

Nordic Young Health

Possibilities and barriers for new, healthy concepts in the fast food sector



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Executive summary

The aim of the Nordic Young Health project was to produce new knowledge on the personal, socio-economic and structural determinants influencing Nordic young people's food practices and preferences in the fast food sector. The goal was also to create innovative concepts that can lead to better fast food products and menus, and also to stimulate effective policies that can make healthier choices more easily available for young people.

Objectives of the project

- To establish a platform for cooperation between consumer research institutions, authorities and fast food industries.
- To secure Nordic young people (age 15-29) a voice in the development of viable and healthier fast food products.
- To produce new knowledge on the personal, socio-economic and structural determinants influencing Nordic young people's food practices and preferences in the fast food sector.
- To translate the knowledge into innovative concepts that can stimulate the development of healthier fast food products and menus and effective policies that can make healthier choices more easily available for young people.

The study has achieved this aim by

- Six work packages.
- WP 1 was the kick-off meeting in Oslo in spring 2009 where goals and framework of the project was discussed and agreed upon with the reference group that included food companies active in Nordic markets and authorities.

- WP 2 included surveys on Nordic young people's views on food "on the go".
- WP 3 consisted of fieldwork mapping young people and the Nordic fast food markets in Oslo and Gothenburg.
- WP 4 focused on testing new healthier products in Oslo and Reykjavik.
- WP 5 disseminated results.
- WP 6 was about coordination of the project.

A platform for cooperation between consumer research institutions, authorities and fast food industry was created as a collaborative network that kept in contact through an inspiring kick-off meeting and seminar in Norway, YoungHealth e-mail list and newsletters, and participation at a successful concluding seminar in Copenhagen. A well-planned multi-sectored workshop in Stockholm was cancelled due to the industry's sudden change in economic situation, as the financial crisis emerged at that specific time. This network has, non-the-less, opened up for easier cooperation between the stakeholders and researchers in the future, and has participated in dialog groups with health and consumer authorities. There is every reason to believe that the connections and networks made through this Nordic Young Health project will continue in a more informal manner after the project's finalization.

Nordic young people (age 15-29) voices have been heard and secured through the executed and analyzed quantitative surveys, school visits, interviews and conversations during the fieldworks, as well as representation at the final, concluding seminar which allowed for direct discussions with, and input to, industry representatives and authorities. The process of testing a new, healthier product on Iceland was done in close cooperation with young people. Distribution of these findings will secure these voices to be heard also in the future.

All project presentations are publicly accessible on the internet.

Methods

The project consisted of several sub-studies that used a number of different methods including questionnaires, qualitative fieldwork, focus group discussions and an experimental dietary crossover study.

Main results

Similar barriers for healthy eating were revealed by the different studies: food (no healthy options), price (healthy options are too expensive), premises (not enough places), location (centre-outskirts, a fair amount of choice in city centres, hardly any in the outskirts).

Possibilities

- Fast food with less fat, or that is less processed, with more fruit and vegetables and wholegrain were the changes most commonly called for by the participants. The specific products suggested by the young people were soups, whole grain bread, fish and low fat meat
- One third of the participants in the survey did not eat fast food because they found it too unhealthy. Health-conscious people are a market opportunity
- The respondents who were served a healthy fast food meal liked it to a similar extent as the unhealthy meal they were served
- Taste was mentioned often as a reason to eat fast food. Healthy fast food should taste good and be cheap. Value-for-money offers on healthy food
- More flexibility and variation for individual choice could favour healthier fast food. The healthy option should be made the standard and not something special you have to ask for
- Emotions and nostalgia were other important reasons to choose a meal, and this should be accommodated by healthy fast food meals as well
- Possibilities for social engagement during the meal is important
- Healthy ingredients (e.g. chicken) contributed to the high status of a fast food product

Barriers

- The present market does not offer the consumer free choice - unhealthy fast food is the standard
- Information about the products might be misleading
- Keeping products fresh

- The need for corporate responsibility from the fast food industry for producing healthy fast food
- Difficult to have low prices on healthy options

Impact on fast food market and policy during project period

- Innovation: Difficult to estimate this project's specific role in market changes during project period as innovation of new products takes time. Concrete recommendations from our findings have been discussed with industry.
- Policy: Dialog groups between authorities, researchers and industry on the topic of healthier fast food has been formed in Norway and Denmark. Increased focus on the need for more knowledge on the fast food market in order to change it, i.e. additional surveys by the Norwegian Consumer Council (Forbrukerrådet).
- Public Discourse: Young Health results have achieved much attention in all Nordic countries, there is great interest in the topic of healthier fast food in the Nordic media today.

Recommendations for continued studies

- Studies on triggers and cues for the choice of healthier fast food combined with observation studies in fast food outlets about the marketing and presentation of healthy and unhealthy food
- Studies of logistics and possibilities to use more local products
- Projects on product development and optimization for healthy options, storage and handling

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Preface

A paradox of our time is that despite the increasing consumption rates of high fat, high sugar fast food, young people report trying to avoid eating unhealthy. This indicates a fast food market with untapped potential when it comes to offering healthier options. The “Nordic Young Health: Possibilities and barriers for new, healthy concepts in the fast food sector” project’s point of departure is that people today, and youth in particular, would eat healthier if they had easier access to affordable healthy food options in the public sphere. Therefore, by establishing cooperation between consumer research institutions, authorities and businesses, the Nordic Young Health project’s main aim has been to yield new information on Nordic young people’s fast food practices and preferences by means of both quantitative and qualitative studies. Specifically, we have been interested in disclosing structural barriers and possibilities that influence the Nordic fast food landscape.

The project is part of Nordic Innovations Center (NICE)’s “Healthier choices made easier for all” focus area, and has been partly funded by NICE. The National Institute for Consumer Research (SIFO) in Norway has initiated and coordinated the project and Kjersti Lillebø (SIFO) has been the project leader. The rest of the research group consists of Randi Lavik (SIFO, Norway), Johanna Mäkelä (National Consumer Research Centre NCRC, Finland), Margit V. Groth, Mette Rosenlund Sørensen (DTU National Food Institute, Department of Nutrition, Denmark) Alfons Ramel, Fjóla Dröfn Guðmundsdóttir (University of Iceland & Landspítali-University Hospital, Unit for Nutrition Research, Iceland), Øydis Ueland (Nofima Mat AS, Norway), Helene Brembeck, Jakob Wenzer, Center for Consumer Science CFK, Sweden). We wish to thank everyone in the research group for their important contributions in this project. Particularly we would like to thank Johanna Mäkelä for her work with this report during the six months Kjersti Lillebø was away on parental leave. We would also like to thank Susan Heiskanen for the language editing of the report.

March, 2011

The National Institute for Consumer Research, Norway

Randi Lavik

1 Introduction

A major public health threat in today's Nordic societies are the increasing rates of overweight and obesity, especially among children and young people. The fast food sector, which constitutes a main venue where young people eat outside the home, is thus an important arena to study in order to open up for changes in this trend. Despite the increasing consumption rates of unhealthy fast food, many young people report trying to avoid eating unhealthy. This indicates a fast food market with untapped potential when it comes to offering healthier options.

The point of departure of the project Nordic Young Health: Possibilities and barriers for new, healthy concepts in the fast food sector has been that people today, and young people in particular, would eat healthier if they had easier access to affordable healthy food options in the public sphere. Therefore the central aim is to produce new knowledge on the personal, socio-economic and structural determinants influencing Nordic young people's food practices and preferences in the fast food sector.

In the project fast food was defined as follows: By fast food we refer to ready-prepared hot foods like hot dogs, hamburgers, French fries and pizza slices, as well as cold foods, like baguettes/sandwiches, snacks, fruit, sweet buns, yogurt etc. The short definition is: Quick to prepare, to serve and to eat. The most typical fast foods are pizza slices, hamburgers, French fries, hot dogs and buns. Fast food is often also food on the go, i.e. food that can be eaten while walking or driving.

Nordic Young Health is a collaborative project among Nordic researchers in consumer research and nutrition. The National Institute for Consumer Research (SIFO) in Norway has coordinated the project. The other research partners are the Centre for Consumer Science (CFK) in Sweden, National Consumer Research Centre (NCRC) in Finland, DTU National Food Institute in Denmark, Nofima Mat AS in Norway and Landspítali-University Hospital University of Iceland, Unit for Nutrition Research in Iceland. The project was financed by the Nordic Innovation Centre (NICE) and the participating institutions. The project also had a reference group that was established in order to enhance cooperation between consumer research institutions, authorities and businesses.

