmordstanker? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. Arbeidsledighet?          |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. Familievold?              |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. Seksuelt misbruk?         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. Stoffmisbruk?             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. Alkoholmisbruk?           |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. Bruk av snus eller skrå?  |

D35. (GI R KORT SJU) Kan du vennligst fortelle meg det nummeret på kortet som best beskriver hvor tilfreds du er med din helsetilstand.

- 1. SVÆRT TILFREDS
- 2. NOE TILFREDS
- 3. HVERKEN TILFREDS ELLER UTILFREDS
- 4. NOE UTILFREDS
- 5. SVÆRT UTILFREDS
- 8. VET IKKE
- 9. IS

(GI R DET SELVADMINISTRERENDE SPØRRESKJEMAET OG EN PENN)

## DEL E: BOLIG OG LEVESTANDARD

E1. Hvilken type bolig bor du i? (LES OPP KATEGORIENE OM NØDVENDIG)

- 1. ENEBOLIG
- 2. VERTIKALDELT BOLIG
- 3. REKKEHUS
- 4. LEILIGHET
- 5. GENERASJONSBOLIG
- 6. SESONGBOLIG
- 7. ANNEN TYPE BOLIG
- 8. VET IKKE
  
- 9. IS

(OM ANNEN TYPE BOLIG)

E2. Hvordan vil du beskrive denne boligen? ↓

- 98. VET IKKE
- 99. IS
- 00. UP

E3. I tillegg til stuen, hvor mange rom finnes det i boligen din? Ikke tell med kjøkken, badrom, korridorer, boder og rom du leier ut til andre.

(00) \_\_\_\_\_

- 98. VET IKKE
- 99. IS
- 00. UP

E4. Hvor mange kvadratmeter vil du anslå du har å bo på?

(0000) \_\_\_\_\_

- 9998. VET IKKE
- 9999. IS
- 0000. UP

E5. (GI R KORT FJORTEN) Ved å se på alternativene på kortet, hva har din bolig **ikke**? Vennligst bare fortell meg bokstavene.

- | 1. HAR                | 2. HAR<br>IKKE        | 8. VI                 | 9. IS                 |    |   |
|-----------------------|-----------------------|-----------------------|-----------------------|----|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. | SEPARAT KJØKKEN?                        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. | BAD ELLER DUSJROM?                      |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. | INNENDØRS TOALET?                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. | VARMTVANNSTANK?                         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. | SENTRALVARME ELLER ELEKTRISKE<br>OVNER? |

- |                       |                       |                       |                       |    |  |
|-----------------------|-----------------------|-----------------------|-----------------------|----|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. | ET STED Å SITTE UTE PÅ?<br>(TERRASSE, BALKONG ELLER HAGE)              |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. | TELEFON?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. | KOMFYR ELLER STEIKOVN TIL MATLAGING?                                   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | i. | RØYKVARSLER?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | j. | ELEKTRISITET?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | k. | GENERATOR?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | l. | KALDT VANN FRA KRAN?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | m. | SEPTIKTANK, TILKOBLING TIL<br>KLOAKKSYSTEM ELLER<br>KLOAKKKOMPOSTERER? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | n. | BRANN-/NØDUTGANG?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | o. | UTSIKT?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | p. | EN BOD?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | q. | EN Plass FOR Å PARTERE OG FILETERE<br>KJØTT OG FISK?                   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | r. | DOBLE VINDUSGLASS?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | s. | INTERNETTILKOBLING?  |

E6. (GI R KORT FEMTEN) Ved å se på eksemplene på dette kortet, har din bolig noen av disse problemene? Vennligst bare fortell meg bokstavene som stemmer.

- | 1. JA                 | 2. NEI                | 8. VI                 | 9. IS                 |    |  |
|-----------------------|-----------------------|-----------------------|-----------------------|----|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. | FOR LITEN Plass?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. | FUKTIGHET?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. | SOPP OG MUGG ELLER RÅTE?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. | LEKKASJE FRA TAK P.G.A KONDENSERING<br>ELLER SMELTING?             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. | FROST PÅ VINDUER?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. | TREKK FRA DØRER ELLER VINDUER?                                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. | TREKK FRA ANDRE STEDER ENN DØRER<br>OG VINDUER?                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. | KALDE GULV?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | i. | GENERELL KULDE?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | j. | TUNG LUFT – DÅRLIG VENTILASJON?                                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | k. | FORANDRINGER I BYGNINGSKONSTRUKSJONEN<br>P.G.A TELEHIV?            |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | l. | VANN SOM IKKE KAN DRIKKES, I ALLE FALL I NOEN<br>PERIODER AV ÅRET? |

E7. Trenger boligen din større reparasjoner (for eksempel nytt tak, nye vannrør, bygningsmessige reparasjoner)?

1. JA  
 2. NEI  
 8. VET IKKE  
 9. IS

## DEL G: SAMISKE VERDIER, RELIGION OG ÅNDELIGHET

I denne delen kommer vi tilbake til dine samiske verdier.

G1. Jeg vil nå lese en liste over gjøremål og skikker som kan være viktig for å opprettholde din samiske identitet og selvfølelse. For hver aktivitet, vennligst fortell meg nummeret som best passer for deg. (GI I KORT TJUETO)

	1. SVÆRT VIKTIG	2. VIKTIG	3. IKKE SÅ VELDIG VIKTIG	4. IKKE VIKTIG I DET HELE TATT
a. Den samiske maten du spiser?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. At du jakter og fisker?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. At du kjenner til slektsforhold?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Innhøsting av planter, grønnsaker og bær?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Ditt arbeide eller yrke?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Konservering av samisk mat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Din bruk av samisk språk?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Deltakelse i tradisjonelle kulturelle begivenheter?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Din oppdragelse?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Klæme du bruker?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Din personlige kontakt med andre samer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Den samiske diktningen og litteraturen du leser?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Din religiøse og åndelige tro?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Ditt syn på naturen?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. Måten du forsøker å møte forventninger fra familie og samiske venner?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. Lære deg selv samisk?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. Lære dine barn samisk?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Jearahalli ID:

Jearahalli ID nummar:

Dárkkistannummar:

**SURVEY OF LIVING CONDITIONS IN THE ARCTIC: INUIT,  
SAAMI AND THE INDIGENOUS PEOPLES OF CHUKOTKA**

**Sámegiell gažadanskovvi**



**SLiCA**

Survey of Living Conditions in the Arctic

A6-A11. Dáid gažaldagain jearan sin birra geat gullet du dálloodollui. (ATTE R:I DÁLLODOALLOTABEALLA) Dá lea dat maid gohčodat dálloodoallotabeallan. Dat galgá min veahkehit čađahit boahte gažaldagaid.

Jus álggát iežainat, ja joatkkát boarrasemosiin nuoramussii, sáhtátgo mitalit ovdanama juohkehažžii gii dál gullá du dálloodollui? Nu go oainnát, de áiggošin diehtit juohkehačča gaskavuoda ja fuolkevuoda dutnje, sin agi, sohka beali ja maid atnet iežaset čearddalaš duogázin: sápmelaš, dáža/ruoŋa/suoma, vai goappašiid. (DEAVDDE DÁLLODOALLOTABEALLA VUOSTTAŠ OASI. SIRDDE VÁSTÁDUSAID GAŽADANSKOVVÁI MADDIL JEARAHALLAMA)



GII	A6. FUOLKEVUOHTA SUTNJE GII JEARAHALLO	A7. AHKI	A8. SOHKA- BEALLI	A9-A11. ČEARDDALAŠ DUOGÁŠ (-ŽAT)
1	SON GII JEARAHALLO		1. ALMMÁI 2. NISU	A9a. <input type="radio"/> 8 VI A10a. <input type="radio"/> 9 IS A11a.
2	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9b. <input type="radio"/> 8 VI A10b. <input type="radio"/> 9 IS A11b.
3	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9c. <input type="radio"/> 8 VI A10c. <input type="radio"/> 9 IS A11c.
4	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9d. <input type="radio"/> 8 VI A10d. <input type="radio"/> 9 IS A11d.
5	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9e. <input type="radio"/> 8 VI A10e. <input type="radio"/> 9 IS A11e.
6	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9f. <input type="radio"/> 8 VI A10f. <input type="radio"/> 9 IS A11f.
7	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9g. <input type="radio"/> 8 VI A10g. <input type="radio"/> 9 IS A11g.
8	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9h. <input type="radio"/> 8 VI A10h. <input type="radio"/> 9 IS A11h.
9	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9i. <input type="radio"/> 8 VI A10i. <input type="radio"/> 9 IS A11i.
10	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9i. <input type="radio"/> 8 VI A10i. <input type="radio"/> 9 IS A11i.
11	<hr/> <input type="radio"/> 8. VI <input type="radio"/> 9. IS <input type="radio"/> 0. UP	<hr/> <input type="radio"/> 98. VI <input type="radio"/> 99. IS <input type="radio"/> 00 UP	1. ALMMÁI 2. NISU <input type="radio"/> 9. IS <input type="radio"/> 0. UP	A9i. <input type="radio"/> 8 VI A10i. <input type="radio"/> 9 IS A11i.

**B16. (JUS R:S LEA DÁLLODOALU MÁNNÁI (MÁNÁIDE)  
VÁHNENOVDASVÁSTÁDUS)**

Guđe giela hálat iežat mánáin(-iguin)?

1. JO	2. IN	9. IS	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	a. SÁMEGIELA
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	b. DÁROGIELA
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	c. RUOFAGIELA
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	d. SUOMAGIELA
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	e. EARÁ _____

**B17. Anedettiin dán koartta, muitalaste munnje mo árvvoštalat iežat čehppodaga áddet, hállat, lohkat dahje čállit sámegiela? (ATTE R:I VIĐÁT KOARTTA)**  
Muitalaste guđet nummarat čilgejit buoremusat du čehppodaga:

	1. HIRBMAT BURES	2. OALLE BURES	3. RAŽAN	4. MOADDE SÁNI	5. IN OBANASSIIGE	9. IS
a. Áddet?						
b. Hállat?						
c. Lohkat?						
d. Čállit?						

**B18. Mo árvvoštalat iežat čehppodaga áddet, hállat, lohkat ja čállit dárogiela?**

	1. HIRBMAT BURES	2. OALLE BURES	3. RAŽAN	4. MOADDE SÁNI	5. IN OBANASSIIGE	9. IS
a. Áddet?						
b. Hállat?						
c. Lohkat?						
d. Čállit?						

**B19. (ATTE R:I GOALMMÁT KOARTTA) Guhte nummar koarttas čilge buoremusat man dávjá hálat sámegiela:**

	1. OLLES ÁIGGI	2. EANAŠ ÁIGGI	3. MUHTIMIN	4. HIRBMAT HÁRVE	5. IN OBANASSIIGE	9. IS
a. Ruovttus?						
b. Barggus?						
c. Skuvllas?						
d. Eará sajis?						

B29. Mii lea alimus dássi skuvllas dahje oahpus maid don leat čađahan?

- 01. MÁNÁIDSKUVLA →
- 02. OVDDEŠ NUORAIDSKUVLA/VUOĐĐOSKUVLA
- 03. JOATKKASKUVLA
- 04. ÁMMÁT- DAHJE GÁVPESKUVLA
- 05. ALLASKUVLA DAHJE UNIVERSITEAHTTA – VUOLIT DÁSI (BACHELOR/CAND.MAG)
- 06. ALLASKUVLA DAHJE UNIVERSITEAHTTA – ALIT DÁSI (MASTER/VÁLDOFÁGA)
- 07. ALLASKUVLA DAHJE UNIVERSITEAHTTA – DOAVTTIRGRÁDA
- 97. EARÁ: \_\_\_\_\_
- 99. IS

MANA B54:i

B29a. Aiddostahte makkár grada dahje oahpu leat gergen: \_\_\_\_\_

B30. Vázzetgo mánáidskuvllas ruovttus eret?

- 1. JO, OLLES MÁNÁIDSKUVLLA
- 2. JO, OASI MÁNÁIDSKUVLLAS
- 3. IN
- 9. IS
- 0. UP, IN VÁZZÁN MÁNÁIDSKUVLLA

B31. Soapmásiid mielas lei mánáidskuvla váttis ja/dahje huššas. Earáid mielas fas ii lean váttis. Mo du mielas lei mánáidskuvla?

- 1. VÁTTIS/HUŠŠAS
- 2. II VÁTTIS/HUŠŠAS →
- 8. IN DIEĐE
- 9. IS
- 0. UP, IN VÁZZÁN MÁNÁIDSKUVLLA

MANA B33:i

B32. Jus ii leat unohas du mielas. Sáhtátgo de munnje muitalit eanet dan birra?

- 98. IN DIEĐE
- 99. IS
- 00. UP, IN VÁZZÁN MÁNÁIDSKUVLLA

## D OASSI: DEARVVASVUOHTA

D1. Dál áiggošin jearrat du dearvasvuođa birra. Álggos, mo čilget iežat oppalaš dearvasvuođadili?

- 1. ERENOMÁŠ BUORRE
- 2. HIRBMAT BUORRE
- 3. BUORRE
- 4. DOHKÁLAŠ
- 5. HEITTOT
  
- 9. IS

D2. (ATTE R:I LOGÁT KOARTTA) Guđiid, jus ovttage, dáid dávdamearkkaid leat dovdan mannan jagis? Mitalastte dušše guhte bustávva (guđet bustávat) heivejit.

- | 1. JO                 | 2. IN                 | 9. IS                 |                                    |
|-----------------------|-----------------------|-----------------------|------------------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. BÁKČASAT?                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. GOSAHAT DAHJE LOSSAT VUOIGDAT?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. ČOAVJE- DAHJE SUOLBMUDANVÁTTUT? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. FEBER?                          |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. MASSÁN BÁNIID?                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. OAIVEJORRAN?                    |

(JUS R NAMUHA BÁKČASIID **DAHJE** VÁTTISVUOĐAID)

D3. Makkár bákčasat dahje váttisvuođat?

- 98. IN DIEÐE
- 99. IS
- 00. UP

D4. Leago du guovllus doavttir dahje eará dearvasvuođabargi gean lusa sáhtát mannat?

- 1. JO
- 2. II
- 8. IN DIEÐE
  
- 9. IS
- 0. UP

D21. Makkár váttisvuođa(id) geažil?

- 98. IN DIEÐE
- 99. IS

D22. (ATTE R:I GUOKTENUPPELOGÁT KOARTTA) Guđet dávddat dán koarttas leat du bearrašis leamaš? Muitalastte munnje dušše bustávid mat leat koarttas.

- | 1. JO                 | 2. IN                 | 9. IS                 |  |
|-----------------------|-----------------------|-----------------------|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. Borasdávda                                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. Váibmo- dahje geahpesvigit                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. Čalbmedávddat                             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. Silolaš dávda                             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. Lađas- ja dáktedávddat                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. Lađassearggahat                           |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. Vaháгат ja dávddat lihkohisvuođaid geažil |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. Jugešvuolta dahje eará mirkkogeavaheapmi  |

D23. Hehttejuvvojitgo dahje gáržžiduvvojitgo du beaivválaš dagut bissovaš rumašlaš dahje silolaš dearvasvuođaváttuin, dávddain dahje vahágiin?

- 1. JO
- 2. EAI
- 8. IN DIEÐE
- 9. IS

D24. Leatgo dus váttisvuođat guluin, oainnuin, gulahallamiin, vázzimiin, ráhpávázzimiin, lihkademiiguin dahje sullasaš doaimmaid čađahemiin?