2 Nordic Young Health Studies

2.1 Aims and structure of Nordic Young Health

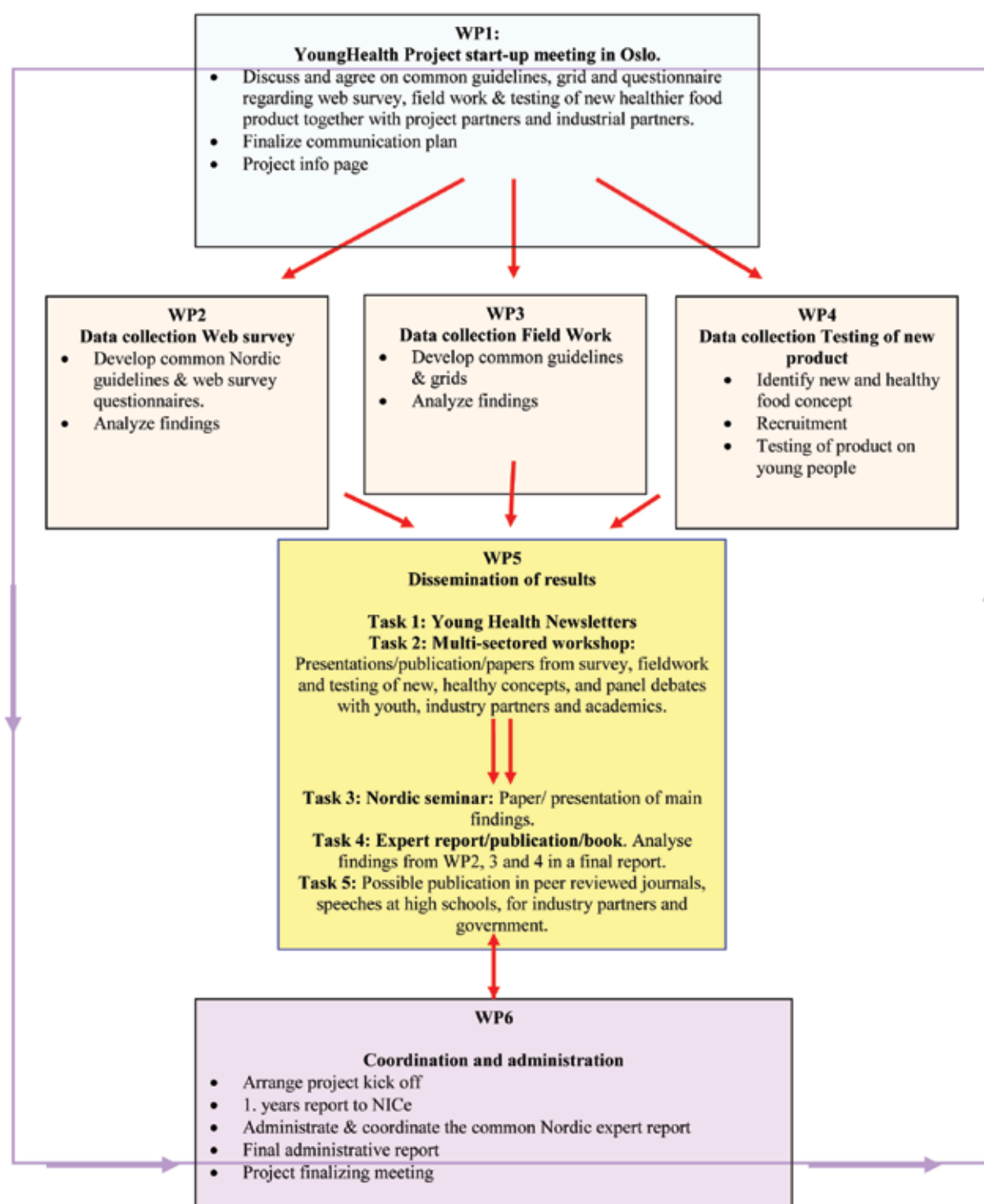
The aim of the Nordic Young Health project was to provide new knowledge on the personal, socio-economic and structural determinants connected to young people's food practices and preferences in the eating-out sector. New knowledge was gathered through surveys in four and qualitative fieldwork in two Nordic countries. Another goal was to investigate young people's attitudes towards products on the current fast food market and to translate this knowledge into innovative concepts by testing an improved fast food menu.

Furthermore, an important goal was to facilitate exchange of best practices and to translate the new knowledge produced into the development of innovative concepts for new and better food products and menus in the public out-of-home eating sector. Therefore, special attention was paid to the dissemination of results in the form of newsletters and seminars as an integral part of the project already in its implementation phase.

The project consisted of six work packages. The first work package was the kick-off meeting in Oslo in spring 2009, where the general aims and framework of the project were discussed and approved among the project group and the reference group. The second work package included planning, executing and analyzing the surveys conducted in four Nordic countries. The third work package was fieldwork mapping young people in the Nordic fast food markets in Oslo and Gothenburg. The fourth work package focused on identifying and testing new healthier fast food products in Oslo and Reykjavik. The fifth package concentrated on dissemination of results. This was done with newsletters, a seminar and the report at hand. The last work package was administration and coordination of the project, carried out by SIFO.

This report consists of 4 chapters. NCRC has compiled and edited the report and the partners responsible for the WPs have produced the texts about the main results of each WP. The structure of the project as well as each WP are illustrated in Figure 1.

Figure 1. The structure and work packages of the Nordic Young Health project



2.1.1 Increasing knowledge, inspiring change

Establishing a platform for cooperation

One aim of this project was to establish a platform, or a meeting point, for cooperation between consumer research institutions, authorities and fast food industry in order to enhance the understanding of barriers and opportunities for affordable, healthy food, and inspire processes of change in the existing Nordic fast food landscape. This particular cooperation was an explicit aim in order to better adjust the methodological approach to the empirical field through different actors looking at the same phenomenon from different perspectives and inspiring change. This was done through establishing a reference group that was included as an integral part of the project process throughout the project period. Our main venues of contact were the kick-off meeting, the planned multi-sectored workshop and the concluding seminar, as well as a common e-mail list.

The Young Health project kick-off meeting was held as a whole day seminar at Gardermoen hotel in Norway, and included representatives from our Nordic reference group (commercial actors, authorities, researchers), and NICE representatives. The kick-off meeting was a great success and a crucial part of our attempt to create a platform for cooperation - i.e. a network - among researchers and stakeholders that share a common interest in the betterment of the Nordic fast food landscape. This meeting ensured the reference group participants to meet and greet in order to enhance cooperation between the stakeholders and lower the barriers to contact each other. The meeting also functioned as an important fundament where the industry and authorities were able to participate and comment on the project layout and overall plan in the initial stages of the project. The researchers presented their work packages and all participants agreed upon concrete common guidelines, grid and questionnaire regarding the fieldwork. Also discussed was how to best go about with the testing of a new healthier product within the project budget constraints and possible industry cooperation. These valuable discussions lead to an important cooperation footing and certain practical changes in the project proposal (methodological additions, alterations, comments) and ensured even stronger integration between the work packages.

The multi-sectored workshop in Stockholm was organized together with the well-renowned Kairos Future, an international research and consulting firm specializing in helping companies understand and shape their futures. The project partners met in Stockholm prior to the workshop, and planned a full day's workshop and a consecutive day of internal meetings for the project partners only. Students for the discussion panel had been booked. Regrettably, this well planned workshop had to be cancelled due to poor participation from commercial actors. The reasons given for the lack of commitment from the industry was the economic situation, as this coincided with the immanent threat of international financial crisis in 2010). This workshop was thus instead turned into a strategic meeting with all our research partners represented. This

was a minor setback for the planned, hands-on collaboration between research and industry, and somewhat shaped the platform's strength. In order to still secure young people a voice, we added some school visits and interviews with young students to our data collection process.

Finally, the reference group was invited to join and participate actively in the dissemination of results in the concluding seminar (see chapter 3). This seminar was open for all, and became a great success which distributed results and generated further discussions broadly; both to our project participants, but also beyond. Present in the audience were also young people and students.

Even though we did not succeed entirely in promoting interaction and collaboration between companies and researchers in the form of the stable platform initially planned for, the outcome of this collaboration has never-the-less been fruitful for the project scope, data collection process and final results. We have though the collaborative efforts in this project noticed, and also inspired to, a lot of concrete activity and genuine willingness in the industry to create new, innovative and healthier fastfood products.

2.2 Survey: Young people in the fast food market in Nordic Countries

Randi Lavik and Kjersti Lillebø, SIFO

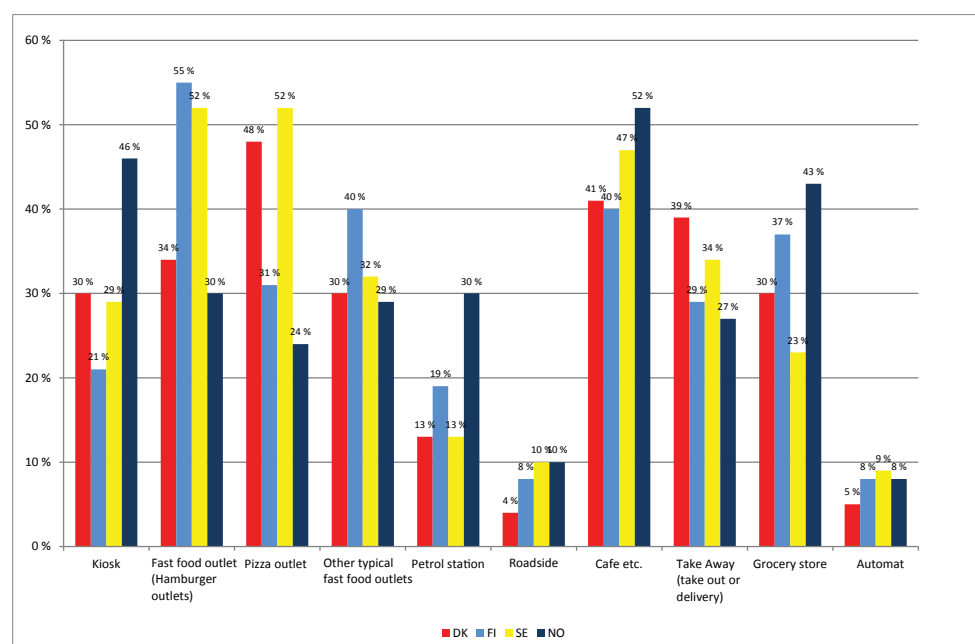
In WP2 the aim was to gather quantitative and comparative data uncovering Nordic young people's views and food practices. The web survey focused on the most common venues where young people eat during their leisure, work and school time: fast food restaurants, convenience stores, snack bars, kiosks, petrol stations, and outlets at sports halls. These venues have been studied with respect to structural features such as healthy/unhealthy food selection, menus, price, shelf placement and marketing.

SIFO in Norway was responsible for this work package that consisted of a common web survey conducted in four Nordic countries: Denmark, Finland, Sweden and Norway. The survey was developed in collaboration with all the project partners, and executed locally in each country. The respondents belonged to a panel, and they gave their consent in advance to participate in the surveys. The surveys were carried out by NORSTAT and consisted of young people aged 15-29 from Denmark (807 respondents), Finland (801), Sweden (816) and Norway (792). The answers of the web survey are weighted in each country according to the population distribution of gender and age among 15 to 29-year-olds.

We asked questions about eating habits and preferences when on the go. This was contextualized to being on the way to and from school or work, shopping, walking, travelling, etc. We chose to describe the food eaten in such situations as 'fast food' (i.e. ready-made hot meals such as hot dogs, hamburgers and French fries, as well as baguettes/sandwiches, snacks, fruit, sweet buns, yoghurt etc.).

There were some specific differences between the Nordic countries in the young people's eating patterns at fast food outlets. When buying fast food; kiosks, petrol stations and grocery stores were visited more often in Norway compared to the other Nordic countries. Hamburger restaurants were more often visited by Finnish and Swedish young people. Pizza and takeaway outlets were more often frequented by young people in Denmark and Sweden compared to the other two countries. Some of these differences could be explained by the specific national market structure and the availability of certain types of places.

Figure 2. How often do you eat food on the go: once a month or more often? Proportion. N=3216



Young men ate fast food more often at kiosks, pizza outlets and petrol stations than young women. Young men in Denmark, Sweden and Norway ate hamburgers more often than young women, but not in Finland. In Finland there was no difference between the sexes, and hamburgers seemed in general to be especially popular in Finland.

Young women ate more often at cafes, confectionaries, bakeries and sandwich/coffee bars than young men; this tendency was found in all the four countries.

The most common reasons given to selecting the fast food place they had last visited were “short distance”, “I was passing by” and “the food was easy to bring along and eat”. These rankings were the same in all the four countries. These reasons are typically *convenience-oriented*.

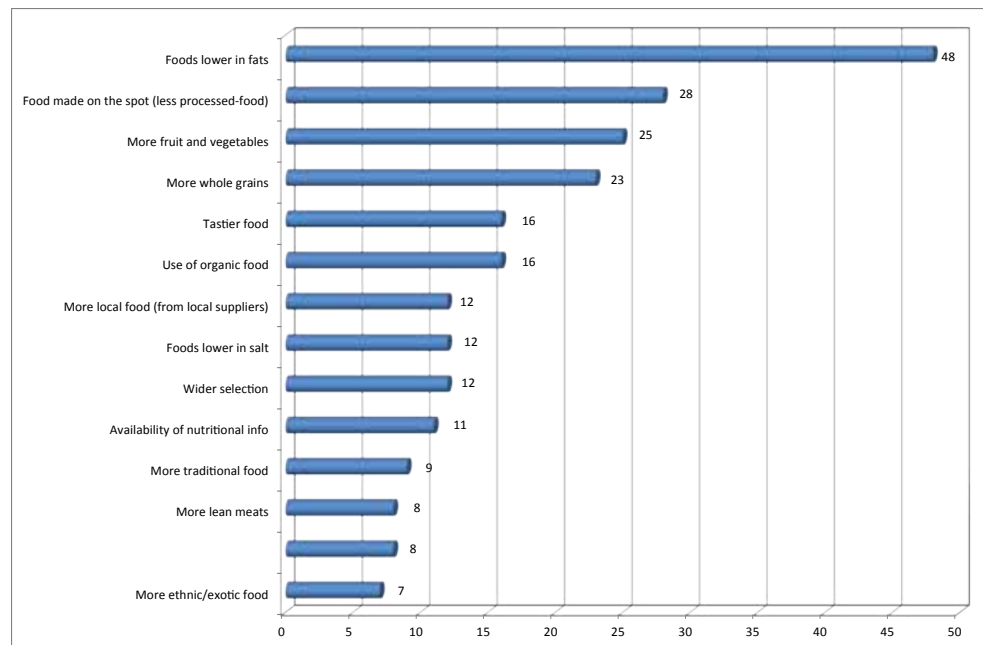
Hamburgers were the most common fast food product purchased by the respondents the last time they had eaten on the go. This was particularly true in the case of Finland. This corresponds well with another question where the respondents were asked to choose which menu they would prefer if price were not an issue. In most of the answers the respondents again chose the hamburger, which again was especially dominating in Finland.

About two third of the respondents frequented fast food outlets more or less regularly (once a month or more often). The most important reasons given for eating fast food was the “good taste” of food like hot dogs, hamburgers etc. This was the case Especially in Finland. The next reason was “I’m generally on the go a lot and often need something quick and easy to eat”. This is also a typical convenience reason and fits well with the main idea behind the convenience market.

The one third of the respondents who never or rarely ate at fast food outlets were asked why they didn’t. The two most frequent answers were “It is too unhealthy” and “It is too expensive”. The health argument and the price argument were given most importance among the Danish and Norwegian respondents.

“Lower fat” was the most frequent answer given when asked what changes in particular they wished for in fast food. Next on the list was easier access to food made on the spot, in other words; less processed food. More fruit and vegetables was also an important request among the young people’s wishes. Denmark and Norway stood out also in this regard, as the respondents there more markedly wished for foods lower in fat when asked what changes they wanted in the fast food market.

Figure 3. What changes would you particularly wish for in fast food? (Max. three answers). Proportion. N=3216

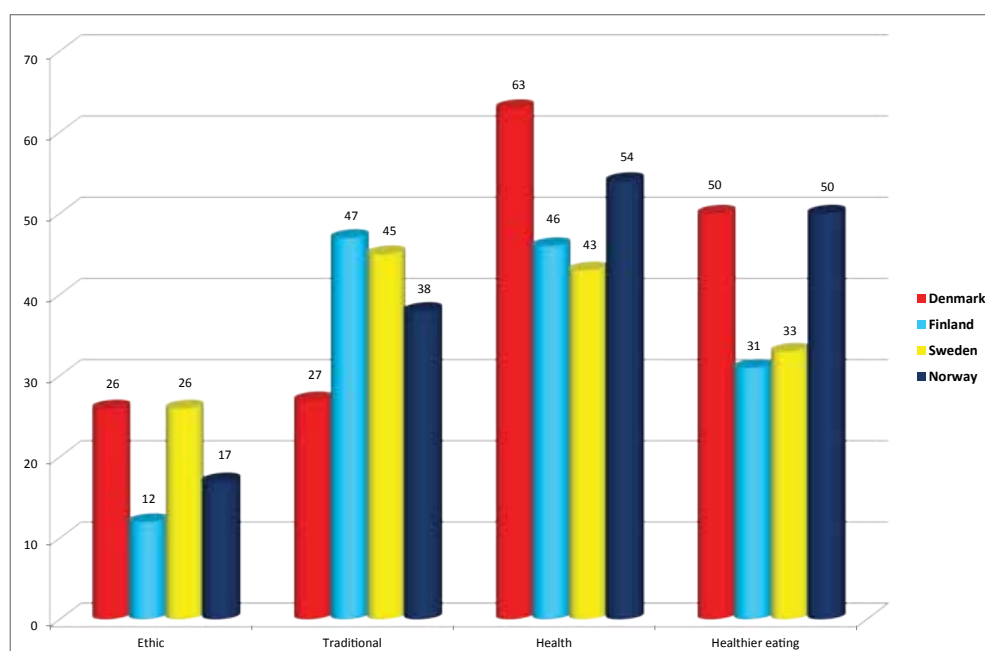


The wishes for changes in fast food can be categorized within a four dimension index:

- **Ethical dimension:** More use of organic food, more fair trade products
- **Traditional dimension:** More food made on the spot (less processed food), more traditional food, more local food (from local suppliers)
- **Health dimension:** More foods lower in fats, more foods lower in salt
- **Healthy eating dimension:** More fruit and vegetables, more whole grains

These latent variables (dimensions) were transformed into four indexes, each coded as dummies (0 and 1). This means that the *Ethical* variable with code 1 is “more use of organic food or/and more fair trade products”. The same logic is used for the other three indexes.