- 1. JO, MUHTIMIN
- 2. JO, DÁVJÁ
- 3. EAI
- 9. IS

D25. Dát gažaldat lea borgguheami birra. Man dávjá borgguhat sigareahtaid dán áiggi?

- 1. BEAIVVÁLAČČAT
- 2. MUHTIMIN → MANA D28:i
- 3. IN GOASSIGE → MANA D28:i
- 9. IS → MANA D34

D26. Man boaris ledjet go borgguhišgohtet beaivválaččat?

(00) \_\_\_\_ (AHKI)

- 97. IN BORGGUT BEAIVVÁLAČČAT
- 98. IN DIEÐE/IN MUITTE
  
- 99. IS
- 00. UP

D27. Galle sigareahta borgguhat dál beaivválaččat?

(00) \_\_\_\_ (GALLE)      (00) \_\_\_\_ (PÁHKA) →

MANA D34:i

- 98. IN DIEÐE
- 99. IS
- 00. UP

D28. Leatgo borgguhan 100 dahje eanet sigareahta iežat eallimis?

- 1. JO
- 2. IN → → → MANA D34:i
- 9. IS → → → → → MANA D34:i

(JEARA DUŠŠE JUS R BORGGUHA "MUHTIMIN")

D29. Daid beivviid go borgguhat, sullii galle sigareahta de borgguhat?

(00) \_\_\_\_ (GALLE)

- 98. IN DIEÐE
- 99. IS
- 00. UP

D30. Leatgo goassige borgguhan beaivválaččat?

- 1. JO
- 2. IN → MANA D34:i
- 9. IS → MANA D34:i

D31. Man boaris ledjet go borgguhišgohtet beaivválaččat?

(01) \_\_\_\_ (AHKI)

- 98. IN DIEÐE/IN MUITTE
- 99. IS
- 00. UP

D32. Galle sigareahta borgguhit dábálaččat beaivválaččat?

(00) \_\_\_\_ (GALLE)      (00) \_\_\_\_ (PÁHKA)

- 98. IN DIEÐE/IN MUITTE

- 99. IS
- 00. UP

D33. Man boaris ledjet go heitet borgguheames beaivválaččat?

(02) \_\_\_\_ (AHKI)

- 98. IN DIEÐE/IN MUITTE
- 99. IS
- 00. UP

D34. (ATTE R:I GOLBMANUPPELOGÁT KOARTTA) Guhte dáin, jus oktage, lea váttisvuhtan sápmelaččaide du guovllus?

- | 1. JO                 | 2. II                 | 8. IN DIEÐE           | 9. IS                 |                                   |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. lešsorbmen/iešsorbmenjurdagat? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. Bargguhisvuhta?                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. Bearrašis veagalváldin?        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. Seksuálalaš illasteapmi?       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. Mirkkogeavaheapmi?             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. Jugešvuhta?                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. Snuvssa dahje duhpáha suoskan? |

D35. (ATTE R:I ČIHČČET KOARTTA) Muitalastte munnje dan nummara koarttas mii buoremusat čilge man duhtavaš leat dearvvasvuodainat.

- 1. HIRBMAT DUHTAVAŠ
- 2. VEAHÁ DUHTAVAŠ
- 3. IN DUHTAVAŠ IN GE DUHTAMEAHTTUN
- 4. VEAHÁ DUHTAMEAHTTUN
- 5. HIRMAT DUHTAMEAHTTUN
- 8. IN DIEÐE
- 9. IS

(ATTE R:I IEŠHÁLDDAŠEADDJI GAŽADANSKOVI JA PEANNA)

## E OASSI: VIESSU JA EALLINDÁSSI

E1. Guhtelágan viesus orut? (LOGA KATEGORIAID JUS DÁRBBAŠUVVO)

- 1. BEARAŠVIESSU
- 2. CEAKKOJUHKKOJUVVON VIESSU
- 3. RÁIDOVIESSU
- 4. ÁSODAT
- 5. BUOLVAVIESSU
- 6. JAHKODATVIESSU
- 7. EARÁLÁGAN
- 8. IN DIEÐE
- 9. IS

(JUS EARÁLÁGAN VIESSU)

E2. Mo čilgešit dán viesu? ↓

- 98. IN DIEÐE
- 99. IS
- 00. UP

E3. Earret beaivelanja, galle lanja leat du viesus? Ale loga gievkkana, basadanlanja, feaskkáriid, vurkkohanlanjaid ja lanjaid maid earáide láigohat.

(00) \_\_\_\_\_

- 98. IN DIEÐE
- 99. IS
- 00. UP

E4. Galle njealljehasmehteris árvvu mielde dajašit don ásat?

(0000) \_\_\_\_\_

- 9998. IN DIEÐE
- 9999. IS
- 0000. UP

E5. (ATTE R:I NJEALLJENUPPELOGÁT KOARTTA) Geahčadettiin koartta molssaeavttuid, mii ii leat du viesus? Muijalastte dušše bustávaid.

1. LEA      2. II      8. VI      9. IS  
LEAT

- |                       |                       |                       |                       |    |   |
|-----------------------|-----------------------|-----------------------|-----------------------|----|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. | SIERRA GIEVKKAN?                        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. | BASADANLATNJA DAHJE RIŠŠOLATNJA?        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. | HIVSSET SISTE?                          |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. | LIEGGAČÁHCETÁDKA?                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. | GUOVDDÁŠLIEKKAS DAHJE ELRÁVDNJE-UVNNAT? |



- |                       |                       |                       |                       |    |  |
|-----------------------|-----------------------|-----------------------|-----------------------|----|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. | BÁIKI GOS SÁHTTÁ OLGUN ČOHKKÁT?<br>(BÁŇKA, BALKODGA DAHJE GILVVAGÁRDI)         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. | TELEFOVDNA?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. | UVDNA DAHJE BASSINUVDNA<br>BIEBMORÁHKADEAPMÁI?                                 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | i. | SUOVVADIEĐIHEADDJI?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | j. | ELRÁVDNJI?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | k. | GENERATOR?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | l. | GALBMA ČÁHCI HÁNAS?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | m. | SEPTIKTÁDKA, LAKTIN<br>DUOLVACÁHCEVUOGÁDAHKII DAHJE<br>DUOLVACÁHCEKOMPOSTEMII? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | n. | BUOLLIN-/HEAHTEUKSA?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | o. | OIDNOLAT?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | p. | VURKKOHANLATNJA?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | q. | SADJI GOS RITTE JA SMÁVVE BIERGGU JA<br>ČUOHPPÁ GUOLI?                         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | r. | GUOVTTERGEARDÁSAŠ GLÁSSARUVTTOT?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | s. | INTERNEHTAS GITTA?   |

E6. (ATTE R:I VITTANUPPELOGÁT KOARTTA) Geahčadettiin dán koartta ovdamearkkaid, leago du viesus oktage dáid váttisvuodain? Muitalaste munnje dušše daid bustávaid mat heivejit.

- | 1. JO                 | 2. II                 | 8. VI                 | 9. IS                 |    |  |
|-----------------------|-----------------------|-----------------------|-----------------------|----|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. | MENDDO GÁRŽI?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. | LÁVTTAS?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. | GUHPPON, GUOHCADAN DAHJE MIESKAN?                              |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. | ROBIS ČAĐAGOLGAN KONDENSEREMA DAHJE<br>SUDDAMA GEAŽIL?         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. | GLÁSAT RITNOT?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. | UVSSAIN JA GLÁSAIN JIELLU?                                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. | EARÁ SAJIIN GO UVSSAIN JA GLÁSAIN JIELLU?                      |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. | GALBMA LÁHTTI?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | i. | GALMMAS OPPALOHKÁI?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | j. | HEAJOS ÁIBMU – HEAJOS BIGGOHEAPMI?                             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | k. | HUKSEHUS RIEVDÁ GIRSELOKTANEAMI GEAŽIL?                        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | l. | ČÁHCI MAID II SÁHTE JUHKAT, II AINJUO MUHTIN<br>ÁIGGIID JAGIS? |

E7. Dárbašago du viessu stuorát divodemiid (ovdamearkka dihtii odđa robi, odđa čáhcebohcciid, huksema ektui divodemiid)?

1. JO  
 2. II  
 8. IN DIEĐE  
 9. IS

# G OASSI: SÁMI ÁRVVUT, OSKU JA VUOINŋALAŠVUOHTA

Dán oasis máhcce fas du sámi árvvuide.

G1. Dál logan listtu daid daguin ja vieruin mat soitet leat dehálaččat doalahan dihtii du sámi identitehta ja iešdovddu. Juohke doaimma ektui, muitalaste munnje dan nummara mii buoremusat dutnje heive. (ATTE GUOKTEGOALMMÁTLOGÁT KOARTTA)

	1. HIRBMAT DEHÁLAŠ	2. DEHÁLAŠ	3. II NU DEHÁLAŠ	4. II DEHÁLAŠ OPPANASSII GE
a. Sámi borramuš maid borat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Ahte bivddát ja guolástat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Ahte dieđát fuolkevuođa birra?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Luonddus viežžat šattuid, ruotnasiid ja murjiid?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Du bargu dahje ámmát?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Sámi borramuša seailudahttin?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Mo sámegiela geavahat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Searvan árbevirolaš kultuvrralaš dáhpáhusaide?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Du bajásgeassin?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Biktasat maid geavahat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Du iežat oktavuohhta eará sápmelaččaiguin?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. Sámi dikten ja girjjálašvuohta maid logat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. Du oskuvaš ja vuoinŋalaš oskku?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Du luondduoaidnu?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. Man láhkai geahččalat dustet vuordámušaid bearrašis ja sámi ustibiin?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. Oahpahit alccet sámegiela?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. Oahpahit mánáidat sámegiela?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Interviewer ID:

Interviewer's Interview  
Number:

Control Number:

**SURVEY OF LIVING CONDITIONS IN THE ARCTIC:  
INUIT, IÑUPIAT, SAMI, AND INDIGENOUS PEOPLES OF  
CHUKOTKA**

**Alaska Questionnaire**

PERSON NUMBER	A6. RELATIONSHIP TO RESPONDENT	A7. AGE	A8. GENDER	A9-A11. CULTURAL BACKGROUND OR BACKGROUNDS
1	RESPONDENT		1. MALE 2. FEMALE	A9a. <input type="radio"/> 8 DK A10a. <input type="radio"/> 9 NA A11a.
2	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9b. <input type="radio"/> 8 DK A10b. <input type="radio"/> 9 NA A11b.
3	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9c. <input type="radio"/> 8 DK A10c. <input type="radio"/> 9 NA A11c.
4	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9d. <input type="radio"/> 8 DK A10d. <input type="radio"/> 9 NA A11d.
5	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9e. <input type="radio"/> 8 DK A10e. <input type="radio"/> 9 NA A11e.
6	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9f. <input type="radio"/> 8 DK A10f. <input type="radio"/> 9 NA A11f.
7	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9g. <input type="radio"/> 8 DK A10g. <input type="radio"/> 9 NA A11g.
8	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9h. <input type="radio"/> 8 DK A10h. <input type="radio"/> 9 NA A11h.
9	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9i. <input type="radio"/> 8 DK A10i. <input type="radio"/> 9 NA A11i.
10	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9i. <input type="radio"/> 8 DK A10i. <input type="radio"/> 9 NA A11i.
11	<input type="radio"/> 8. DK <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	<input type="radio"/> 98. DK <input type="radio"/> 99. NA <input type="radio"/> 00 INAP	1. MALE 2. FEMALE <input type="radio"/> 9. NA <input type="radio"/> 0. INAP	A9i. <input type="radio"/> 8 DK A10i. <input type="radio"/> 9 NA A11i.

B12. What are the reasons why you choose to remain in (COMMUNITY)?

- 98. DON'T KNOW
- 99. NA
- 00. INAP

B13. Now I'd like to talk with you about language. What languages did you first learn at home as a child?

- |                       |                       |                       |                |
|-----------------------|-----------------------|-----------------------|----------------|
| 1. YES                | 2. NO                 | 9.NA                  |                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. IÑUPIAQ     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. YUPIK       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. ENGLISH     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. OTHER _____ |

B14. Up until you were 16 years old, what languages did adults in your home mostly use when talking among themselves?

- |                       |                       |                       |                |
|-----------------------|-----------------------|-----------------------|----------------|
| 1. YES                | 2. NO                 | 9.NA                  |                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. IÑUPIAQ     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. YUPIK       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. ENGLISH     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. OTHER _____ |

B15. And what languages did adults in your home mostly use when talking with you?

- |                       |                       |                       |                |
|-----------------------|-----------------------|-----------------------|----------------|
| 1. YES                | 2. NO                 | 9.NA                  |                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. IÑUPIAQ     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. YUPIK       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. ENGLISH     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. OTHER _____ |

B16. Using this card, please tell me how would you rate your ability to understand, speak, read, and write (Iñupiaq /Yupik)? (HAND R CARD FIVE) Just tell me the number that best describes your ability to:

	1. VERY WELL	2. RELATIVELY WELL	3. WITH EFFORT	4. A FEW WORDS	5. NOT AT ALL	9. NA
a. Understand?						
b. Speak?						
c. Read?						
d. Write?						

B27. Did you go to a preschool or kindergarten?

- 1. YES
- 2. NO
- 8. DON'T KNOW
- 9. NA

B28. What is the highest level of schooling or training you have completed?

- 01. ADVANCED TRADITIONAL TRAINING
- 02. LESS THAN ELEMENTARY/PRIMARY SCHOOL →
- 03. ELEMENTARY/PRIMARY SCHOOL
- 04. SECONDARY/HIGH SCHOOL
- 05. VOCATIONAL/TRADE SCHOOL – ASSOCIATE DEGREE
- 06. COLLEGE OR UNIVERSITY – BACHELOR'S DEGREE
- 07. COLLEGE OR UNIVERSITY – MASTER'S DEGREE
- 08. COLLEGE OR UNIVERSITY – DOCTORATE, MD
- 97. OTHER: \_\_\_\_\_
- 98. DK
- 99. NA

SKIP TO PG. 22,  
Q. B53

B28a. Specific grade completed: \_\_\_\_\_

B29. Did you go to an elementary school outside of your home town?

- 1. YES, ALL ELEMENTARY
- 2. YES, PART ELEMENTARY
- 3. NO
- 9. NA
- 0. INAP, DID NOT GO TO ELEMENTARY SCHOOL

B30. Some people found elementary school stressful. For others, the experience was not stressful. Which is closer to the way you feel about your elementary school experience: stressful, or not stressful?

- 1. STRESSFUL
- 2. NOT STRESSFUL. →
- 8. DON'T KNOW
- 9. NA
- 0. INAP, DID NOT GO TO ELEMENTARY SCHOOL

B31. If you are comfortable doing so, can you tell me more about that?

- 98. DON'T KNOW
- 99. NA
- 00. INAP, DID NOT GO TO ELEMENTARY SCHOOL

## Part D: Health

D1. Now I'd like to ask you about your health. First of all, how would you describe your health in general: excellent, very good, good, fair, or poor?

- 1. EXCELLENT
- 2. VERY GOOD
- 3. GOOD
- 4. FAIR
- 5. POOR
  
- 9. NA

D2. (HAND R CARD TEN.) Which, if any, of the symptoms on this card have you experienced in the last 12 months? Please just tell me the letters of the symptoms.

- | 1. YES                | 2. NO                 | 9. NA                 |                                    |
|-----------------------|-----------------------|-----------------------|------------------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. PAINS?                          |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. BREATHING OR COUGHING PROBLEMS? |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. STOMACH OR DIGESTION PROBLEMS?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. HIGH TEMPERATURE?               |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. TOOTH LOSS?                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. DIZZY SPELLS?                   |

(IF R MENTIONS PAINS OR PROBLEMS)

D3. What type of pains or problems?

- 98. DON'T KNOW
- 99. NA
- 00. INAP

D4. Is there a place that you can go to see a doctor or other medical professional in your community?

- 1. YES
- 2. NO
- 8. DON'T KNOW
  
- 9. NA
- 0. INAP

D21. For which problems?

- 98. DON'T KNOW
- 99. NA

D22. (HAND R CARD TWELVE.) Which of the illnesses listed on this card have affected your family (anyone you consider to be family)? Please just tell me the letters on the card.

- | 1. YES                | 2. NO                 | 9. NA                 |  |
|-----------------------|-----------------------|-----------------------|--|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. cancer  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. heart or lung diseases (circulation diseases) |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. eye disease                                   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. mental illness                                |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. joint and bone diseases                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. arthritis                                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. accidental injury                             |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. alcoholism or drug addiction                  |

D23. Are you hampered in your daily activities by any chronic physical or mental health problem, illness, or disability? (ANOTHER WORD FOR HAMPERED IS "LIMITED". IF R ASKS "WHAT IS HAMPERED?" REPEAT Q USING WORD LIMITED.)

- 1. YES
- 2. NO
- 8. DON'T KNOW
- 9. NA

D24. Do you have any difficulty hearing, seeing, communicating, walking, climbing stairs, bending, learning or doing any similar activities?

- 1. YES, SOMETIMES
- 2. YES, OFTEN
- 3. NO
- 9. NA

D25. The next question is about smoking. At the present time do you smoke cigarettes daily, occasionally, or not at all?

- 1. DAILY
- 2. OCCASIONALLY → SKIP TO D28
- 3. NOT AT ALL →
- 9. NA →



D26. At what age did you begin to smoke cigarettes daily?

(00) \_\_\_\_ (AGE)

- 97. DON'T SMOKE DAILY
- 98. DON'T KNOW/CAN'T REMEMBER
- 99. NA
- 00. INAP

D27. How many cigarettes do you smoke each day now?

(00) \_\_\_\_ (NUMBER) (00) \_\_\_\_ (PACKS) → SKIP TO D34

- 98. DON'T KNOW
- 99. NA
- 00. INAP

D28. Over your lifetime, have you smoked a total of 100 or more cigarettes (about 4 packs?)?

- 1. YES
- 2. NO → → → SKIP TO D34
- 9. NA → → → → →

(ASK ONLY IF R SMOKES "OCCASSIONALY")

D29. On the days that you smoke, about how many cigarettes do you usually have?

(00) \_\_\_\_ (NUMBER) (00) \_\_\_\_ (PACKS)

- 98. DON'T KNOW
- 99. NA
- 00. INAP

D30. Have you ever smoked daily?

- 1. YES
- 2. NO → SKIP TO D34
- 9. NA →

D31. At what age did you begin to smoke cigarettes daily?

(01) \_\_\_\_ (AGE)

- 98. DON'T KNOW/CAN'T REMEMBER
- 99. NA
- 00. INAP

D32. How many cigarettes did you usually smoke each day?

(00)\_\_\_\_(NUMBER) · (00)\_\_\_\_(PACKS)

- 98. DON'T KNOW/CAN'T REMEMBER
- 99. NA
- 00. INAP

D33. At what age did you stop smoking cigarettes daily?

(02) \_\_\_\_ (AGE)

- 98. DON'T KNOW/CAN'T REMEMBER
- 99. NA
- 00. INAP

D34. (HAND R CARD THIRTEEN) Which, if any, of the following is a problem for Iñupiat people in your community?

- | 1. YES                | 2. NO                 | 8. DON'T<br>KNOW      | 9. NA                 |   |
|-----------------------|-----------------------|-----------------------|-----------------------|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. Suicide?                                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. Unemployment?                                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. Family violence?                               |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. Sexual abuse?                                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. Drug abuse?                                    |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. Alcohol abuse?                                 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. Smokeless tobacco (snuff and chewing tobacco)? |

D35. (HAND R CARD SEVEN) Please tell me the number on this card that fits how satisfied you are with your health.

- 1. VERY SATISFIED
- 2. SOMEWHAT SATISFIED
- 3. NEITHER SATISFIED NOR DISSATISFIED
- 4. SOMEWHAT DISSATISFIED
- 5. VERY DISSATISFIED
- 8. DON'T KNOW
- 9. NA

(HAND RESPONDENT SELF-ADMINISTERED QUESTIONNAIRE AND PENCIL)

## Part E: Housing & Standard of Living

E1. What type of house do you live in? (READ CATEGORIES IF NECESSARY)

- 1. DETACHED, SINGLE FAMILY HOUSE
- 2. DUPLEX
- 3. ROW HOUSE (SEMI-DETACHED)
- 4. APARTMENT IN A MULTIPLE-FAMILY BUILDING
- 5. OTHER TYPE OF HOUSE
- 8. DON'T KNOW
- 9. NA

(IF OTHER TYPE OF HOUSE)

E2. How would you describe this house? ↓

- 98. DON'T KNOW
- 99. NA
- 00. INAP

E3. In addition to the living room, how many rooms are in your home, not counting the kitchen, bathroom, corridor, storage rooms, and sublet rooms?

(00) \_\_\_\_\_

- 98. DON'T KNOW
- 99. NA
- 00. INAP

E4. How many square feet of living space would you estimate you have?

(0000)\_\_\_\_\_

- 9998. DON'T KNOW
- 9999. NA
- 0000. INAP

E5. (HAND R CARD FOURTEEN.) Looking at the features on this card, which of the following does your home **not** have? Please just tell me the letters.

1. HAVE    2. NOT HAVE    8. DK    9. NA

- |                       |                       |                       |                       |    |                            |
|-----------------------|-----------------------|-----------------------|-----------------------|----|----------------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. | A SEPARATE KITCHEN?        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. | A BATH OR SHOWER?          |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. | AN INDOOR FLUSHING TOILET? |

- |                       |                       |                       |                       |    |   |
|-----------------------|-----------------------|-----------------------|-----------------------|----|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. | HOT RUNNING WATER?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. | CENTRAL HEATING OR ELECTRIC STORAGE HEATERS?                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. | A PLACE TO SIT OUTSIDE<br>(E.G. A BALCONY, TERRACE OR GARDEN) |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. | A TELEPHONE?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. | STOVE FOR COOKING?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | i. | SMOKE DETECTOR?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | j. | ELECTRICITY?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | k. | GENERATOR?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | l. | CARBON MONOXIDE DETECTOR?                                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | m. | COLD RUNNING WATER?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | n. | SEPTIC TANK, SEWER CONNECTION,<br>OR SEWAGE PROCESSOR?        |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | o. | FIRE EXIT?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | p. | A VIEW TO CHECK THE WEATHER?                                  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | q. | A STORE ROOM?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | r. | A PLACE TO CUT MEAT AND FISH?                                 |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | s. | DOUBLE GLASS WINDOWS?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | t. | A CONNECTION TO THE INTERNET?                                 |

E6. (HAND R CARD FIFTEEN) Looking at the items on this card, does your house have any of these problems? Please just tell me the letters.

- | 1. YES                | 2. NO                 | 8. DK                 | 9. NA                 |    |   |
|-----------------------|-----------------------|-----------------------|-----------------------|----|---|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | a. | TOO LITTLE SPACE?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | b. | DAMPNESS?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | c. | MOLD OR MILDEW?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | d. | WATER LEAKING FROM THE CEILING FROM<br>CONDENSATION OR MELTING?         |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | e. | FROST ON THE WINDOWS?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | f. | DRAFT FROM THE DOORS OR WINDOWS?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | g. | DRAFTS FROM PLACES OTHER THAN DOORS &<br>WINDOWS?                       |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | h. | COLD FLOORS?  |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | i. | GENERALLY COLD?   |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | j. | STALE AIR – INADEQUATE VENTILATION?                                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | k. | SHIFTING OF HOUSE FROM ACTIVE PERMAFROST?                               |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | l. | WATER THAT IS NOT SAFE TO DRINK,<br>AT LEAST AT SOME TIMES OF THE YEAR? |

E7. Is your home in need of major repairs (for example: a new roof, plumbing repairs, structural repairs)?

1. YES  
 2. NO  
 8. DON'T KNOW  
 9. NA

## Part G: Iñupiat Values, Religion, and Spirituality

In this section, we return to talking about your traditional values.

G1. I'd like to read a list of activities and customs that may be important to maintaining your Iñupiat identity. For each one, please tell me the number on this card (HAND R CARD TWENTY-ONE) that best fits your choice.

	1. VERY IMPORTANT	2. IMPORTANT	3. NOT VERY IMPORTANT	4. NOT AT ALL IMPORTANT
a. The Iñupiat food I eat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The hunting and fishing I do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Naming kinship relationships	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. The harvesting of wild berries and plants I do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. My occupation or profession?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. The preserving of Iñupiat foods I do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. My use of Iñupiaq language?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Participating in traditional cultural events?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. My childhood upbringing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. The clothes I wear?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. The personal contacts I have with other Iñupiat?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. The Iñupiat poetry and literature I read?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. My religious and spiritual practices?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. The way I view Nature?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. How I try to meet the expectations of my family and Iñupiat friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



# Appendix B



## SAMINOR

- Information pamphlet
- Invitation letter
- Informed consent
- Questionnaires







Nå skal vi sette fokus på helsen i kommunen din.

Hvordan står det egentlig til? Hvordan fungerer helsetjenesten?

Er det store helseforskjeller i de ulike delene av fylket eller mellom de ulike etniske gruppene? Er kvinner friskere enn menn?

Hvorfor øker sukkersyke her i landet?

---

Dál áigut giddet fuomášumi dearvvasvuhtii din gielddas. Mo dat duodas lea? Mo doaibmá dearvvasvuodabálvalus? Leatgo stuorra dearvvasvuodaerohusat fylkka iešgudet osiin dahje iešgudet čearddalaš joavkkuid gaskkas?

Leatgo nissonat dearvasat go albmát?

Manne lassána sohkarđávda dán riikkas?

**H**elseundersøkelsen har tre formål:

- Du som deltar i helseundersøkelsen får sjekket om du har bestemte sykdommer, eller om det er fare for at du kan få dem.
- Å få ny kunnskap om helse, sykdom og levekår i områder med samisk og norsk bosetting.
- Å lage en oversikt over folks helse – en «helseprofil» for fylket. Dette er viktig for å gi fylket og de enkelte kommunene et bedre grunnlag for å planlegge helsetjenesten i framtida.

### Hvem kan delta?

Alle født 1925–1967 og i 1973 fra områder med samisk og norsk bosetting. Det er 9 kommuner i Finnmark, 6 i Troms, 4 i Nordland og 2 i Nord-Trøndelag med i undersøkelsen.

### Hvordan får du time til helseundersøkelsen?

Du får tilsendt et spørreskjema sammen med innkallingen. Vi ber om at du fyller ut skjemaet hjemme og tar det med når du møter fram til helseundersøkelsen. Helseundersøkelsen vil foregå enten i buss eller i et fast lokale i kommunen. Hvis den oppsatte timen ikke passer, kan du møte når du vil innenfor åpningstiden vår. Undersøkelsen er gratis.

### Hvordan foregår helseundersøkelsen?

Det gjøres målinger av blodtrykk, høyde, vekt og livvidde, og det taes en blodprøve. Blodprøven kan senere bli analysert på fettstoffer i blodet, blodsukker, markører for betennelsesreaksjoner, kosthold, hormoner, lever- og nyrefunksjon samt beinmarkører. Genetiske analyser av blodet kan også bli aktuelt.

Omtrent fire uker etter helseundersøkelsen får du et brev i posten med opplysninger om

**D**earvasvuodaiskkadeami dieđuin leat golbma ulbmila:

- Dus gii searvvat iskkadeapmái iskat leatgo dus dihto dávddat, dahje leago dus várra daid oažžut.
- Oažžut odđa máhtu dearvasvuoda, dávdmaid ja eallindili birra sámi ja dáža ássanguovlluin.
- Ráhkadit várdosa oibmuid dearvasvuodas – fylkka «dearvasvuodaprofiilla». Dát lea dehálaš vai fylkkas ja juohke gielddas lea buoret vuoddu plánet boahttevaš dearvasvuodabálvalusa.

### Gii sáhtá searvat?

Juohkehaš riegádan 1925–1967 ja 1973 guovlluin gos ássat sápmelaččat ja dážat. 9 gieldda Finnmarkkus, 6 Tromssas, 4 Nordlánddas ja 2 Davvi-Trøndelagas leat iskkadeamis mielde.

### Mo oaččut diimmu dearvasvuodaiskkadeapmái?

Oaččut gažadanskovi oktan rávkamiin. Bivdit du deavdit skovi ruovttus ja váldit dan mielde go boadát iskkadeapmái. Iskadeapmi lea juogo busses dahje dihto lanjas gielddas. Jus bidjon áigi ii heive, de sáhtát boahitit vaikke goas min rahpanáiggis. Iskadeapmi lea nuvtá.

### Mo iskkojuvvot?

Varradeaddu, allodat, lossodat ja seakkáš mihtiduvvojit, ja váldo varraiskkus. Varraiskosis sáhtá maŋŋil iskat vara buoideávdnasiid, varrasohkkara, infekšunreakšuvnnaid mearkaid, biepmu, hormonaid, vuovvas- ja monimušdoaimma ja dákte mearkkaid. Vara genetalaš analysat maid soitet šaddat áige guovdilát.

Sullii njeallje vahku maŋŋil dearvasvuodaiskkadeami oaččut poasttas reivve iežat kolestrola, varradeattu ja varrasohkkara birra, ja mo dat leat rávvejuvvon meriid ektui.

ditt kolesterol, blodtrykk og blodsukker, og hvordan du ligger an i forhold til anbefalte verdier. De som har særlig høy risiko for å få hjerte- og kar sykdommer og sukkersyke, vil bli bedt om å ta kontakt med sin egen lege for videre oppfølging.

Alle som møter fram til helseundersøkelsen, får et tilleggsskjema, med spørsmål om blant annet kosthold og levekår.

De som fullfører hele helse- og levekårsundersøkelsen vil være med i trekningen av 3 reisegavekort hver verdt kr. 10000,-. Vi regner med en deltakelse på ca. 15000 personer.

## Vi trenger din tillatelse

Når du møter fram til helseundersøkelsen, ber vi deg om å undertegne et samtykke der du sier deg enig i et eller flere av de fire punktene nedenfor. (Du vil få kopi av samtykke erklæringen).