Figure 4. Changes in the fast food market, by countries. Proportion. N=3216



The ethical dimension proved the most common in Denmark and Sweden, and the traditional dimension the most common in Finland and Sweden, whereas the health dimension was the most common in Denmark and Norway, as was also the pattern for the soundness dimension. In all the four countries the young women were more *health* and *healthy eating* oriented than the young men.

Summing up, there are indications that Danish and Norwegian young people are slightly more health-oriented than young people in Finland and Sweden. Therefore, in the next step the results from quantitative survey were deepened by conducting qualitative field works in two cities.

2.3 Qualitative field studies

The main objective of WP3 was to explore which structural barriers are preventing young people from access to healthy and nutritious food during their daytime activities, especially at lunch-time on school days. It should be noted that the most obvious difference between the Nordic countries is the free-of-charge lunch option in Sweden and Finland. In Norway and Denmark schools do not provide free hot lunches. In Norway many young people eat home-made packed lunches.

Qualitative ethnographic fieldwork investigating the existing foodscape, and the possibilities and barriers young people are faced with both in urban environments and in

the outskirts was executed in Norway and Sweden. The fieldwork observed both social and topological factors according to a common observation protocol developed partly in collaboration with reference group members. This common protocol (see appendix) is possible for use in duplicate studies in other countries.

2.3.1 Access and availability in the Norwegian fast food market – a qualitative mapping

Kjersti Lillebø and Randi Lavik, SIFO

The aim of this fieldwork was to explain why the fast food market in Norway looks like it does. If it is dominated by unhealthy fast food, why is it so? The research questions were: To what extent do young consumers have the opportunity to make choices that correspond with their prioritizations regarding health/food intake and enjoyment? What food is on offer in the Norwegian foodscape? Is it possible to buy healthier food when travelling or on the go?

The Norwegian study focused around rural and urban Norway, and food along main highways leading to Oslo and Bergen. Menus and display in shops and at fast-food-outlets was analysed, such as shock sales of high fat and sugar food and competitions for employees selling the most buns. Data is based on observations and qualitative interviews of both young customers and staff in fast food outlets along main highways leading to/from Oslo and Bergen, and at chosen traffic points and shopping malls in the two cities. Interviews with school children was done at some selected Oslo schools. In addition, the researcher took photographic documentation from the market landscape.

The fieldwork entailed mapping what kind of fast food was available at fast food outlets such as petrol stations, kiosks, snack bars, roadside restaurants etc. How was the fast food promoted, what barriers were identified for healthier fast food, how did the customer and sales people experience their involvement in this eating landscape? The fieldwork was carried out by Kjersti Lillebø and Julie Sage from SIFO in 2008 and 2009.

In Norway kiosks and petrol stations make up a significant market. In 2008 they held a share of 11 percent of the total grocery market. The big grocery chains own a main proportion of this market. Campaigns at fast food outlets are often standardized and not adjusted to individual outlets, which can prove to be problematic at times. An illustrative case in point is a national campaign that proudly promoted a poster with pictures of three new menu standardisations saying "The choice is yours!". While the choices given were hot dog with sugar drink, hamburger with sugar drink, or whole wheat baguette with fresh vegetables and water, it becomes unfortunate when one of the three – the healthier choice – had been crossed out by hand with a thick, black marker. Many kiosks in Norway are small outlets and are not allowed to prepare meals on the spot because of

health restrictions/regulations, and this is why the baguette alternative was crossed out. This gives the consumer the illusion of a choice that does not exist.

Standardized menus are an important way of selling fast food and they are highly promoted and visibly exhibited. The chain policy is to sell as many menus as possible. The staffs are instructed to recommend additional products in order to make it “a menu”, and hence make it “a better deal” with the idea of “value for money”: If a customer wants to buy a hot dog, the staff will more often than not ask if you want a drink as well, only for a small extra charge. If the customer orders a sweet bun, he or she will be encouraged to buy a pack of 5 for a special price, to “save money”. The chains that dominate the Norwegian fastfood market organize contests among the sellers where bonuses are given to the sellers able to dispose of the most buns. A customer summed up her experiences like this:

“I feel pressured into buying sweet buns every time I stop by just to buy coffee, and it is so cheap that it kind of makes you feel stingy if you don't accept the offer.”

Another form of sale promotion are so-called “shock sales”. Products dominated by high fat or high sugar contents are placed together at highly available locations, easy for the customer to pick up on the way to checkout.

There are explainable reasons for why we find high-fat, high-sugar food and drinks like hot dogs, pizza slices, hamburgers, French fries, sugar drinks, and sweet buns in the fast food outlets. These products are easy to prepare, they are quick to serve, they demand little employee skill and they produce very little waste (stored in a freezer until it is time to prepare them). Especially the high-fat products are easy to always have available in the outlet because they can be kept warm for a longer time without spoiling. Moreover, fat and sugar are cheap ingredients, and cheap products are important for young people. Cheap products also mean possibilities for large volumes, and large volumes are profitable for sellers in this market.

There are possibilities in the current market for healthier products, like wraps, fruits and vegetables, salads and other more challenging fresh foods, like sushi. A packed lunch is also a healthier alternative: “A sandwich for NOK 19” is promoted and is a popular impulse buy.

The roadside cafes offer food for people “on the run”. Most of these are traditional meals with high fat content. However, some are locally produced, with fresh and high-quality ingredients. An example of this is a French concept: Marché which has been operating in

Norway for some years now. This is, however, not a cheap place to eat, and most young people would be discouraged by the prices.

In rural areas/city outskirts the choice of fast food is very limited, and healthier alternatives few. There are structural limitations for the availability of fresh products. Norway is an elongated country, sparsely populated and topographically complicated, with long distances. This poses a challenge for food supply in general, and fresh food specifically. It makes it more difficult to offer fresh fruit and vegetables or other products that must be served fresh. While hamburgers are precooked and quickly can be defrosted from the freezer according to needs, fresh products like fruit and vegetables cannot come out of a freezer and thus produce more waste. Small kiosks in the outskirts represent small markets, and in small markets it is difficult to offer the customers a wide selection. Small kiosks also often lack the necessary facilities demanded by Norwegian food safety regulations to preserve and prepare food in the place where it is sold. It is thus evident that running a small kiosk in the outskirts is very different from a larger kiosk in a big city.

There is a growing potential for healthy fast food, and many business managers expressed an eagerness to sell healthy food. As the foodscape is dominated by the large cooperations, which dictates the menus and products on offer, it is here crucial that reported consumer interest for healthier choices clearly indicate a market out of touch, and that there is an untapped potential in the market for change. The structural barriers can be overcome, especially if the big companies are on board: they have the possibility to change the fixed menus and display quickly if they are willing. An appropriate question to ask regarding the internal competition arrangements is: Could this be done with fruit and vegetables? Or with seafood products? Or could the chains arrange internal competitions on selling the most fruit and vegetables, rather than sweet buns and chocolate?

Better flexibility would be a direct and easy way to allow for healthier options. It does not necessarily have to be high sugar drinks that are offered as part of a menu; a healthier beverage could be proposed as a choice alternative. One could also choose whole grain buns for hot dogs, low fat milk in coffee, one bun instead of a 3-pack offer and whole grain baguettes. Some of these options are already available today.

There could also be flexibility in other areas. One could allow for personal adjustments, like flexibility in menus and portion sizes. One could graphically illustrate what the combined food products consist of; the entire combination of ingredients of the menus/packs, as well as nutrition indexes (calories, trans fats etc). One could have standardized campaigns with focus on healthier products. This would be a unique way of achieving quick and durable changes in the foodscape. The chains have great power and can influence big changes in the convenience market.