- 1) At du kan bli kontaktet med anbefaling om oppfølging, behandling eller for å forebygge sykdom.
- 2) At opplysningene dine kan brukes til medisinsk forskning etter vurdering og tilråding fra *Regional komité for medisinsk forskningsetikk i Nord-Norge* og *Datatilsynet*.
- 3) At resultatene dine (etter godkjenning fra *Datatilsynet*) kan settes sammen med opplysninger om deg i andre registre for forskningsformål slik som *Kreftregisteret*, *Dødsårsaksregisteret* og folketellingene. I alle disse tilfellene vil navn og personnummer bli fjernet. Forsikringsselskaper får ikke tilgang til dataene.
- 4) At blodprøven din kan lagres og brukes til medisinsk forskning og genetiske analyser for å finne årsak til sykdom. All bruk av denne prøven vil bare skje i samsvar med godkjenning fra *Datatilsynet* og etter at *Regional komité for medisinsk forskningsetikk i Nord-Norge* har vurdert og tilrådd prosjektet.

Bivdit sin geain lea hui alla váibmo- ja suotnádávddavárra ja sohkarávda, váldit oktavuoda iežaset doaktáriin joatkka čuovvoleapmái.

Juohkehaš gii boahdá iskkadeapmái, oažžu lassiskovi, gažaldagaiguin ee. biepmu ja ealindili birra.

Sii geat čadahit olles dearvasvuoda- ja ealindilleiskkadeami leat mielde vuorbádeamen 3 mátkeskeanjkakoartta man árvu lea 10000,- ru. guđesge. Doaivut ahte su. 15000 olbmo servet.

## Mii dárbbášat du lobi

Go boadát iskkadeapmái, de bivdit du čállit vuollái miehtama, mas logat iežat leat ovttamielas ovta dahje moatti dán njeallje čuogás vulobealde (*Miehtamis oaččut mángosa*).

- 1) Ahte duinna sáhtá váldit oktavuoda go áigu rávvet čuovvoleami, dálkkodit dahje eastadit dávddaid.
- 2) Ahte visot du diedut sáhttet adnot mediinnalaš dutkamii *Regional komite for medisinsk forskningsetikk i Nord-Norge* ja *Datatilsynet* árvvoštallama ja rávvaga mielde.
- 3) Ahte du bohtosiid (*Datatilsynet* dohkkeheami mielde) sáhtá čohkket dieduiguin du birra eará registariin dutkandoaimmaide nugo *Kreftregistret*, *Dødsårsaksregistret* ja olmmošlohkamat. Visot dáid oktavuodain sihkkko namma ja personnummar. Dáhkádušfitnodagat eai beasa dáid dieduid oaidnit.
- 4) Ahte du varraisikkus sáhtá ráddjot ja adnot mediinnalaš dutkamii ja genetalaš analysaide gávnnaht dávdmaid árttaid. Dán iskosu juohke geavaheapmi geavvá dušše *Datatilsynet* dohkkeheami mielde ja maŋnil go *Regional komite for medisinsk forskningsetikk i Nord-Norge* lea árvvoštallan ja rávven prošeavtta.

Selv om du sier ja til dette nå, kan du senere ombestemme deg og be om å bli slettet fra undersøkelsen uten at du må oppgi noen grunn for det. Dette gjøres ved skriftlig beskjed til **Institutt for samfunnsmedisin, UiTø, 9037 Tromsø**. Blodprøven din vil da bli tilintetgjort.

Vi ønsker å følge alle som møter til helseundersøkelsen i lang tid framover med hensyn til hjerteinfarkt, hjerneslag og andre aktuelle sykdommer. Derfor ønsker vi å lagre opplysningene du har gitt, frem til fylte 100 år, for å sammenholde disse med opplysninger fra sentrale registre slik som *Kreft- og Dødsårsaksregisteret*.

Resultatene vil bli publisert i massemedia, og det utformes en rapport fra helse- og levetidsundersøkelsen når den er avsluttet.

*Datatilsynet* har gitt konsesjon for lagring av opplysninger fra undersøkelsen og forskningsprosjektet er tilrådd av *Regional komite for medisinsk forskningsetikk i Nord-Norge*.

## Velkommen til helseundersøkelsen

Selv om du nettopp har vært hos lege eller selv om du føler deg frisk, kan du likevel delta i undersøkelsen. Da hjelper du oss til bedre kunnskap og riktigere oversikt over helsen i kommunen og fylket ditt.

Vaikke dása dál miedat, de sáhtát manñil molsut oaivila ja bivdit sihkkot iskkadeamis dieditkeahhtá makkárge ákka dasa. Dán dagat čálalaččat Institutt for samfunnsmedisinii; **Institutt for samfunnsmedisin, UiTø, 9037 Tromsø**. Du varraiskkus dalle bálkestuvvo.

Mii dáhtošeimmet guhkit áiggi čuovvut juohkehačča gii boahhtá dearvasvuodáiskkadeapmái váibmodohppehaga, vuoiññašgáldnavigi ja eará vejolaš dávddaid hárrái. Danne dáhtošeimmet rádjat du addán dieduid, gitta devdon 100 jahkái, vai daid beassá sulastahtit guovddáš registariid dieđuiguin, nugo *Kreft- ja Dødsårsaksregistret*.

Bohtosiid almmuhat mediain, ja čállo raporta dearvasvuoda- ja eallindilleiskkadeamis go dat lea loahpahuovvon.

*Datatilsynet* lea addán sierralobi rádjat iskkadeami dieduid ja dutkanprošeavtta lea rávven *Regional komite for medisinsk forskningsetikk i Nord-Norge*.

## Bures boahhtin dearvasvuodáiskkadeapmái

Vaikke leatge aiddo leamaš doaktára luhte dahje dovddat iežat dearvvasin, de sáhtát liikká searvat iskkadeapmái. Dalle veahkehat min oažžut eanet máhtu ja riektasat dieduid du gieldda ja fylkka dearvasvuodas.

Dearvvuodaiguin / Med hilsen

*Anne Kirsten Anti*  
Sámi dearvvasvuodadutkama guovddáš,  
Senter for samisk helseforskning  
Karášjohka/Karasjok

*Eiliv Lund*  
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For mer informasjon, ring 78 46 89 04, Senter for samisk helseforskning, Karasjok.  
E-post: [helseus@fagmed.uit.no](mailto:helseus@fagmed.uit.no)

Jus dárbbašat eambo dieduid, čuojahaste 78 46 89 04, Sámi dearvvasvuodadutkama guovddášii,  
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# Helse- og levekårsundersøkelse

## – et forskningsprosjekt

Helsedepartementet har bedt oss undersøke helse- og levekårsforhold hos alle født i 1925–1967 og i 1973 i utvalgte kommuner med samisk og norsk bosetting i Nord-Norge og Nord-Trøndelag. Formålet er å innhente opplysninger om hjerte- og karsykdommer, kreft, allergier, smerter og andre lidelser samt ulykker for å kunne forebygge dem. Videre er målet å få et bilde av folks oppfatning av helsetjenestetilbudet, deres levesett slik som kosthold og røyking, levekår og tilhørighet. De som ønsker å delta, blir med i et forskningsprosjekt som består av spørreskjemaer og helseundersøkelse. Alle opplysninger fra undersøkelsen vil bli behandlet konfidensielt.

Helse- og levekårsundersøkelsen er nærmere beskrevet i brosjyren, som ligger vedlagt. Dersom du er i tvil om noe, kan du kontakte oss på tlf. 78 46 89 04 eller på e-post: [helseus@fagmed.uit.no](mailto:helseus@fagmed.uit.no)

**Du kan delta på følgende måter:** (kryss av øverst på spørreskjema under «samtykke til deltakelse»)

- A Dersom du ønsker å delta i helseundersøkelsen og forskningsprosjektet, krysser du av punkt **A**, fyller ut spørreskjemaet og returnerer det til oss i vedlagte konvolutt. Du vil senere få et brev med tid og sted for fremmøte sammen med et nytt spørreskjema.
- B Dersom du bare ønsker å delta i en innledende del av forskningsprosjektet uten helseundersøkelse, krysser du av punkt **B**, fyller ut spørreskjemaet og returnerer det til oss i vedlagte konvolutt.
- C Du kan unngå purring fra oss ved å krysse av punkt **C** og returnere spørreskjemaet til oss. Purring vil skje skriftlig.

*Datatilsynet* har gitt konsesjon for lagring av opplysninger fra undersøkelsen og forskningsprosjektet er tilrådd av *Regional komite for medisinsk forskningsetikk i Nord-Norge*.

For forskningen sin del vil det være av stor interesse at vi får inn så mange opplysninger som mulig. Du deltar frivillig og kan, etter å ha sagt ja til deltakelse, senere trekke deg uten å begrunne hvorfor og uten at det vil ha noen konsekvenser for deg. Det samme gjelder dersom man i utgangspunktet ikke ønsker å delta. Opplysninger du har gitt kan du be om å få slettet.

Resultatene vil bli publisert i massemedia, og det utformes en rapport fra helse- og levekårsundersøkelsen når den er avsluttet.

De som fullfører hele helse- og levekårsundersøkelsen vil være med i trekningen av 3 reisegavekort til en verdi av å kr. 10 000,–. Vi regner med en deltakelse på ca. 15000 personer.

Med hilsen

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# Dearvasvuoda ja eallindilleiskkadeapmi

## – dutkanprošeakta

Dearvasvuodadepartementa lea min bivdán iskat dearvasvuoda- ja eallindili juohkehaččas rieġádan 1925–1967 ja 1973 dihto gielddain sámi ja dáža ássamiin Davvi-Norggas ja Davvi-Trøndelágas. Ulbmilin lea viežžat dieđuid váibmo- ja suotnadávddaid, borasdávdda, allergiaid, bákčasiid ja eará gillámušaid ja lihkohisvuodaid birra vai daid sáhtášii eastadit. Dasto lea ulbmilin diehtit olbmuid oavila dearvasvuodabálvalusa birra, sin eallinvuogi nugo biepmu ja borgguheami, eallindili ja gullelašvuoda birra. Geat háliidit searvat, leat mielde dutkanprošeavttas mas leat gažadanskovit ja dearvasvuodaiskkadeapmi. Iskkadeami visot dieđut meannuduvvojit čieġusvuodas.

Dearvasvuoda- ja eallindilleiskkadeapmi lea dárkilat válddahallon gihppagis mii čuovvu mielde. Jus eahpidat maidege, sáhtát gulahallat minguin tlf. 78 46 89 04 dahje e-poasta: [helseus@fagmed.uit.no](mailto:helseus@fagmed.uit.no)

**Dán láhkai sáhtát searvat:** (russe bajimuččas gažadanskovis «miedan searvamii» buohta)

- Jus háliidat searvat dearvasvuodaiskkadeapmái ja dutkanprošeaktii, de russet **A** čuoggá, deavddát gažadanskovi ja máhcahat dan midjiide čuovvu konfaluhtas. Maññil oáččut reivve mas čuožžu goas ja gosa boadát oktan odđa gažadanskoviin.
- Jus háliidat searvat dušše dutkanprošeavtta álgoosis almmá dearvasvuodaiskkadeami haga, de russet **B** čuoggá, deavddát gažadanskovi ja máhcahat dan midjiide čuovvu konfaluhtas.
- Eat rása jus russet **C** čuoggá ja máhcahat gažadanskovi midjiide. Rássan lea čálalaččat.

*Datilsynet* lea addán sierralobi rádjat iskkadeami dieđuid ja dutkanprošeavtta lea rávven *Regional komite for medisinsk forskningsetikk i Nord-Norge*.

Dutkama dáfus lea hui miellagiddevaš ahte oazžut nu olu dieđuid go vejolaš. Don searvvat eaktodáhtolaččat ja sáhtát, maññil go leat miehtan searvamii, geassádit vuoduškeahtta ja dutnje čuozaġeahtta. Seamma guoská jus álggus juo ii hálit searvat. Dieđuid maid leat almmuhan sáhtát bivdit sihkkut.

Bohtosiid almmuhat mediain, ja čállo raporta dearvasvuoda- ja eallindilleiskkadeamis go dat lea loahpahuvvon.

Sii geat čadahit olles dearvasvuoda- ja eallindilleiskkadeami leat mielde vuorbádeamen 3 mátkeskeanġakoartta man árvu lea 10 000,- ru. gudesge. Doaivut ahte su. 15000 olbmo servet.

Dearvvuodaiguin

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Oslo

## INFORMERT SAMTYKKE

Jeg har lest informasjonen om undersøkelsen og samtykker i at (stryk det / de avsnitt du reserverer deg mot):

1. Jeg kan bli kontaktet med anbefaling om oppfølging, behandling eller for å forebygge sykdom.
2. Opplysningene mine kan brukes i medisinsk forskning til å kartlegge og finne årsaker til helse, sykdom og levekår. All bruk av opplysningene i eventuell framtidig medisinsk forskning vil bare bli brukt dersom Regional komité for medisinsk forskningsetikk og Datatilsynet ikke har noen innvendinger mot dette.
3. Etter godkjenning fra Datatilsynet kan opplysningene mine settes sammen med opplysninger om meg i andre registre for forskningsformål. I alle disse tilfellene blir navnet og personnummeret mitt fjernet. Det kan være registre om trygd, sykdom, inntekt, utdanning, yrke, og opplysninger fra de tidligere hjerte- og kar undersøkelsene. Eksempler på slike registre er Krefregistret, Dødsårsaksregistret og folketellingene. Forsikringsselskaper vil ikke få tilgang til dataene.
4. Blodprøven min kan lagres og brukes til medisinsk forskning og genetiske analyser for å finne årsak til sykdom. All bruk av denne prøven vil bare skje i samsvar med godkjenning fra Datatilsynet og etter at Regional komite for medisinsk forskningsetikk i Nord- Norge har vurdert de etiske sidene ved gjennomføring av prosjektet.

.....

sted og dato

.....

underskrift





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# Helse- og levekårs- undersøkelsen

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⌋

**Personlig innbydelse**

⌋

## 1. EGEN HELSE

Hvordan er helsen din nå? (Sett bare ett kryss)

- Dårlig  Ikke helt god  God  Svært god  
1 2 3 4

Har du, eller har du hatt?

	JA	NEI	Alder første gang
Astma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Kronisk bronkitt/emfysem/KOLS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Diabetes (sukkersyke)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Fibromyalgi/kronisk smertesyndrom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Psykiske plager som du har søkt hjelp for	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Hjerteinfarkt (sår på hjertet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Angina pectoris (hertekrampe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Hjerneslag/hjerneblødning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Multipel sklerose (MS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Ulcerøs kolitt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

Får du smerter eller ubehag i brystet når du går i bakker, trapper eller fort på flatmark?

- JA NEI

Kan slike smerter opptre selv om du er i ro?

- 

## 2. MUSKEL OG SKJELETTPLAGER

Har du i løpet av det siste året vært plaget med smerter og/eller stivhet i muskler og ledd som har vart i minst 3 måneder sammenhengende?

- JA NEI

Har du noen gang hatt:

	JA	NEI	Alder siste gang
Brudd i håndledd/underarm?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Lårhalsbrudd?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

## 3. MAGE OG TARM SYMPTOMER

Har du hatt sure oppstøt, halsbrann eller brystbrann nesten daglig i minst en uke?

- JA NEI

Har du noen gang hatt smerter eller verk i magen som har vart i minst 2 uker?

- 

Hvis JA, hvor i magen sitter smertene? (Sett ett kryss)

- Øvre del  Nedre del  Hele magen

Er smertene eller «verken» jevnt over tilstede? (Sett ett kryss)

- I perioder av ukers varighet   
I perioder av måneders varighet   
Bestendig

Er du ofte plaget av oppblåsthet, rumling i magen eller rikelig luftavgang?

- JA NEI

## 3. MAGE OG TARM SYMPTOMER (fortsettelse)

Er avføringen din vanligvis? (Sett ett eller flere kryss)

- Normal  Løs  Hard og perlete  
 Vekslede hard og løs  Illeluktende

Har du i perioder tre eller flere avføringer daglig?

- JA NEI

Har du hatt plager i mage/tarm etter inntak av melk?

- 

Er det andre i familien som har de samme magesymptomene?

- Mor  Far  Søsken  Barn  Ingen

## 4. ANDRE PLAGER

Under finner du en liste over ulike problemer. Har du opplevd noe av dette den siste uken (til og med i dag)?

(Sett ett kryss for hver plage)

	Ikke plaget	Litt plaget	Ganske mye	Veldig mye
Plutselig frykt uten grunn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Føler deg redd eller engstelig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Matthet eller svimmelhet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Føler deg anspent eller oppjaget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lett for å klandre deg selv	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Søvnproblemer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedtrykt, tungsindig	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av å være unyttig, lite verd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av at alt er et slit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Følelse av håpløshet mht. framtida	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tenkt på å gjøre slutt på livet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 5. SYKDOM I FAMILIEN

Har en eller flere av dine foreldre eller søsken hatt hjerteinfarkt eller angina pectoris?

VET

- JA NEI IKKE

Kryss av for de slektningene som har eller har hatt noen av sykdommene og angi deres alder for når de fikk sykdommene. (Hvis flere søsken, før opp den som fikk det tidligst i livet)

	Mor	Far	Søster	Bror	Barn	Ingen	Alder første gang
Hjerteinfarkt før 60-års alder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Hjerteinfarkt etter 60 års-alder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Diabetes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Hjerneslag	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Astma	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Tyktarmskreft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Brystkreft	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Eggstokkreft	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

Hvor mange søsken har du?  Brødre  Søstre

## 6. BRUK AV MEDISINER

Med medisiner mener vi her medisiner kjøpt på apotek. Kosttilskudd og vitaminer regnes ikke med her.

**Bruker du?**

	Nå	Før, men ikke nå	Aldri brukt
Medisin mot høyt blodtrykk ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kolesterolsenkende medisin ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insulin .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tabletter mot sukkersyke .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Hvor ofte har du i løpet av de siste 4 ukene brukt følgende medisiner?** (Sett ett kryss pr. linje)

	Ikke brukt siste 4 uker	Sjeldnere enn hver uke	Hver uke, men ikke daglig	Daglig
Smertestillende uten resept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Smertestillende på resept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sovemedisin .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beroligende medikamenter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Medisiner mot depresjon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annen medisin på resept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

**For de medisinene du har krysset av for i de to punktene ovenfor og som du har brukt i løpet av de siste 4 ukene:**

Angi navnet og hvilken grunn det er til at du tar/har tatt disse (sykdom eller symptom):(Kryss av for hvor lenge du har brukt medisinen)

Navn på medisinen: (sett ett navn pr. linje)	Grunn til bruk av medisinen:	Hvor lenge?	
		Inntil 1 år	1 år eller mer
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Dersom det ikke er nok plass her, kan du fortsette på eget ark som du legger ved.

## 7. MAT OG DRIKKE

**Hvor ofte spiser du vanligvis disse matvarene?**

(Sett ett kryss pr. linje)

	Sjelden/aldri	1-3 g. pr.mnd	1-3 g. pr. uke	4-6 g. pr. uke	1-2 g. pr. dag	3 g. el. mer pr. dag
Frukt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bær .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ost (alle typer) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Poteter .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokte grønnsaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rå grønnsaker/salat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

## 7. MAT OG DRIKKE (fortsettelse)

**Hva slags fett bruker du oftest?** (Sett ett kryss pr. linje)

	Bruker ikke	Meieri-smør	Hard margarin	Myk/lett margarin	Oljer	Annet
På brødet .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I matlagingen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

**Bruker du følgende kosttilskudd:**

	Ja, daglig	Iblant	Nei
Tran, trunkapsler? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskeoljekapsler (omega 3)? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamin- og/eller mineraltilskudd? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Hvor mye drikker du vanligvis av følgende?** (Sett ett kryss pr. linje)

	Sjelden/aldri	1-6 glass pr. uke	1 glass pr. dag	2-3 glass pr. dag	4 glass el. mer pr. dag
Helmelk, kefir, yoghurt ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lettmelk, cultura, lett yoghurt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skummet melk (sur, søt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ekstra lettmelk .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fruktjuice .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vann .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brus/Cola med sukker ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brus/Cola uten sukker ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

**Hvor mange kopper kaffe og te drikker du daglig?**

(Sett 0 for de typene du ikke drikker daglig)

	Antall kopper
Filterkaffe .....	<input type="text"/>
Kokekaffe/trykkanne .....	<input type="text"/>
Annen kaffe .....	<input type="text"/>
Te .....	<input type="text"/>

**Omtrent hvor ofte har du i løpet av det siste året drukket alkohol?** (Lettøl og alkoholfritt øl regnes ikke med)

Har aldri drukket alkohol	Har ikke drukket siste år	Noen få ganger siste år	Omtrent 1 gang i måneden
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2-3 ganger pr. måned	Ca. 1 gang i uka	2-3 ganger i uka	4-7 ganger i uka
<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8

Til dem som har drukket siste år:

**Når du har drukket, hvor mange glass eller drinker har du vanligvis drukket?** Antall

**Omtrent hvor mange ganger det siste året har du drukket så mye som minst 5 glass eller drinker i løpet av ett døgn?** Antall ganger

**Når du drikker, drikker du da vanligvis:** (Sett ett eller flere kryss)

Øl  Vin  Brennevin

## BRUK AV HELSETJENESTER

Hvor mange ganger de siste 12 måneder har du selv brukt:  
(sett ett kryss for hver linje)

	Ingen	1-3 ganger	4 eller flere
Kommunelege/fastlege	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spesialist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legevakt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sykehus innleggelse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hjemmesykepleie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kommunal hjemmehjelp	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysioterapeut	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiropraktor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tannlege	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternativ behandler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvor mange leger har du selv vært hos de siste 12 måneder?

(angi antall)

Har du fått tildelt navngitt fastlege?  Ja  Nei

Når du er til undersøkelse, hvilket språk kommuniserer du og legen på? (sett ett eller flere kryss)

Norsk  Samisk  Bruker tolk  Annet språk

Tror du det skjer noen gang at du og legen misforstår hverandre p.g.a. språklige problemer?

Aldri  Sjelden  Av og til  Ofte  Usikker

Dersom det er behov for tolk, synes du at legen er flink nok til å be om det?

Ja, alltid  Ja, som regel  Nei, ikke alltid  
 Nei, aldri  Jeg liker ikke å bruke tolk

Hvor fornøyd eller misfornøyd er du med følgende sider ved den kommunale legetjenesten i din bostedskommune?  
(sett ett kryss per linje)

	Ingen	1-3 ganger	4 eller flere
Avstand til legen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legens tilgjengelighet på telefon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ventetid på legetime	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tid inne hos legen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mulighetene for å få fortalt om dine plager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legens forståelse av din kulturelle bakgrunn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Legens informasjon om dine helseplager, undersøkelse og behandlingsopplegg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## BRUK AV HELSETJENESTER (fortsettelse)

	Meget fornøyd	Fornøyd	Misfornøyd	Meget misfornøyd	Vet ikke
Legens språkbeherskelse (samisk eller norsk)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Totalt sett, hvor fornøyd eller misfornøyd er du med den kommunale <u>legetjenesten</u> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvor lenge er det siden du var hos lege sist? (angi i hele tall)

(år)   (måneder)

Dersom du noen gang har benyttet alternative behandlere, hvilke har du brukt? (sett ett eller flere kryss)

Helbreder (guvllár, leser, blåser, håndspålegger)  
 Healer  
 Akupunktør  
 Soneterapeut, homeopat, kinesiolog osv.

Dersom du har benyttet en alternativ behandler, hvor lenge er det siden sist? (angi i hele tall)

(år)   (måneder)

Tenk deg at du i dag skulle få behov for hjelp/bistand fra den kommunale helse- og sosialtjenesten (hjemmesykepleie, hjemmehjelp, sosiale tjenester, fysioterapi o.s.v.)

Vet du hvor du skal henvende deg?

Ja  Nei  Usikker

Er du trygg på at du får hjelp hvis du trenger det?

Ja  Nei  Usikker

Dersom du i dag får hjelp fra den kommunale helse- og sosial tjenesten, er du fornøyd med tilbudet?

Ja  Nei  Usikker

## SKADER/ULYKKER

Har du vært utsatt for noen ulykker som medførte behandling hos lege og/eller sykehusinnleggelse?

Lege  Ja  Nei   antall ganger  
Sykehus innleggelse  Ja  Nei   antall ganger

## SKADER/ULYKKER (fortsettelse)

Hvis ja, hva slags ulykke(r) er du blitt behandlet for?

(sett ett eller flere kryss pr. linje)

	Arbeid	Hjem	Fritid	Ingen
Bil.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Motorsykkkel .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Snøscooter.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Firehjulssykkkel .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traktor.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fallulykke.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kuttskade .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annet.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Har ulykken(e) ført til nedsatt arbeidsevne? T

Helt  Delvis  Ikke i det hele tatt

## FAMILIE OG SPRÅKBAGGRUNN

I Nord-Norge bor det folk med ulike etnisk bakgrunn. Det vil si at de snakker ulike språk og har forskjellige kulturer.

Eksempler på etnisk bakgrunn, eller etnisk gruppe er norsk, samisk og kvensk.

Hvilket hjemmespråk har/hadde du, dine foreldre og beste-foreldre? (sett ett eller flere kryss)

	Norsk	Samisk	Kvensk	Annet, beskriv
Morfar:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mormor:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farfar:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farmor:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Far:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mor:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jeg selv:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hva er din, din fars og din mors etniske bakgrunn?

(sett ett eller flere kryss)

	Norsk	Samisk	Kvensk	Annet, beskriv
Min etniske bakgrunn er:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fars etniske bakgrunn er:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mors etniske bakgrunn er:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hva regner du deg selv som? (sett ett eller flere kryss)

	Norsk	Samisk	Kvensk	Annet, beskriv
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## ARBEIDSLIV/ØKONOMI

Hvilken type arbeid/livsopphold har du? (sett ett eller flere kryss)

- Fastlønnnet, heltid  Fastlønnnet, deltid  
 Sesongarbeid  Selvstendig næringsdrivende  
 Arbeidsledig  Hjemmевærende  
 Alderstrygd  Uføretrygd  
 Annet (beskriv) .....

## ARBEIDSLIV/ØKONOMI (fortsettelse)

Kunne du tenke deg å flytte fra din bostedskommune dersom du fikk tilbud om arbeid et annet sted?

Ja  Nei  Deler av året  Usikker

Dersom du er **arbeidsledig**, angi hvor lenge du har vært arbeidssøker: (angi i hele tall)

(år)   (måned)

Dersom du er **selvstendig næringsdrivende**, hvilken type næring jobber du i? (sett ett eller flere kryss)

Reindrift  Fiske  Jordbruk  Skogbruk  
 Forretningsvirksomhet  Annet (spesifiser) .....

Hvor mange personer bor det i din husstand? ⊥

(antall personer)

Hvor stor er familiens/husstandens bruttoinntekt per år?

Under kr. 150 000  Kr. 150 000–300 000  
 Kr. 301 000–450 000  Kr. 451 000–600 000  
 Kr. 601 000–750 000  Over kr. 750 000

Hvor ofte spiller du på ulike pengespill slik som lotto, tipping, spilleautomater og lignende?

Aldri/sjelden  1-3 ganger i mnd.  
 1 gang i uka  2-6 ganger i uka  Hver dag

Hvor mye spiller du for ukentlig i gjennomsnitt?

Under kr. 100 i uka  Kr. 100-500 i uka  
 Kr. 501–1000 i uka  Over kr. 1000 i uka

## MOBBING

Med mobbing mener vi når en eller flere personer **gjentatte ganger sier eller gjør vonde ting mot deg, og du har vanskeligheter med å forsvare deg.**

Har du vært utsatt for mobbing?

Ja, de siste 12 mnd.  Ja, før  Nei

Dersom du har vært utsatt for mobbing, hvilken type mobbing er du blitt utsatt for? (sett ett eller flere kryss)

Baksnakking  Ignorering  
 Diskriminerende bemerkninger  Annet

Kan du angi hvor dette foregår/foregikk? T

(sett ett eller flere kryss)

På skolen  På skoleinternat  I yrkeslivet  
 I lokalsamfunnet  Annet

## 8. RØYKING OG BRUK AV SNUS

Hvor lenge er du vanligvis daglig i et røykfyllt rom? Antall hele timer

Røykte noen av de voksne hjemme da du vokste opp?  JA  NEI

Bor du, eller har du bodd, sammen med noen dagligrøykere etter at du fylte 20 år?  JA  NEI

Har du røykt/røyker du daglig?  Ja, nå  Ja, før  Aldri

Hvis du røyker daglig nå, røyker du:  JA  NEI  
 Sigaretter?    
 Sigarer/sigarillos/pipe?    
 Rulletobakk/rullings?

Hvis du har røykt daglig tidligere, hvor lenge er det siden du sluttet? Antall år

Hvis du røyker daglig nå, eller har røykt tidligere: Hvor mange sigaretter røyker/røykte du vanligvis daglig? Antall sigaretter

Hvor gammel var du da du begynte å røyke daglig? Alder i år

Hvor mange år til sammen har du røykt daglig? Antall år

Har du brukt/bruker du snus daglig?  Ja, nå  Ja, før  Aldri

Hvis du bruker/har brukt snus, hvor mange år til sammen har du brukt snus? Antall år

## 9. MOSJON OG FYSISK AKTIVITET

Hvordan har din fysiske aktivitet i fritiden vært det siste året? (Tenk deg et ukentlig gjennomsnitt for året. Arbeidsvei regnes som fritid. Besvar begge spørsmålene)

Timer pr. uke:

Lett aktivitet (Ikke svett/andpusten) .....	<input type="checkbox"/>	Ingen	<input type="checkbox"/>	Under 1	<input type="checkbox"/>	1-2	<input type="checkbox"/>	3 og mer	<input type="checkbox"/>
Hard fysisk aktivitet (Svett/andpusten) .....	<input type="checkbox"/>	1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4	<input type="checkbox"/>

Angi bevegelse og kroppslig anstrengelse i din fritid. Hvis aktiviteten varierer meget f. eks. mellom sommer og vinter, så ta et gjennomsnitt. Spørsmålet gjelder bare det siste året. (Sett kryss i den ruta som passer best)

Leser, ser på fjernsyn eller annen stillesittende beskjeftigelse?  1

Spaserer, sykler eller beveger deg på annen måte minst 4 timer i uka?  2  
(Regn også med gang eller sykling til arbeidsstedet, søndagsturer m.m.)