Young people have a good sense of what is healthy and unhealthy food. However, unhealthy food is cheaper than healthy food, which could be a barrier for increased consumption of healthy fast food. The fast food market also consists of customers who like unhealthy fast food, such as hamburgers and hot dogs. Young men are over-represented. The reasons for visiting fast food outlets are practical and convenient.

2.3.2 Food-related practices in Gothenburg, Sweden

Jakob Wenzer (CFK)

The aim of the Swedish fieldwork was to investigate factors in Swedish fast food market. It might look different comparing to Norway because the availability of subsidized lunch in Swedish schools. The Swedish fieldwork was carried out in Gothenburg, Sweden's second largest city, and its surroundings in May and June 2009. Six sites were chosen for the fieldwork on the basis of their geographic locations in relation to secondary schools; three areas in the city centre and three areas on the outskirts or outside the city limits. In the city, the ethnographic work was preceded by visits to school classes to determine, with the help from the students themselves, where to go, when to go there and what to look for. The sites, cafes, gas stations, restaurants and similar establishments, were visited and examined according to the observation protocol, with respect to the physical environments surrounding the sites and the transportation making access possible. The field visits lasted between four and eight hours for each area, but some sites in the centre of town were visited on a number of occasions to check the adequacy of the first visits.

In Sweden students get free lunch served in the school cafeteria every day. Therefore, there is no actual need of leaving the school premises for food, at least not from a nutritionist's point of view – when students leave the school at lunch time it is for reasons other than hunger alone. For that reason, the nutritional aspect should be toned down and other aspects brought into focus instead. What stand out as especially interesting from the Swedish fieldwork are those practices the students undertake in which consumption is included in any way. Often, it turns out, the activities involved include food without it being the focus of the practice. Hence, the barriers, in the case of Sweden, consist of those factors that prevent nutritious and healthy foodstuffs from entering the practices preferred among young people, as the school classes within our study showed a preference for healthy food over the available, more unwholesome range of foodstuffs usually available to the students upon leaving the school grounds.

The three important food-related practices which were ethnographically identified among the respondents in the schools at the visited sites were:

- **“Fika”**: The traditionally Swedish practice of consuming, in a public setting,

something eatable or drinkable at a designated place while talking or hanging out with friends (or reading, thinking if alone).

- **Replacing school meal with other food:** Actually leaving the school premises for the purpose of eating elsewhere.
- **Hanging out:** Buying something small to get to sit at a table occupied by a group for the purposes of socializing or just passing time in a nice environment/pleasant surroundings.

The identified barriers that prevent the insertion of healthy food into these practices are:

- **Food:** At some places, like in the outskirts, there are simply no healthy options.
- **Price:** Where there is healthy food, like in the city centre, it is too expensive for teenagers, or to put it another way, there are not enough cheap and healthy alternatives that are also found tasty.
- **Premises:** There are not enough nice places for young people where “healthy eating” as a practice can emerge.
- **Location:** Because of the discovered huge geographical differences in healthy food options, location outside of city centres was also identified as a barrier in this study.

2.3.3. Towards healthier food on the go in Norway and Sweden

The Norwegian and Swedish fieldwork combined clearly indicate that hamburger rules, but there is a clear interest in healthier food options (chicken and fish burgers, whole grain breads). Big companies have the possibility to change fixed menus, displays and campaign focus quickly on a national scale, and hence are important agents for change. We have also found that healthy eating requires nice places, as the atmosphere is important for a healthy body and mind. Young people are clearly interested in eating healthy food. We also found clear indications that innovation of healthy fast food primarily seem to take place in urban centres. Barriers for healthy eating are the food itself (few healthy options), price (healthy options are too expensive), premises (not enough places), the location (centre outskirts, a fair amount of choices in city centres, hardly any in the outskirts).

The fieldwork in Norway and Sweden identified several barriers to healthy food on the go practices. In addition to the eternal questions of prices and availability of healthy fast food and food on the go options, it is obvious that there is a need to develop new products that fulfil the requirements of modern and healthy fast food. Consequently,

the next step of the project was to explore the possibilities for new product concepts.

Based on the previous work packages new concept was constructed on the basis of healthiness and Nordic ingredients. These were tested in Reykjavik. Also, in Oslo young people's preferences and attitudes towards products in the fast food market was studied.

2.4 Testing of new healthy fast food concepts

The main objectives of WP4 were to identify new, healthy fast food concepts and test a concept in the market. WP4 consisted of two tasks where Task 1 was undertaken by University of Iceland & Landspítali-University Hospital, and Task 2 was carried out at Nofima Mat, Norway.

2.4.1. Acceptability of improved fast food in Iceland

Fjóla Dröfn Guðmundsdóttir and Alfons Ramel, University of Iceland

In Task 1 the aim was set to complement earlier work by providing information about how young people react to real products and about the influence of product characteristics. The products were pre-characterized on the basis of healthiness and sensory characteristics.

In this study we investigated how young people react to fast food products and the influence of product characteristics. The products tested were pre-characterized in terms of healthiness, their nutrient and energy content. This study investigated how acceptable improved fast food was in the opinion of the study participants and whether fast food with an altered nutrient composition could improve postprandial metabolism in comparison to typical fast food.

This was a randomized, experimental, dietary crossover study conducted at the Unit for Nutrition Research / University of Iceland & Landspítali-University Hospital. The subjects were tested two times with a one-week break between the test days. All the participants were randomly assigned in the order in which they got the test meals. All the meals were prepared and served by Fjóla Dröfn Guðmundsdóttir and Alfons Ramel.

The reference meal was a typical fast food meal (Hamburger + Cola). The healthy meal was matched in energy, protein, carbohydrate and absolute fat content, but it was improved in comparison to the reference product with regard to fatty acid composition, dietary fibre and folic acid, and it was also different as to protein and sugar types. It contained ingredients typical of the Nordic countries, e.g. fish instead of meat, whole meal (rye) bread instead of white bread, more salad, and fruit juice instead of Cola.

A total of 25 young individuals were included in the study through advertisements at the University of Iceland. The study followed the Helsinki guidelines, and all the participating subjects gave their informed, written consent.

Feelings of hunger (satiation, satiety) were assessed using visual analogue scales before, immediately after and for two hours after the test meals. Palatability was assessed using visual analogue scales immediately after the test meals. Furthermore, willingness to buy was also assessed using visual analogue scales immediately after the test meals.

Blood samples were drawn before the test meal, immediately after, 1 hour, 2 hours and 3 hours later, and analyzed for blood lipids, glucose, insulin and general blood status at the University Hospital laboratory.

The participants (age = 27.0 ± 4.8 yrs; BMI = 26.6 ± 6.5) usually ate fast food once a week. Although the participants felt that the fish flavour stood out in the healthy meal it turned out that they liked both the healthy meal and the reference meal to a similar extent. Despite the similar energy content of the two tested meals, the healthy meal was perceived as a bit larger and the satiety score was significantly higher directly after the fish meal, although these effects disappeared during the later measurements. Around half of the participants stated that they would buy the healthy meal instead of the reference meal if it were available at the same prize.

The blood sugar levels 20, 40, 60 and 80 minutes after the reference meal were higher than after the fish meal. The blood insulin levels were significantly lower after the healthy meal (1 and 2 hours). The increase of blood lipids after the meal was transient and similar in both groups, but the study period was however probably too short to capture the full increase in blood lipids after the meal. The inflammation parameter c-reactive protein was not different between the groups.

The study indicates that a healthy alternative to common fast food with ingredients typical to the Nordic countries is well accepted by young adults who regularly eat fast food. Despite the perceived fish flavour, the healthy meal was rated similar to the reference product. Measurements of blood variables indicated that the healthy fast food meal containing lots of fibre, fish, salad and fruit juice exerted less stress on postprandial metabolism than the reference meal.

Our conclusion is that the current results are of relevance not only to health professionals such as nutritionists, dieticians, medical doctors or public health specialists but also to other professionals, such as restaurant and canteen owners.

2.4.2 Young consumers' fast food behaviour in Norway

Øydis Ueland, Nofima Mat and Siri Mohagen, Norwegian University of Life Sciences

In Task 2 an in-depth investigation was undertaken on factors characterizing fast food behaviour among young consumers, based on results from the surveys on young people and their food and fast food preferences and practices. The study was conducted as part of a Master's thesis by Siri Mohagen at the Norwegian University of Life Sciences.

The aim in this task was to give an indication of young people's preferences and attitudes towards products in the fast food market. This study is relevant for providing information with respect to developing new and healthier food concepts.

The applied methods were mainly semi-structured group interviews in the form of focus groups, consisting of 2 x 8 respondents, allocated respectively in plain male and female groups. In addition, projective testing was conducted, including illustrating pictures, product grouping and mood boards. Students at the University of Oslo were recruited to participate in the study, as they were hypothesized to be regular consumers of fast food. The focus group interviews were also conducted at the university premises.