Driver mosjonsidrett, tyngre hagearbeid e.l.?  3  
(Merk at aktiviteten skal vare minst 4 timer i uka)

Trener hardt eller driver konkurranseidrett regelmessig og flere ganger i uka?  4

## 10. UTDANNING OG ARBEID

Hvor mange års skolegang har du gjennomført? (Ta med alle år du har gått på skole eller studert) Antall år

Hvordan trives du i din jobb?  1 Svært godt  2 Godt  3 Dårlig  4 Veldig dårlig

Mener du at du står i fare for å miste ditt nåværende arbeid eller inntekt de nærmeste 2 årene?  JA  NEI

Mottar du noen av følgende ytelser?  JA  NEI  
 Sykepenger    
 Attføring    
 Sosialhjelp/-stønad    
 Overgangsstønad for enslige forsørgere

## 11. RESTEN AV SKJEMAET SKAL BARE BESVARES AV KVINNER

Hvor gammel var du da du fikk menstruasjon aller første gang? Alder i år

Hvis du ikke lenger får menstruasjon, hvor gammel var du da den sluttet? Alder i år

Er du gravid nå?  1 Ja  2 Nei  3 Usikker  4 Over fruktbar alder

Hvor mange barn har du født? Antall barn

Hvis du har født barn, fyll ut hvert barns fødselsår, og hvor mange måneder du ammet etter fødselen.

(Hvis du ikke ammet, skriv 0)

Barn:	Fødselsår:	Ammet antall mnd.:
1. barn .....	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
2. barn .....	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
3. barn .....	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
4. barn .....	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
5. barn .....	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>

(Hvis flere barn, bruk ekstra ark)

Bruker du, eller har du brukt? (Sett ett kryss for hver linje)

	<input type="checkbox"/> Nå	<input type="checkbox"/> Før, men ikke nå	<input type="checkbox"/> Aldri
P-pille/minipille/p-sprøyte .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hormonspiral (ikke vanlig spiral) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Østrogen (tabletter eller plaster) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Østrogen (krem eller stikkpiller) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Hvis du bruker/har brukt reseptpliktig østrogen: Hvor lenge har du brukt dette? Antall år

Hvis du bruker p-pille, minipille, p-sprøyte, hormonspiral eller østrogen; hvilket merke bruker du?

Spesifiser:

Ikke skriv her

## TILLEGGSPØRSMÅL TIL HELSE- OG LEVEKÅRSUNDERSØKELSEN

Takk for fremmøte til helseundersøkelsen. På denne måten har du bidratt til å skaffe ny viten om helse og levekår i områder med samisk og norsk bosetting. Hovedformålet med undersøkelsen har vært å skaffe ny viten om hjerte- kar sykdommer for å kunne forebygge dem. I tillegg skal undersøkelsen gi oss kunnskap om andre sykdommer og plager slik at vi kan lage en oversikt over folks helse i fylket. Vi ber deg derfor svare på noen spørsmål om forhold som kan ha betydning for disse og andre sykdommer.

Det utfylte skjemaet sendes i vedlagte svarkonvolutt. Portoen er betalt. På forhånd takk for hjelpen!

Med vennlig hilsen:  
Senter for samisk helseforskning og  
Nasjonalt folkehelseinstitutt

Dato for utfylling:

Dag	Måned	År
<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>	<input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/> <input style="width: 20px; height: 20px; border: 1px solid black;" type="text"/>

<b>1. SYMPTOMER</b>	<b>2. KOSTHOLD NÅ (fortsettelse)</b>
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**Hoster du omtrent daglig i perioder av året?** JA  NEI

**Har du hatt slik hoste så lenge som i en 3 måneders periode i begge de to siste år?**

**Hender det at du er plaget av søvnløshet?**

**Hvis ja, når er du mest plaget av søvnløshet?**  
(Sett ett eller flere kryss)

Hele året    Vår    Sommer    Høst    Vinter  
1                      2                      3                      4                      5

**Har du det siste året vært plaget av søvnløshet slik at det har gått ut over arbeidsevnen?** JA  NEI

**Er du stort sett fornøyd med tilværelsen?**

1  Meget fornøyd  
2  Ganske fornøyd  
3  Litt misfornøyd  
4  Meget misfornøyd

**Hender det at du i lengre perioder – i minst 14 dager- er trist og nedfor?** JA  NEI

**Har du i de siste 14 dager følt deg ute av stand til å takle dine vanskeligheter?**

Nei    Av og til    Ofte    Nesten hele tiden  
1                      2                      3                      4

**Hender det at du føler deg ensom?**

Nei    Av og til    Ofte  
1                      2                      3

### 2. KOSTHOLD NÅ

Vi vil gjerne spørre deg om hvor ofte du pleier å spise enkelte matvarer. Tenk på gjennomsnittet det siste året. **Sett ett kryss pr. linje for antall ganger.** Hvis du ikke husker nøyaktig, fyll ut så godt du kan.

Hvor mange ganger i uken pleier du å spise middag? Antall ganger

**Hvor ofte pleier middagen å inneholde:**

	Aldri/sjelden	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2 pr. uke	3 pr. uke	4 pr. uke	5+ pr. uke
Fisk .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kjøtt (helt, oppmalt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verken fisk el. kjøtt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7	8

**Hvor ofte spiser du kokt torsk og sei til middag?**

	Aldri	1-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2 pr. uke	3+ pr. uke
Torsk (f.eks. fersk, lettsaltet, røkt, bokna)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sei (f.eks. fersk, bokna)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

**Hvor mange ganger pr. år spiser du fiskeinnmat?**

	0	1-3	4-6	7-9	10+
Fiskelever .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rogn .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

**Hvor ofte spiser du annen kokt fisk til middag?**

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2+ pr. uke
Fete fiskeslag (f.eks. kokt laks, kveite, uer, røye, ørret, sik)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Magre fiskeslag (f.eks. kokt hyse/ kolje, abbor, gjedde, harr)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

**Hvor ofte spiser du stekt fisk til middag?**

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2+ pr. uke
Fete fiskeslag (f.eks. stekt laks, sild, røye, ørret, sik)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Magre fiskeslag (f.eks. stekt sei, torsk, abbor, gjedde, harr)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

## 2. KOSTHOLD NÅ (fortsettelse)

### Hvor ofte spiser du fiskemat til middag?

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2+ pr. uke
Fiskekaker/boller/pudding .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskegrateng, plukkfisk .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskepinner, panert fisk .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

### Hvor ofte spiser du fiskepålegg?

	Aldri	1-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1-2 pr. uke	3-4 pr. uke	5+ pr. uke
Speket/saltet fisk ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Røkt fisk .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Makrell i tomat ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nedlagt sild .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kaviar .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Annet fiskepålegg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

### Hvor ofte spiser du følgende retter?

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2+ pr. uke
Pizza .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spagetti, pastaretter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hamburger i brød	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kjøttkaker/karbonader .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pølser .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gryterett .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

### Hvor ofte spiser du kjøtt til middag (f.eks. koteletter, steik, grytekjøtt, biff, filet)?

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2+ pr. uke
Kylling .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Svin .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Okse/storfe .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sau/lam .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elg .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hval .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

### Hvor mange egg fra sjøfugl spiser du pr. år?

	0	1-3	4-6	7-9	10+
Antall egg	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

### Hvor ofte spiser du kjøtt av rein?

	Aldri	1-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2 pr. uke	3+ pr. uke
Kokt reinkjøtt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(buljong)							
Stekt reinkjøtt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(helt, skavet, oppmalt)							

## 2. KOSTHOLD NÅ (fortsettelse)

### Hvor ofte spiser du kjøtt av rein? (fortsettelse)

Røkt reinkjøtt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tørket reinkjøtt ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

### Hvor ofte spiser du andre matvarer av rein?

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	3+ pr. uke
Blodmat av rein ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Margbein .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reintunge .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reinlever .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

### Hvor ofte spiser du bær?

Én gang tilsvares 1 brødskeive med syltetøy, tyttebær til 1 porsjon middag, 1 porsjon dessert, 1 glass saft, eller en tur hvor du spiste friske bær.

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1-2 pr. uke	3+ pr. uke
<b>Molter</b>							
Friske, frosne, rørte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokt/kjøpt syltetøy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Tyttebær</b>							
Friske, frosne, rørte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokt/kjøpt syltetøy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Blåbær</b>							
Friske, frosne, rørte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kokt/kjøpt syltetøy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saft .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Krøkebær</b>							
Friske, frosne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saft .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

### Hvordan pleier du/ditt hushold å skaffe følgende råvarer til eget bruk? (Sett ett eller flere kryss)

	Spiser aldri/sjelden	Helt selv-forsynt	Delvis selv-forsynt	Kjøper i butikk	Kjøper privat	Bytter eller får
<b>Kjøtt</b>						
Rein .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sau .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Elg .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Fisk</b>						
Ferskvann ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saltvann ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Bær</b>						
Molter .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tyttebær ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6



## 2. KOSTHOLD NÅ (fortsettelse)

Hvor ofte pleier du å jakte, fiske og plukke bær?

	Aldri	Sjelden	Av og til	Mye av fritiden
Jakte rype/småvilt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jakte storvilt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiske .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plukke bær .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

Hvor ofte har du spist et hovedmåltid fra ditt husholds jakt/fiske siste år?

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2+ pr. uke
Hovedmåltid jakt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hovedmåltid fiske	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

## 3. KOSTHOLD I OPPVEKSTEN

Tenk på maten du fikk hjemme før du flyttet for deg selv. Hvis du bodde mesteparten av året på skoleinternat, tenk på maten du fikk der.

Bodde du på internat (statsinternat eller privat) da du gikk på barne- og ungdomsskolen?

- 1  Ja, ungdomsskolen  
2  Ja, barneskolen  
3  Ja, både barne- og ungdomsskolen  
4  Nei, ingen av delene

Hvis ja, hvor mange klassetrinn?

Hvor lenge var du på internat i snitt for hvert klassetrinn?

- 1-3 mnd.  4-6 mnd.  7-9 mnd.

Hvor ofte spiste du fisk og reinkjøtt i oppveksten?

	Aldri	1-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1-2 pr. uke	3-4 pr. uke	5+ pr. uke
Kokt/stekt fisk .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reinkjøtt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

Hvor ofte spiste du andre matvarer i oppveksten?

	Aldri	1-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1 pr. uke	2 pr. uke	3+ pr. uke
Blodmat .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saukjøtt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kjøttkaker, pølser ..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskemat .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fiskelever og rogn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grøt, pannekaker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

Fikk du medisinsk tran i oppveksten?

Fikk du servert tran til for eksempel fisk (i stedet for annet fett)?

JA  NEI

JA  NEI

## 3. KOSTHOLD I OPPVEKSTEN (fortsettelse)

Hvor ofte spiste du ville bær og planter i oppveksten?

	Aldri	1-5 pr. år	6-11 pr. år	1 pr. mnd.	2-3 pr. mnd.	1-2 pr. uke	3+ pr. uke
Ville bær .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Syregress .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kvann .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6	7

Er maten du spiser nå, forskjellig fra det du fikk i oppveksten?

- 1  Nei  
2  Litt forskjellig  
3  Ganske forskjellig  
4  Veldig forskjellig

## 4. NATTSPISING

Våkner du ofte opp for å spise etter at du har lagt deg om kvelden? JA  NEI

Hvis «ja», besvar de neste 4 spørsmålene:

Når har du oftest plagene? (Sett ett eller flere kryss)

- Hele året  Vår  Sommer  Høst  Vinter  
1 2 3 4 5

Hva spiser du om natten? (Sett ett eller flere kryss)

- Kjøtt  Brødmat  Godteri  Annet  
1 2 3 4

Spiser du mer enn halvparten av døgnets matmengde etter kl. 20 om kvelden? JA  NEI

Er andre i familien plaget med nattspising?

- JA  NEI  VET IKKE

Har du skiftarbeid, nattarbeid eller går vakter? JA  NEI

## 5. OPPVEKST, FAMILIE OG VENNER

I hvilken kommune har du bodd lengre enn ett år?

Kommune:

1. Fødested:.....fra 0 år til   år  
2. ....fra   år til   år  
3. ....fra   år til   år  
4. ....fra   år til   år  
5. ....fra   år til   år

(Hvis du har bodd i flere kommuner, bruk eget ark.)

Bor du sammen med ektefelle/samboer? JA  NEI

Har du delt eller daglig omsorg for Barn? ..... JA  NEI   
Foreldre/andre? .....

## Hvor mange gode venner har du?

(De som du kan snakke fortrolig med og som kan gi deg hjelp dersom du trenger det. Tell ikke med de du bor sammen med.)

Antall venner

## Er du tilknyttet noen av de følgende menigheter/trossamfunn: (Sett ett eller flere kryss)

- 1  Medlem i statskirka  
2  Den Læstadianske menighet  
3  Annen menighet  
4  Ikke medlem av noen menighet

## Føler du at du kan påvirke det som skjer i lokalsamfunnet der du bor? (Sett bare ett kryss)

- 1  Ja, i stor grad    2  Ja, en del    3  Ja, i liten grad  
4  Nei    5  Har ikke forsøkt

## 6. VERDITILKNYTNING

### TIL ALLE:

#### Er det viktig for deg å ha kontakt med naturen?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Er utnytting av naturen gjennom fiske, jakt og bærplukking viktig for deg?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Er bevaring av slekts- og familietradisjoner viktig for deg?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Har du opplevd at du er blitt mobbet eller diskriminert på grunn av din etniske (samisk, kvensk, russisk, tamilsk, norsk, etc.) bakgrunn?

- Svært mange ganger    Noen ganger    En sjelden gang    Aldri  
              
1    2    3    4

#### Tror du at diskriminering av etniske minoriteter kan ha negative helsemessige konsekvenser?

- I stor grad    I noen grad    I liten grad    Absolutt ikke  
              
1    2    3    4

#### Føler du deg presset ut av næringen din?

- I stor grad    I noen grad    I liten grad    Absolutt ikke  
              
1    2    3    4

## 7. TIL DEM MED SAMISK BAKGRUNN:

#### Er samiske klestradisjoner viktige for deg?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Hvilken betydning har duodji for deg?

- Meget stor betydning    Stor betydning    Liten betydning    Ingen betydning  
              
1    2    3    4

#### Hva betyr bevaring og utvikling av det samiske språket for deg?

- Meget stor betydning    Stor betydning    Liten betydning    Ingen betydning  
              
1    2    3    4

#### Er det viktig for deg å bo i et lokalsamfunn der du daglig kan møte andre samer?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Synes du at bevaring av typiske samiske næringer er viktig?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Er utviklingen av det moderne samiske skoleverket viktig for deg?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Er det viktig for deg at samiske lokalsamfunn bør få et større innslag av moderne arbeidsplasser?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Hva betyr samiske media (radio, TV, aviser, bøker) for deg?

- Meget stor betydning    Stor betydning    Liten betydning    Ingen betydning

#### Hva betyr moderne samisk kunst (billedkunst, musikk, film og teater) for deg?

- Meget stor betydning    Stor betydning    Liten betydning    Ingen betydning  
              
1    2    3    4

#### Hvordan ser du på at samisk samfunn og kultur med årene har fått en sterkere internasjonal kontakt?

- Meget viktig    Viktig    Lite viktig    Helt uviktig  
              
1    2    3    4

#### Hva betyr Sametinget for deg?

- Meget stor betydning    Stor betydning    Liten betydning    Ingen betydning  
              
1    2    3    4

#### Opplever du forurensning av eller inngrep i naturen som en trussel mot din samiske tilværelse?

- I stor grad    I noen grad    I liten grad    Absolutt ikke  
              
1    2    3    4

#### Føler du at den moderne utviklingen fortrenger den samiske kulturen?

- I stor grad    I noen grad    I liten grad    Absolutt ikke  
              
1    2    3    4

TAKK FOR HJELPEN!