A range of products consisting of 13 items from the food on the go market, was presented to the focus groups. The items were categorized in advance with regard to their degree of healthiness, to function as factors for comparison.

In the results the male group of respondents showed generally a higher consumption of food on the go than the female group. The young women preferred preparing meals at home. Allergies, greater opportunity for variation and financial circumstances were some of the arguments given in favour of not buying food prepared outside of the home. Stated as an argument in favour of making purchases in the "out of home" sector, however, was the possibility of getting large portions of food, often hot, for a small amount of money. Other arguments were that food is boring to cook, it should be easily accessible, and also taste good. Moreover, the males associated to a greater extent cosiness and comfort with the purchase of food on the go, while the females, on the other hand, emphasized lack of time as the biggest contributing factor when purchasing food prepared outside of the home.

Price, availability and satiety were key words with respect to choices made in the purchase of food on the go. In addition, the need for cutlery or other equipment to consume the food, determined whether the products were suitable for consumption on the go or not. Here the knife turned out to constitute a significant hindrance.

Stigmatization of both types of products and outlets was obvious. In fact, certain kinds of food and chains of outlets were attached a varying degree of integrity by the informants.

The presence of certain ingredients could greatly help to change food-cultural status, from low-grade to more high-quality, often based on a perception of the ingredients' degree of healthiness. Chicken, for instance, contributed with positive influence on status, while carbohydrates were negatively perceived. In this context, it seemed as if the media, including daily and weekly press, contribute a greater effect on influencing consumer choice than information provision by the health authorities.

In the wishes expressed by the informants, future trends in the food on the go market seem to indicate an emergence of new values. These were related to a globalized culture of food, focus on price, health, and sensory aspects related to colours and freshness. At the same time, the food should be safe, portable and environmentally friendly.

Associations related to the various products with respect to preference and personal attitudes seemed to deal mainly with categories regarding food cultural status, emotional matters, sensory properties and practical application. Future work with innovations with regard to food on the go should take these factors into consideration.

3 Dissemination activities

In this project the dissemination was a central task because of the structure of the project that consisted of five research activities in different Nordic countries. The main tasks of WP5 centred on newsletters, a multi-sectored workshop, a Nordic seminar and a final report to disseminate the main results of the project. The objective of the dissemination activities was to stimulate ideas that can make healthier choices more easily available for young people.

3.1 Newsletters

Øydis Ueland, Nofima Mat

A major objective was to inform stakeholders throughout the entire project. Therefore, an ambitious plan for communication through a number of newsletters was initiated. The newsletters were distributed at regular intervals and following major deliverables.

The first newsletter included information about the kick-off meeting and the presentation of partners and planned activities.

<http://www.nofima.no/mat/artikkel/6331459235170448212>

The second newsletter presented the Nordic survey and fieldwork conducted in Norway and Sweden (WP2).

<http://www.nofima.no/mat/artikkel/newsletter-2-2009>

The third newsletter presented further results from the Nordic survey and a qualitative study among school children in Norway. Furthermore, plans for WP4 were presented.

<http://www.nofima.no/mat/artikkel/newsletter-3-2010>

The fourth newsletter presented results from one of the tasks in WP4.

<http://www.nofima.no/mat/artikkel/newsletter-4-2010>

The fifth newsletter contained the invitation and program for the final seminar in Copenhagen.

<http://www.nofima.no/mat/artikkel/newsletter-5-2010>

The sixth newsletter presented the final results from the Nordic Young Health project based on the final seminar in Copenhagen.

<http://www.nofima.no/mat/artikkel/newsletter-6-2010>

In addition, a general description of the project was drafted:

<http://www.nofima.no/mat/prosjekt/nordicyounghealth>

3.2 Concluding seminar

Mette Rosenlund Sørensen and Margit V. Groth, DTU National Food Institute

The aim of the concluding seminar was to smoothly mediate the results of the study to the industry, authorities, administrators and researchers. The seminar was held in Copenhagen on 10 November 2010, with 64 participants, organized by the DTU National Food Institute.

Christian Bitz was invited as a main lecturer to the seminar. He has been doing research in appetite regulation, palatability, diets and lifestyle-related diseases. He is known from Danish television and is an enthusiastic lecturer who has published two popular recipe books with a focus on health. He is known for communicating his health knowledge in an engaging and entertaining way that is understandable for all and easy to relate to everyday life. Furthermore, he is relatively young, and as the theme for the project is Nordic *young* health, we found it relevant to include the voice of a qualified young person.

The feedback from the participants was very positive. Summing up – a good seminar with lots of interesting results.

The seminar also attracted a large amount of interest from the media. Prior to the seminar a journalist from Ritzaus Bureau interviewed Øydis Ueland and Randi Lavik about their results. The article was published in 55-60 different media. In addition, national TV and radio in Denmark noticed the seminar in their news. Two journalists also participated in the seminar.

The seminar ended with a discussion with many relevant and interesting questions and perspectives from the participants. The question was raised whether the project was focused more towards the health-oriented group instead of unhealthily oriented young consumers as the target group. The project team pointed out that the project should include cooperation among researchers, authorities and the fast food industry, and therefore also needs to motivate the industry with the potential of a market. Further, if healthier fast food were available and the choice of an unhealthy alternative were

narrowed down, food practices in the unhealthily oriented group might also become healthier. This would be the case especially if the social aspects of food and eating were also taken into account.

Another point raised was that the project was legitimizing fast food instead of trying to steer practices away from it. It is important to focus on structural solutions and offer healthy meals as an option to institutions of education and workplaces. The answer from the project team was that healthy meals at workplaces and institutions of education were important but the focus of this project was young people's meals outside these institutions. The purpose of these meals was not only to eat but also to hang out with friends and have fun - and healthy alternatives were needed for these occasions. Young people, when outside the home, do not want to buy something they can get at home from their parents for free, such as carrots and rye bread. Buying something else - often more unhealthy food - can be a way for a young person to break free from the restrictions of home.

Some comments were made about the political level. The agricultural policy in the EU favours in many ways the unhealthy products by lower prices. Christian Bitz underlined the responsibility of industry to choose healthier products and present them for sale. Many of the choices should not be left to the consumer alone. The healthy choice should be made a standard.

The project group concluded that the project showed that there might be a market for healthier fast food in the future. But today the consumer really doesn't have free choice - the unhealthy choice is the easy choice. In the future it should be the opposite.

The concluding seminar was successful and its objectives were largely realized - results were presented and followed by relevant and interesting questions and comments. The media made sure that deliverables and learning from the project were made available for many more people than just the participants in the seminar. Representatives of industry did attend, and we trust that deliverables from the project will inspire new innovations of new healthy eating concepts.

In addition, CFK has published a report from the Swedish fieldwork and SIFO plans to publish further details on the web surveys in a forthcoming report. The Master's thesis from WP4, task 2, will be reformulated as a scientific article and submitted for publication in a peer-reviewed journal.

3.3 Factors ensuring a successful Concluding Seminar

Kjersti Lillebø, SIFO

Contemporary themes ensured large media turnout

There is currently a big discussion about children and health in relation to obesity theme in Denmark, and the health minister was about to present a proposal for action in the coming days of our seminar. Thus, the timing of our closing seminar was perfect, as there was great interest in our research themes in the Danish media at the time. Nordic Young Health and the seminar was mentioned in 60 Danish media, among them on national TV, and the national radio had a live broadcast from our seminar. The major Danish newspapers were also present throughout the entire day, and journalists were interested and participated actively with questions, feedback and discussions during the seminar.

Seminar participants represented an appropriate target group & participated actively

We attracted relevant, knowledgeable and interested seminar participants: it was an exciting mix of representatives from health authorities, researchers, Nordic Council of Ministers, and commercial actors in the audience. We used our Nordic network active and project reference group to reach the right audience. We allowed for questions from the audience after each session, creating a lively debate throughout the day. It is, however, worth noting that the majority of participant were in fact Danes.

Good presentation & professional high-level

We have received very positive feedback on our professional presentations, and that they were linked very well together. Thematically, we had a broad set of presentations that varied from going into detail on some selected phenomena that create barriers and opportunities in the common Nordic food market, we presented qualitative analysis of adolescents' preferences, some overall Nordic issues and findings regarding youth behavior and attitudes to fast food, and referred to specific innovations of healthier fast food compared to traditional fast food.

Communication

As this was a Nordic cooperation project (including Icelandic and Finnish participants and researchers) the seminar language was English in order for all to participate on an equal footing during the presentations. In order to lower the threshold for participation, we allowed our key note speaker to speak Danish in the latter part of the program, and allowed questions from the audience to appear on their preferred Nordic language. This worked very well, and we believe, increased involvement from the audience even more, creating an informal atmosphere. The fact that our key note speaker was a well-known Danish media personality with a degree in nutrition, made his presentation link up very well with our findings and themes, and made it easily digestible for the media.

4 Lessons learned

4.1. Barriers and possibilities

At a time of increasing prevalence of unhealthy eating habits and overweight among young people, the need to understand the conditions affecting this situation is widely recognized. The collaborative project *Nordic Young Health: Possibilities and barriers for new, healthy concepts in the fast food sector* has explored the determinants influencing young people's food practices and preferences in the fast food sector. The project consisted of several sub-studies utilizing a variety of research methods in different contexts. In order to make healthy fast food choices more easily available, it is necessary to map out the barriers structuring access to healthy choices that young people face when eating out in public.

During the project we identified both possibilities and barriers. From the view point of possibilities, the results show many opportunities in the sector of healthier fast food.

One third of the participants in the survey did not eat fast food at all because they found it too unhealthy. This is a clear opportunity for fast food companies. It is evident that there is a growing demand for healthy fast food options. Fast food with less fat, and that is less processed, with more fruit and vegetables and wholegrain are the wished changes for the better that most of the respondents stated. Specific products suggested by the respondents were soups, fruit and vegetables, more whole grain bread, more fish and more low-fat meat. Results from the sub-studies suggest that more flexibility and variation for individual choice could favour healthier fast food.

It is obvious that emotions and nostalgia are not to be forgotten when evaluating reasons for making certain food choices. In addition, sociability is an inherent part of fast food eating. This should be more deeply acknowledged in promoting healthier fast food habits among young people.

Finally, it really should be noted that taste was commonly mentioned as a reason to eat fast food. Therefore, when developing new healthy fast food concepts or menus taste should be taken into consideration.

Healthy fast food should taste good and be reasonably priced. This implies that there should be more value-for-money offers on healthy food. The healthy option should be made the standard and not something special you have to ask for.

The results of the project also identified some barriers for healthier fast food. Firstly, the present market does not offer consumers any choice, as unhealthy fast food is the standard. Sometimes even the information about a product might be misleading. As there is a definite demand for freshness, the task of keeping products fresh might be a challenge. Use of more local products. (cf. New Nordic Food) could provide a good solution. All in all, the quest for making healthy fast food available was seen as part of the fast food industry's corporate responsibility.

4.1.2. Collaboration and innovation

The central aims of the Nordic Young Health project were, firstly, to translate the gathered new consumer knowledge into innovative concepts that can lead to better fast food products and menus through the involvement of the industry, and, secondly, to stimulate effective policies that can make healthier choices more easily available for young people. Therefore, parallel to the sub-studies, there was a more ambitious plan to serve as an important meeting point between the different stakeholders within the Nordic eating-out sector; a cooperation between consumer research institutions, authorities and businesses, including producers, wholesalers, retailers, the catering industry and fast food restaurants. For that reason, a lot of effort was put into the exchange of knowledge, experience and competence through various means such as workshops, a seminar, newsletters and web-pages.

These dissemination activities and the collaboration with the reference group, like the final seminar in Copenhagen, were partly a success. However, we also need to critically evaluate the collaboration with the reference group and food companies. It seems that it is rather demanding to try to organize workshops or seminars in one country and hope that people from several Nordic countries will attend. The kick-off workshop that started the project was attended only by Norwegian members of the reference group, the successful final seminar interested only the Danish audience and a workshop planned to be held in Stockholm as a halfway dissemination activity targeted at the food companies involved was cancelled due to lack of interest.

As social scientists in a research driven project our role is thus to give collect and share information that might, in this case, lead to product innovation. As we lost some of the dialog due to the financial situation during this project period, making product developers become aware of the untapped potential for healthier fast food that we have uncovered in this project is our main contribution. Innovation thus takes time, and it is beyond the scope and time frame of this project to conclude about concrete new innovations and product outcome. We have, however, seen some noticeable changes

in the market, one example being increasing attempts in Norway to serve hot dogs and hamburgers on whole wheat bread instead of the traditional white bread. This is a concrete example of the types of suggestions we have made to the industry as small steps in the direction of a healthier meal composition.

In Denmark The National Food Administration has established a Dialogue Group with producers and distributors of food on the go, and there exists similar Dialogue groups in Norway. Together with members of our reference group, the project leader of this Young Health project has been invited to Dialog Conferences at the Consumer Council (Forbrukerrådet) of Norway in order to discuss the food situation for people on the go, with a specific emphasis on marketing strategies for healthier fastfood. We have in this report showed that there is a great interest among young people, authorities and also within the industry, for new, healthy fast food products. Although there is good reason to believe that the market is changing with regards to offering healthier options, it is difficult to conclude what role this specific project has had in this possible change as of today.

Based on our results from the Nordic Young Health project, we have some suggestions for future studies:

- observation studies in fast food outlets about marketing and presentation of healthy and unhealthy food,
- qualitative interviews of shopkeepers and customers as well as representatives of industry,
- studies of logistics and possibilities to use more local products,
- studies on real triggers and cues for choice of healthier fast food,
- projects on product development and optimization for healthy options, storage, handling etc.

In relation to new food concepts and policy making our results show that there is a lot of room for new thinking and ideas in the fast food market. The ethical dimension should not be forgotten when offering healthy options in the fast food sector. More use of organic food and fair trade products could give a boost to healthy options as well. The chains have great power and can influence major changes in the convenience market.

4.1.3 Creativity in spite of financial constraints

This project has been a success largely due to the project participants' willingness to give more time than the project budget has allowed. There are hours of free labor in the

implementation and creative solutions (for instance have two Master's students and a trainee executed some of the research). This makes it particularly pleasing that we closed this project in a successful way with great turnout. Additional funding for the publication of our exciting research and discoveries would have been money well spent.

5. Appendices

5.1. Common Observation Guide

5.2. Nordic Web survey (English Version)

5.3. YoungHealth Project Poster

5.4. YoungHealth Concluding Seminar Program

5.1. Common Observation Guide

The observation at each location:

Place: Time: from:..... to:.....

First impressions:

General impression of the site:	
New trends?	
Hygiene Condition / WC	
'Hybrid Ever'?	
Is there seating spaces? (If yes, who sits down, who goes?). Smell (freshly made buns, frying, etc.)	
Lighting	
Attractions & characteristics? (ex. music profile, the TV transmissions of sports / football / quiz, div other cultural events, Local meal	

Menus

The main menus (Special Offers) Regular number of menus per product (baguette-/sweet-treats-/low-calorie food/ pizza-/hamburger-/ sausage- as well as fruit & vegetables menus Rates (In particular: sausage salad vs price)	Rates (In particular: sausage salad vs price) Rates (In particular: sausage salad vs price)
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Menus marketing campaigns

['Aggressive' / unobtrusive marketing, special 'festivals', multi-pack offers, salty / fat snacks at eye level?] What's on the boards?	
What's on the boards? (colours, fonts, standardized / local campaigns)	
How is the food presented through the wording? ('Healthy', 'delicious', 'cheap', 'good', 'smart' etc).	
Flexibility in the menus	
Public targeted? (young kids, teenagers, young parents, businessperson, wealthy crowd)	
Healthy Options	
Local meal/Organic food	

Product Placement & Marketing:

Healthy / unhealthy focus? (consciously)	
Product Placement? (Cf. grocery stores)	
What do you find when you come in?	
What is easiest to find?	
What is a little bit harder to find?	
What you find at the checkout? (sugar-free boxes?)	
What's on the disks ? Sweet / salty / fat products at the checkout?	
Drink Rank: Juice vs. soft drinks, variety	
Type of coffee / tea arrangements	
Shelf location after season ?	
Yoghurt- low fat ice cream vs. basic ice cream (sample price)	
Slush vs. smoothie (sample price)	
Is the same product on display in several places in the premises?	

Shock Sales / points	
Healthy groceries (fruits & vegetables) compared with sweets / fast food etc	
Sweet / salty / fat products' percentage (approximately) the location of the premises	
Sold products other than food? (lifestyle concepts)	
Focus on being 'single and cheap' gourmet '?	
Organic and local focus?	

Who are the consumers?

Gender	Age group	Look and dress code (the typology ala jogging suit clad, motorcycle-profile, etc.)	Body Impressions/ language (trained / untrained, overweight, thin, normal, overweight, tidy / untidy)

Activities:

What is eaten / drank?	What is to be purchased?	What's not available?	Who sits down, who comes by?

- Photo-documentation. Close-up of menus / disks / exhibitions / boards if places allow.
- APPEARANCE read into the tape / recorded immediately after each visit.

5.2 Nordic Web survey (English Version)

Questionnaire: English version

Survey - Nordic Young Health 25th of September 2009

In this survey, we will ask you questions about your eating when you are “on-the-go” - it can be on the way to and from school or work, for shopping, walking, travelling, etc.