HUSK Å POSTLEGGE SKJEMAET I DAG!

T

**DEARVVASVUOĐA -  
JA EALLINDILLE-  
ISKKADEAPMI**

**Bovdehus**

⊥

## 1. DU DEARVVASVUOHTA

Mo lea du dearvvasvuohta dál? (Russe dušše oktii)

Heittot  li nu buorre  Buorre  Hirbmat buorre  
1 2 3 4

Leago dus, dahje leago dus leamaš?

	JUO	II	Ahki vuosttas geardde
Astma .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bistevaš bronkihtta/emfysema/KOLS .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes (sohkardávda) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fibromyalgia/bistevaš bávččassyndroma .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psykalaš váttut maida leat jearran veahki .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Váibmodohppehat (váibmohávvi) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angina pectoris (váibmogeasáhat) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuoŋŋasgáldnanvihki/vuoŋŋasvardin .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multipel sklerose (MS) .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ulcerøs kolitt .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Bávččagastágo dahje unohastágo rattis go:

Goarknut milliid, ráhpáid dahje váccát  
jođanit dulbohagas? .....

Sáhttágo ná bávččastit vaikke it lihkat? .....

## 2. DEAHKKE- JA DÁKTERIGGEGIVSSIT

Leatgo *manimus jagi* váivašuvvan bákčasiiguin  
ja/dahje stirdun dehkiiguin ja lađđasiiguin mii  
lea bistán *uhcimusat 3 mánu* oktlaččat? .....

Leago dus goassige leamaš:

	JUO	II	Ahki manimus háve
Doddjon giehtalađas/giehtadieiggus? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doddjon noras? .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 3. ČOAVJE- JA ČOALLEĐÁVDAMEARKKAT

Leago dus leamaš čáhcečolohagat,  
čottaboaldáhat dahje raddeboaldáhat  
masá beaivválaččat *uhcimusat vahku?* .....

Leatgo dus goassige leamaš čoavjjiis bákčasat  
dahje várka mii lea bistán *uhcimusat 2 vahku?* .....

Jus JUO, gokko čoavjjiis dovdojit bákčasat? (Russe oktii)

Bajit oasis  Vuolit oasis  Miehtá čoavjji

Dovdojitgo bákčasat dahje «várka» jámmat? (Russe oktii)

Bistá ain vahkuid  Bistá ain mánuid  Čađat

Giksašuvtago dávjá baggamiin, čoavješnoarra-  
miin dahje hirbmat buoskkuhemiin? .....

Leago du baika dábálaččat: (Russe oktii dahje moddii)

Dábálaš  Njárbat  Garas ja gágirlágan  
 Vuohagaid garas ja njárbat  Guohca

Baikkátgo soames ággiid golmma dahje eanet  
geardde beaivái? .....

Leatgo giksašuvvan čovjjiin/čoliiguin go  
mielkki jugat? .....

Leago earáin bearrašis seamma dávdamearkkat?

Eatnis Áhčis Oappás/vieljas Mánáin li ovttagse

## 4. EARÁ GIVSSIT

Vulobealde lea listu iešgudet váttisvuođain. Leatgo *manimus  
vahku* dáin ovttage dovdan (otnáš ráđjai)?

(Russe juohke givssi buohta)

	li giksa- šuvvan	Veahš giksa- šuvvan	Olu	Hirbmat olu
Fáhka ballu ákka haga .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dovdan balu dahje árgodaga .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skurvas dahje oaivejorran .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dovdan iežat čavgen dahje huššas .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Álki iežat sivahallat .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oadđinváttisvuođat .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hurvas, lossamiella .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dovdan leat ávkemeahtun, unnán árvvus .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dovdan ahte visot lea lossat .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dovdan eahpedoaivvu boahhteáiggi ektui .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jurddašan loahpahit eallima .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 5. BEARRAŠIS DÁVDDAT

Leago ovttagse dahje mángasis du váhnemiin  
dahje oappáin/vieljain leamaš váibmo-  
dohppehat dahje angina pectoris? .....

Russe daid fulkkiid buohta geain lea dahje lea leamaš muh-  
tun dáid dávdain ja almmut sin agi goas ožžo dávdaid.  
(Jus eanet oappát/vieljat, čále su gii áramusat eallimis dan  
oaččui)

	Eadni	Áhčči	Oabbá	Viellja	Máná	li oktage	Ahki vuosttas geardde
Váibmo- dohppehat ovdal 60-jagi agi .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Váibmo- dohppehat manjil 60-jagi ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diabetes .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuoŋŋas- gáldnanvihki .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Astma .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gassačoalle- borasdávda .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Čižžeborasdávda .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mannerákša- borasdávda .....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Galle oappá/vielja leat dus?  Vielja  Oappá

## 6. DÁLKASIID GEAVAHEAPMI

Dáلكasiiguin oaivvildat dás apotehkas oston dáلكasiid.  
Biebmolasáhusat ja vitamíinnat eai lohko dás mield.

**Geavahatgo?**

	Dál	Ovdal, muhto in dál	In goassige
Dáلكasa alla varradeddui	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kolesterolgeahpedeaddji dáلكasa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Insuliinna	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tablehtaidd sohkarváidii	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Man dávjá leat *manimus 4 vahku* geavahan dáid dáلكasiid?**  
(Russe oktii juohke linnjás)

	In atnán manimus 4 vahku	Hárvebut go juohke vahku	Juohke vahku, muhto in beaivvá- laččat	Beaivvá- laččat
⊥				
Bávččasvuogiheaddji resepta haga	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bávččasvuogiheaddji reseptain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oaddendáلكasiid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ráfohandáلكasiid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dáلكasiid hurvvi vuostá	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eará dáلكasiid reseptain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

**Daid dáلكasiidda maid leat russen bajábeal guovtti čuoggás ja maid leat atnán *manimus 4 vahku*:**

Bija nama ja manne daid geavahat/leat geavahan (dávda dahje dávdamearka): (Russe dasa man guhká leat dáلكasa geavahan)

Dáلكasa nama:	Manne geavahan dáلكasa:	Man guhká?	
		Gitta 1 jagi	Jagi dahje guhkit
(Ovttá nama juohke linnjái)		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>

Jus dás ii leat doarvái sadji, de sáhtát joatkit eará báhpárii, maid de bijat mield.

## 7. BORRAMUŠ JA JUHKAMUŠ

**Man dávjá borat dáбáлаččat dáid borramušaid?**

(Russe oktii juohke linnjás)

	Hárve/ in goassige	1-3 g. mánui	1-3 g. vahkkui	4-6 g. vahkkui	1-2 g. beaivái	3 g. dahje eanet beaivái
⊥						
Šattuid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Murjjiid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuosttá (buot slájjaid)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Budehiid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuššon ruotnasiid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Varas ruotnasiid/ saláhta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

**Makkár vuoa anát dávjimusat?** (Russe oktii juohke linnjás)

	In geavat	Mejeri- vuoa	Garra margariinna	Dipma/geahppa margariinna	Oljjuid	Eará
Láibbi alde	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borramuš- ráhkadeamis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5	6

**Geavahatgo dáid biebmolasáhusaid:**

	Juo, beaivválaččat	Soames háve	In
Trána, tránatablehtaidd	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guollevuodjatablehtaidd (omega 3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vitamiidna/minerálasáhusaid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Man olu jugat dáбáлаččat dáin:** (Russe oktii juohke linnjás)

	Hárve/ in goassige	1-6 glása vahkkui	1 glása beaivái	2-3 glása beaivái	4 gl. dahje eanet beaivái
⊥					
Ollesmielkki, kefira, yoghurta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geahppamielkki, cultura geahppa yoghurta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Skummamielkki (suvrra, čielga)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Liigegeahppamielkki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Šaddomáihlli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Čázi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bruvssa/Cola sohkkariin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sohkkarhis bruvssa/Cola	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4	5

**Galle gohpa gáfe dahje deaja jugat beaivái?**

(Bija 0 daid slájaid maid it juga beaivválaččat)

	Galle gohpa
Filttagáfe	<input type="text"/>
Vuoššangáfe/deattagievnni	<input type="text"/>
Eará gáfe	<input type="text"/>
Deaja	<input type="text"/>

**Sullii man dávjá leat manimus jagi juhkan alkohola?**

(Geahppavuolla ja alkoholahis vuolla ii lohko)

In goassige juhkan alkohola	In juhkan manimus jagi	Hui moatti háve manimus jagi	Sullii oktii mánui
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2-3 geardde mánui	Su. oktii vahkkui	2-3 geardde vahkkui	4-7 geardde vahkkui
<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8

*Sidjiide geat leat juhkan manimus jagi:*

**Go leat juhkan, galle glása dahje  
drinikka leat dáбáлаččat juhkan?**

Galle

**Sullii gallii manimus jagi leat juhkan  
nu olu go uhcimusat 5 glása dahje  
drinikka jándoris?**

Gallii

**Go jugat, jugatgo dalle dáбáлаččat?** (Russe oktii dahje moddii)

<input type="checkbox"/> Vuola	<input type="checkbox"/> Viinni	<input type="checkbox"/> Buolliviinni
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## DEARVVASVUOĐABÁLVALUSAID GEAVAHEAPMI

### Gallii leat *manimus 12 mánu* ieš geavahan:

(russe oktii juohke linnjás)

	In oktiige	1-3 geardde	4 dahje eanet
Gielddadoaktára/fástadoaktára	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spesialistta	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doavttervávttá	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Buohccevissui sisačállima	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ruovttubohccedivššu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gieldda ruovttuveahki	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fysioterapevttá	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kiropraktora	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bátneadoaktára	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Molssaevttolaš dálkkodeaddji	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Galle doaktára luhtte leat ieš leamaš *manimus 12 mánu*

(almmut galle)

Leatgo ožžon namahuvvot fástadoaktára?  Juo  In

### Go leat iskkadeamis, makkár gillii gulahallabeahtti doaktáriin?

(russe oktii dahje mángii)

- Dárogillii  Sámegillii  Gevahan dulkka  
 Eará gillii

### Jáhkátgo ahte doai doaktáriin eahppi áddehala giella- válttisuodaid geažil?

- Ean goassige  Hárve  Duollet dálle  Dávjá  
 Eahpesihkar

### Jus dárbbášuvvo dulkka, leago doavttir du mielas doarvái čeahppi dan bivdit?

- Juo, álohii  Juo, dábálaččat  li álohii  
 li goassige  In liiko dulkka geavahit

### Man duhtavaš dahje duhtameahttun leat don gieldda doavtterbálvalusa čuovvovaš beliin du ássangielddas?

(russe oktii juohke linnjás)

	Hirbmat duhtavaš	Duhtavaš	Duhta- meahttun	Hirbmat duhtameahttun	In diede
Doaktára lusa gaska	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doaktára fidnet telefovnnas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vuordináigi doaktára lusa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áigi doaktára luhtte	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Beasat muitalit du válttuid birra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doaktára áddejupmi du kulturduogáži	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doaktára diediheapmi du dearvasvuoda- válttuid, iskkadeami ja dálkkodeami birra	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## DEARVVASVUOĐABÁLVALUSAID GEAVAHEAPMI (joatikka)

	Hirbmat duhtavaš	Duhtavaš	Duhta- meahttun	Hirbmat duhtameahttun	In diede
Doaktára giellamáhttu (sámegiella dahje dárogiella)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oppalohká, man duhtavaš dahje duhtameahttun leat don gieldda doavtter- bálvalusain?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Man guhká lea dassá go *manimus fitnet* doaktára luhtte?

(almmut olles loguin)

(jagi)   (mánu)

### Jus goassige leat geavahan molssaevttolaš dálkkodeaddji, geaid leat geavahan? (russe oktii dahje moddii)

- Guvllára (lohkki, bossu, giehtadálkkodeaddji)  
 Healera  
 Akupunktora  
 Soneterapevttá, homeopata, kinesiologa jna.

### Jus leat geavahan molssaevttolaš dálkkodeaddji, de goas lei *manimus*? (almmut olles loguin)

(jagi)   (mánu)

### Jurddaš mat ahte dál dárbbášat veahki gieldda dearvas- vuoda- ja sosiálbálvalusas (ruovttubohccedivššus, ruovt- tuveahkis, sosiála bálvalusain, fysioterapias jna.)

### Diedátgo geainna galggat váldit oktavuoda?

- Juo  In  Eahpesihkar

### Leatgo oadjebas ahte oaččut veahki jus dan dárbbášat?

- Juo  In  Eahpesihkar

### Jus dál oaččut veahki gieldda dearvasvuoda- ja sosiálbál- valusas, leatgo duhtavaš dainna?

- Juo  In  Eahpesihkar

## VAHÁGAT/LIHKOHISVUOĐAT

### Leat go leamaš lihkohisvuodas man geažil fertejit doaktára lusa ja/dahje buohccevissui čálihuuvvot?

Doaktára lusa  Juo  In   Gallii

Buohccevissui čálihuuvvot  Juo  In   Gallii

## VAHÁGAT/LIHKOHISVUODAT (joatkka)

Jus juo, de makkár lihkohisvuodas(ide) leat dálkkoduvvon?  
(russe oktii dahje moddii juohke linnjái)

	Bargu	Ruoktu	Astoáigi	In makkárga
Biila.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mohtorsikkel .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Muohtaskohter .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Njealjejuvllasihkkel .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Traktor .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gahččanlihkohisvuodát	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Čuohtpadanvaháгат .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eará .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lea(t)go lihkohisvuohhta(đat) geahpedan bargonávccaid?

- Áibbas  Belohakkii  li/eai oppanassiige

## BARGOEALLIN/RUHTADILLI (joatkka)

Sáhtášitgo jurddašit fárret ássangiiddastat jus fálllo dutnje bargu eará báikkis?

- Juo  In  Muhtun ráje jagis  Eahpesihkar

Jus leat **bargguheapme**, mital man guhká leat barggu ohcan: (almmut olles loguin)

(jagi)  (mánu)

Jus leat **iešbirgeaddji ealáhusdoalli**, makkár ealáhusas barggat? (russe oktii dahje moddii)

- Boazodilis  Guolásteamis  Eanadoalus  
 Vuovdedoalus  Gávpedoaimmas  
 Eará (čilge) .....

Gallis ássat du bearašgottis?

(galle olbmo)

## BEARAŠ JA GIELLADUOGÁŠ

Davvi-Norggas ássat mángga čearddaduogáš olbmot. Dát mearkkaša ahte hállet mánggalágan giela ja leat iešguđet kultuvrrat. Ovdamearkkat čearddalaš duogášii, dahje čerđii leat dáža, sámi ja kveana.

Makkár ruovttugiella lea/lei dus, du váhnemiin ja áhkuin/ádjáin? (russe oktii dahje mángii)

	Dárogiella	Sámegiella	Kveanagiella	Eará, čilge
Eatniáhčis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eatnieatnis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhčiiáhčis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhčieatnis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhčis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eatnis:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mus:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mii lea du, áhččát ja eadnat čearddaduogáš?

(russe oktii dahje moddii)

	Dáru	Sámi	Kveana	Eará, čilge
Mu čearddaduogáš lea:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Áhči čearddaduogáš lea:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eatni čearddaduogáš lea:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Maid logat iežat leat? (russe oktii dahje moddii)

	Dáža	Sámi	Kveana	Eará, čilge
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## BARGOEALLIN/RUHTADILLI

Makkár bargu/eallinbirgejupmi lea dus? (russe oktii dahje moddii)

- Fástabálká, ollesáigi  Fástabálká, oasseáigi  
 Áigodatbargu  Iešbirgeaddji ealáhusdoalli  
 Bargguheapme  Ruovttus  
 Boarrásiidoajus  Bargonávccahisvuodaruhta  
 Eará (čilge) .....

Man stuoris lea bearraša/bearašgotti bruttosisabohtu jahkái?

- Vuollet 150 000 ru.  Ru. 150 000–300 000  
 Ru. 301 000–450 000  Ru. 451 000–600 000  
 Ru. 601 000–750 000  Badjel 750 000 ru.

Man dávjá spealat makkárnu ruhtaspealuin nugo lotto, tihp-pen, speallanautomáhtat ja sullasaččain?

- In goassige/hárve  1–3 geardde mánnui  
 Oktii vahkkui  2–6 geardde vahkkui  
 Juohke beaivvi

Man olu spealat gaskamearálaččat vahkkui?

- Vuollet 100 ru. vahkkui  100–500 ru. vahkkui  
 501–1000 ru. vahkkui  Badjel 1000 ru. vahkkui

## GIVSSIDEAPMI

Givssidemiin oaivvildat go okta dahje moattis dutnje baháid mángii dadjet dahje dahket, ja dus lea váttis iežat bealuštit.

Leatgo goassige givssiduvvon?

- Juo, mañimus 12 mánu  Juo, ovdal  In

Jus leat givssiduvvon, de mo leat givssiduvvon?

(russe oktii dahje moddii)

- Bostalemiin  Badjelgeahččamiin  
 Vealaheaddji mearkkašumiiguin  Eará

Sáhtášitgo mitalit gos dát geavvá/geavvai?

(russe oktii dahje moddii)

- Skuvllas  Skuvlainternáhtas  Fidnoeallimis  
 Báikegottis  Eará

## 8. BORGGUHEAPMI JA SNUVSSEN

Man guhká leat beaivái dábálaččat suovvalanjas? Galle olles diimmu

Borgguhiigo oktage rávisolmmoš ruovttus go bajásšaddet? JUO II

Ásatgo, dahje leatgo ássan, ovttas beaiválaš borgguheaddjiiguin manñil go devdet 20 jagi? JUO IN

Leatgo borgguhan/borgguhatgo beaiválaččat?  Juo, dál  Juo, ovdal  In

Jus borgguhat beaiválaččat dál, borgguhatgo: JUO IN

Sigarehtaid?

Sigáraid/sigarillos/biippu?

Geassanduhpáha/rullings?

Jus beaiválaččat leat borgguhan ovdal, man guhká lea dassá go heitet? Galle jagi

Jus borgguhat beaiválaččat dál, dahje leat borgguhan ovdal:

Galle sigarehta borgguhat/borgguhit dábálaččat beaivái? Galle sigarehta

Man boaris ledjet go borgguhišgohtet beaiválaččat? Ahki

Galle jagi leat oktiibuot borgguhan beaiválaččat? Galle jagi

Leatgo snuvssen/snuvsetgo beaiválaččat?  Juo, dál  Juo, ovdal  In

Jus snuvset/leat snuvssen, galle jagi leat oktiibuot snuvssen? Galle jagi

## 9. LÁŠMMOHALLAN JA RUMAŠLAŠ LIHKADEAPMI

Mo lea du rumašlaš lihkađeapmi astoáiggis leamaš manjimus jagi? (Jurddaš gaskameari vahkus jahkái. Mátki bargui lohko astoáigin. Vástit goappašiid gažaldagaid)

### Diimmuid vahkkui:

	li ovttage	Vuollel 1	1-2	3 dahje eanet
Gehppes lihkađeapmi (li bivastuvvo/sieđđaluvvo).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Garra rumašlaš bargu (Bivastuvvo/sieđđaluvvo).....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	1	2	3	4

Almmut lihkađeami ja rumašlaš rahčamušaid du astoáiggis. Jus lea hui mánggalágan lihkađeami omd. gaskal geasi ja dálvvi, de bija gaskameari. Gažaldat guoská dušše manjimus jahkái. (Russe ruvtui mii buoremusat heive)

Logat, geahčat tv dahje eará jaskačohkká buđaldus?  1

Váccát, sihkelasttát dahje lihkađat earáláhkai ainjuo 4 diimmu vahkkui? (Loga maid vázzima dahje sihkelastima bargui, sotnabeaimátkkiiid jna.).....  2

Lášmmohalat, barggat losit bealđobarggu js.? (Merke ahte lihkađeapmi galgá leat ainjuo 4 diimmu vahkkui).....  3

Hárjehalat garrasit dahje gilvvohalat jeavddalaččat ja mángii vahkkui?.....  4

## 10. OAHPPU JA BARGU

Galle jagi leat skuvllaid vázzán? (Bija buot jagiid go leat skuvllaid vázzán dahje studeren) Galle jagi

Mo loavttát barggus?

1  Hirbmat bures

2  Bures

3  Heittogit

4  Hirbmat heittogit

Oaivildatgo ahte orut massimin dálá barggut dahje sisabođut lagamus 2 jagi? JUO IN

Oaččutgo ovttaga dáid doarjagiin? JUO IN

Buohcceruda.....

Barguimáhcahandoarjaga.....

Sosiálveahki/-doarjaga.....

Gaskaboddosašdoarjaga ovttaskas fuolaheaddjiide.....

## 11. DUŠŠE NISSONOLBMOT GALGET VÁSTIDIT DÁS RÁJES SKOVIS

Man boaris ledjet go vuosttas geardde ožžot mánnodávddaid? Ahki

Jus eai šat leat mánnodávddat, man boaris ledjet go dat nohke? Ahki

Leatgo dál áhpeheapme?

Juo In Eahpesihkkar Badjel sahkoagi  1  2  3  4

Galle máná leat rieğáđhtán? Galle máná

Jus leat máná rieğáđhtán, deavdde juohke máná rieğáđanjagi, ja galle mánu njamahit manñil rieğáđhttima?

(Jus it njamahan, čále 0)

Mánná: Rieğáđanjahki: Galle mánu njamahan:

1. mánná.....

2. mánná.....

3. mánná.....

4. mánná.....

5. mánná.....

(Jus eanet mánát, čále sierra árkii)

Geavahatgo, dahje leatgo geavahan? (Russe oktii juohke linnjás)

Dál Ovdal,muhto In in dál goassige

P-pilla/minipilla/p-cirgganasa.....

Hormonspirála (ii dábálaš spirála).....

Østrogena (tablehtaid dahje plastera).....

Østrogena (vuoidasa dahje čuggestatpillaid)

Jus geavahat/leat geavahan reseptageatnegas østrogena: Man guhká leat dan geavahan? Galle jagi

Jus geavahat p-pilla, minipilla, p-cirgganasa, hormonspirála dahje østrogena: makkár mearkka geavahat?

Almmut:

T

Ále čále dátko







	In bora goassige/ hárvve	Vísot háhkát ieža	Beloháhkii háhkát ieža	Oastit buvddas	Oastit priváhta	Lonuhat dahje oažžu
<b>Guoli:</b>						
Sáivaguoli ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mearraguoli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Murjjiid:</b>						
Luopmániid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jonaid .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Man dávjá lávet bivdit, guolástit ja murjet?

	In goassige	Hárvve	Muhtumin	Olu ástoáiggis
Bivdit rievssahiid/ fuđožiid .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bivdit fuodđuid ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guolástit .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Murjet .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Man dávjá leat borran váldomállása iežat dálldoalu sállais manjimusa jagi?

	In goassige	1-5 g. jahkái	6-11 g. jahkái	1 g. mánui	2-3 g. mánui	1 g. vahkui	2+ g. vahkui
Váldomállása bivddus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Váldomállása guolásteamis .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 3. BORRAMUŠ BAJÁŠŠADDAMIS

Jurddaš ruovttu borramuša birra ovdal go fárrerit sierra. Jus ášset eanaš oasi jagis internáhtas, de jurddaš borramuša birra doppe.

Ášsetgo internáhtas (stáhtinternáhtas dahje priváhta) go vázzet mánáid- ja nuoraidskuvlla?

Juo, nuoraidskuvllas

Juo, mánáidskuvllas

Juo, sihke mánáid- ja nuoraidskuvllas

In goappáge

Jus juo, galle luohká?

Man guhká ledjet internáhtas gaskamearálaččat juohke luohkás?  1-3 mánu  4-6 mánu  7-9 mánu

Man dávjá borret guoli ja bohccobierggu bajáššaddamis?

	In goassige	1-11 g. jahkái	1 g. mánui	2-3 g. mánui	1-2 g. vahkui	3-4 g. vahkui	5+ g. vahkui
Vuššon/báiston guoli	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bohccobierggu .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Man dávjá borret eará borramušaidda bajáššaddamis?

	In goassige	1-11 g. jahkái	1 g. mánui	2-3 g. mánui	1 g. vahkui	2 g. vahkui	3+ g. vahkui
Varraborramuša .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sávzzabierggu .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biergogáhkuid, márffiid .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guolleborramuša ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guollebuoivasa ja meadđemiid .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suohkada, bánnogáhkuid .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Ožžotgo medisiinnalaš trána bajáššaddamis? JUO IN

Ožžotgo trána omd. guollái (eará vuoja sadjái)?

Man dávjá borret meahccemurjjiid ja šattuid bajáššaddamis?

	In goassige	1-5 g. jahkái	6-11 g. mánui	1 g. mánui	2-3 g. vahkui	1-2 g. vahkui	3+ g. vahkui
Meahccemurjjiid ....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Jupmuid .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Borranrási .....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Leago borramuš maid dál borat earálágan go maid borret bajáššaddamis?

li  Veaháš earálágan

Hui earálágan  Hirbmat earálágan

### 4. IDJABORRAN

Morihatgo dávjá boradit manjil go eahkedis leat velledan? JUO IN

Jus "juo", vástit boahhte 4 gažaldaga:

Goas leat dus dávjimusat givssit? (Bija ovttá dahje moadde ruossa)

Miehtá jagi  Giddat  Geassit

Čakčat  Dálvit

Maid borat ihkku? (Russe oktii dahje moddii)

Bierggu  Láibeborramuša  Njálgáid  Eará

Boratgo eanet go beali jándora borramušas manjil di. 20 eahkedis? JUO IN

Givssiduvvojito earát bearrašis idjaborramiin? JUO EAI IN DIEDE

Leago dus bargovuorru, idjabargu dahje vuoruid váccát? JUO IN

### 5. BAJÁŠŠADDAN, BEARAŠ JA USTIBAT

Man gielddas leat ássan guhkitgo ovttá jagi?

Gielda:

1. Riegádanbáiki: ..... 0 jagi rájes   jahkái

2. ....   jagi rájes   jahkái

3. ....   jagi rájes   jahkái

4. ....   jagi rájes   jahkái

5. ....   jagi rájes   jahkái

Ásatgo ovttas náittosguimmiin/elošteaddjiin? JUO IN

Leago dus beaivválaš dahje juhkkon fuolahus: JUO II

Mánái/mánáide?

Váhnemiidda/earáide?

Galle buori ustiba leat dus? T

(Geaiguin sáhtát oadjebasat hállat ja geat sáhttet du veahkehit jus dan dárbbasat.

Ále loga sin geaiguin ovttas ásat, muhto eará fulkkiid gal) Galle ustiba

## Gulatgo ovttage dáid searvegottiide/oskkuide?

(Russe oktii dahje moddii)

- Stáhtagirku miellahttu  
 Lestadiánalaš searvegoddái  
 Eará searvegoddái  
 In miellahttu ovttage searvegottis

## Dovddatgo ahte sáhtát váikkuhit dan mii dáhpáhuvá báikegottis gos ásat? (Russe dušše oktii)

- Juo, hui olu  Juo, muhtun muddui  
 Juo, unnán  In  In leat geahččalan

## 6. ÁRVOČATNAŠUPMI

### BUOHKAIDE:

#### Leago dutnje dehálaš leat luonddus?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Leago luonddu ávkástallan nugo guolásteapmi, bivdu ja murjen dutnje dehálaš?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Leatgo sohka- ja bearašárbevierut dutnje dehálaččat bisuhit?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Leatgo vásihan ahte leat givssiduvvon dahje vealahuvvon du čearddalaš duogáža (sámi, kveana, ruošša, tamila, dáža jna.) gežil?

- Hui mángii  Muhtumin  Hárve  In oppanassiige

#### Jáhkátgo ahte čearddalaš unnitloguid vealaheapmi sáhttá dearvvasvuhtii čuočcat heajos guvlui?

- Hui olu  Muhtun láhkai  Unnán  Li oppanassiige

#### Dovddatgo ahte ealáhusastis leat duvdovjovomin eret?

- Hui olu  Muhtun láhkai  Unnán  Li oppanassiige

## 7. SIDJIIDE GEAIN LEA SÁMI DUOGÁŠ:

#### Leatgo sámi bivttasvierut dutnje dehálaččat?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Maid mearkkaša dutnje duodji?

- Hirbmat stuorra mearkkašupmi  Stuorra mearkkašupmi  Unnán mearkkašupmi  Li makkárga mearkkašupmi

#### Maid mearkkaša dutnje sámegeiela seailuheapmi ja ovddideapmi?

- Hirbmat stuorra mearkkašupmi  Stuorra mearkkašupmi  Unnán mearkkašupmi  Li makkárga mearkkašupmi

#### Leago dutnje dehálaš ássat báikegottis gos beaivválaččat sáhtát deaivvadit eará sámiiguin?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Leago du mielas dehálaš ahte mihtilmas sámi ealáhusat bisuhuvvojit?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Leago dehálaš dutnje ahte ovddiduvvo odđáigásaš sámi skuvla?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Leago dutnje dehálaš ahte sámi báikegottit berrešit oažžut eanet odđáigásaš bargosajiid?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Maid mearkkašit dutnje sámi mediat (TV, aviissat, girjjit)?

- Hirbmat stuorra mearkkašupmi  Stuorra mearkkašupmi  Unnán mearkkašupmi  Li makkárga mearkkašupmi

#### Maid mearkkaša dutnje odđá sámi dáidda (govvadáidda, musihka, filbma ja teáhter)?

- Hirbmat stuorra mearkkašupmi  Stuorra mearkkašupmi  Unnán mearkkašupmi  Li makkárga mearkkašupmi

#### Mo du mielas lea go sámi servodat ja kultuvra jagiid mielde lea ožžon lagat riikkaidgaskasaš oktavuodaid?

- Hirbmat dehálaš  Dehálaš  Unnán dehálaš  Áibbas deattoheapme

#### Maid mearkkaša dutnje Sámediggi?

- Hirbmat stuorra mearkkašupmi  Stuorra mearkkašupmi  Unnán mearkkašupmi  Li makkárga mearkkašupmi

#### Dovddatgo ahte nuoskkideapmi luonddus dahje sisabahkken lundui áitá du sámi eallima?

- Hui olu  Muhtun láhkai  Unnán  Li oppanassiige

#### Dovddatgo ahte odđáigásaš ovdáneapmi duvdá eret sámi kultuvrra?

- Hui olu  Muhtun láhkai  Unnán  Li oppanassiige

GIITU VEAHKI OVDDAS!  
MUITTE SKOVI OTNE POSTET!