We have chosen to describe the food as eaten in such situations for the fast food (ready-prepared hot meals like hot dogs, hamburgers, French fries as well as baguettes/sandwiches, snacks, fruits, sweet buns, yoghurts etc).

B1 Gender

- 1 Male
- 2 Female

B2 What is your age?

B3 Where do you live?

- 1 In Oslo {COUNTRY} (Oslo - Copenhagen - Stockholm - Helsinki)
- 2 In a city more than 50.000 inhabitants
- 3 In a city between 5.000 and 50.000 __
- 4 In a small or midsized town
- 5 Rural district

B4 Which of the following description suits your current situation? Are you

- 1 Working (fulltime or part-time)
- 2 Student
- 3 Both working and student
- 4 Unemployed
- 5 Other

B5 Who do you live together with?

- 1 Alone
- 2 Together with parent/parents
- 3 Cohabitant/married
- 4 Friend/friends

Q1 Where was your mother born?

In {COUNTRY}	In another Nordic country	In another European country	In a non-European country	Do not know

Q2 Where was your father born?

In {COUNTRY}	In another Nordic country	In another European country	In a non-European country	Do not know

Q3 Mother's educational background?**1 Elementary****2 Junior high school****3 College/university****3 Other****4 Don't know****Q4 How often do you eat food from the following places?**

	Three times a week or more	Once or twice a week	Once to three times a month	Once or several times a year	More seldom or Never
A. Convenience store, kiosks, snack bars, sales stalls					
B. Fast food outlet (hamburgerrestaurants)					
C. Pizza outlet (not served by a waiter)					
D. Other typical fast food outlets					
E. Petrol station					
F. Roadside restaurant					
G. Café, confectionery, bakery, sandwich-/coffee bar					
H. Take Away (taken/delivered to your door)					

I. Food ready to eat/salad bar from a grocery store					
J. Automat					

If "ONCE OR SEVERAL TIMES A YEAR", "SELDOM or NEVER" in all places in Q4: FILTER:
The respondent is directly sent to question q11 marked with *.

Please think of the last time you consumed a meal on the move and answer the following questions:

Q5 At what type of food outlet did you buy at last time?

Kiosks, snack bars, sales stalls
Hamburger-restaurant
Pizza outlets (not served by a Waiter)
Other typical fast food outlets
Petrol station
Roadside restaurant
Café, confectionery, bakery, sandwich-/coffee bar
Take Away (taken/delivered to your door)
Food ready to eat/salad bar from a grocery store
Automat
Other, note

Q6 Where was this food outlet located?

In my neighborhood
Along the state highway/motorway
Outdoors/on the mountain/in the forest/at the beach
In a shopping centre
In a shopping street
At an airport or train/bus/boat/ferry terminal
On the train/boat/ferry/airplane
In the gym, sports hall/arena, swimming pool/water park, alpine skiing facilities
In a amusement park/tourist attraction
At film, movie, theatre, concert, festival or similar
Other, note ...
Do not know/remember

Do not know / remember - go to q10 or q11

(If "Do not know / remember": The respondent who has answered "once to three times a month or more often" in at least one of the alternatives from A to E in q4, is sent to q10*. The respondents who have answered "Once or more a year or more seldom/never" in all alternatives in A to E in q4, is sent to q11*.)

who has answered "once to three times a month or more often" in at least one of the alternatives from A to E in q4, is sent to q10*. The respondents who have answered "Once or more a year or more seldom/never" in all alternatives in A to E in q4, is sent to q11*.)

Q7 Why did you select this location in preference to other outlets? (Multiple answers)

Short distance

I was passing by
 It was the only available place to eat
 It was reasonably priced menu
 It was variety of food options
 It had large portions
 The food was easy to bring along and eat
 It offer healthier selections
 It had good quality (fresh food)
 It was a good atmosphere/ nice place
 I met friends and acquaintances there
 Efficient staff/short waiting lines
 No particular reason
 Other, note
 Do not know

**Q8 Which of the following statements best describe your last eating situation?
(Multiple answers)**

I was in a hurry
 I was on my way to/from school, work, and meetings or similar
 I was in the school/work/meeting
 I substituted the institutional meal for a food 'on-the-go' option
 I worked overtime
 I was on a trip/travel (at home or abroad)
 I was on my way to/from training
 I participated in a sports activity / event (like a football game, sports club, etc.)
 I participated in a cultural activity / event (like cinema, theatre, etc.) I went shopping
 I was meeting/be with friends/family
 I was tempted
 I was hungry
 It was the only food I could get
 I wanted to enjoy myself
 No special reason, I'll often visit places that sell fast food when I'm out
 Other, note
 Do not know/remember

Q9 What did you eat the last time? (Multiple answers)

Hot dog
 Hamburger
 Chicken
 French fries
 Pizza/calzone
 Pasta

Kebab/shawarma/ wraps/pita/luna/börek
 Wok/rice dish/noodles
 Sushi
 Tapas
 Mixed salad/Vegetables/Fruits
 Sandwich/Baguette, roll or similar
 Sweet pastries: buns, muffin, cake, cookie, waffle, etc.
 Yoghurt
 Smoothies
 Ice cream/Slush/Chocolate/Sweets/Snacks
 Nut mix, energy bar or similar
 Other, note
 Do not know/remember

Q10 IF EATING ON 4A, 4B, 4C, 4D or 4E “Once or 1-3 times a month” or more:

What would you say are the most important reasons to eat fast food?

(Multiple answers)

I think typical American fast food like hot dog, hamburger etc. tastes good
 It is a reasonably priced food
 They have a good supply of healthy food
 I'm generally a lot on the go and often need something quick and easy to eat
 I choose it only when no other options
 I prefer to avoid eating sausages, hamburger, buns, etc., but it is often tempting
 I know what I get
 I don't have the time to prepare homecooking
 I think it is a good alternative to cook at home
 I was attracted by the smell
 I wanted to try something new
 No special reason. It's just a habit
 Other, note ...
 Do not know

* Filter:

IF “ONCE OR SEVERAL TIMES A YEAR”, “MORE SELDOM OR NEVER” EATING ON 4A, 4B, 4C, 4D OR 4E:

Q11 What are the main reasons that you rarely or never eat in fast food outlets

(Multiple answers)

It is too expensive
 It is too much unhealthy food
 It tastes bad
 It is not pleasant
 I do not trust the food being sold

Eating sausages and hamburgers is not my style
 Hot dog and hamburger is outdated
 I find it difficult to find healthy food on such locations
 I deliberately avoids food that is fattening
 I deliberately avoiding U.S. chains
 I do not eat in these places as a matter of principle
 No particular reason
 Other, note
 Do not know

* All respondents answer these questions

Q12 What of the following best describes your relationship with fast food?

Can you please specify on a scale from 1 to 5, where 1 is strongly disagree and 5 is strongly agree

	1 Strongly disagree	2	3	4	5 Strongly agree	Do not know/No opinion
I think in general the food sold in fast food outlets or the like is tasty						
I think it's ok to replace dinner with fast food once or twice a week						
I think it's ok to replace lunch at school/work with fast food once or twice						
I prefer to bring homemade food/ lunch with me rather than buying food from fast food outlets when I'm on-the-go						

I choose rather to be a little hungry than to eat food from fast food outlets						
I usually buy the reasonably priced food/menu						
It's more important to eat healthy food than to save money						
I exercise and therefore it doesn't matter so much if I eat hot dogs, hamburgers, French fries, etc.						
I get a bad conscience when eating food from fast food outlets						
I like to spend time at fast food outlets						

Q13. Here we present some suggestions for changes in the fast food market. What changes would you particularly want for fast food?

Multiple answers, max 3 answers

I am generally satisfied with the fast food offered

Tastier food

Food made on the spot (less processed-food)

Wider selection

Foods lower in fats

Foods lower in salt

Use of organic food

More lean meats

More fruit and vegetables

More whole grains

Availability of nutritional info

More traditional food

More local food (from local suppliers)

More fair-trade products

More ethnic/exotic food

Other:.....

Don't know

Q14 Suppose that the food outlet you visit has the following options on the menu (below): Which of these would you prefer with great or low probability (don't think of the price, only what you would like)? Can you specify on a scale from 1 to 5, where 1 indicates that it is very likely and 5 that it is very unlikely.

		1 Very likely	2	3	4	5 Very unlikely	Do not know/ No opinion
A	Hamburger						
B	French fries						
C	Regular hot dog						
D	Chicken/Turkey hot dog						
E	Low fat hot dog						
F	Chicken burger						
G	Fish burger						
H	Pizza slice/calzone						
I	Pasta						
J	Salad (chicken, ham, vegetarian)/ Fruits/Vegetables						
K	Sushi						
L	Tapas						
M	Wok / Rice dishes						
N	Traditional, local food						
O	Organic food						
P	Vegetarian food						
Q	Sandwich/Baguette/rolls						
R	Whole-wheat hot dog-bun/hamburger bun						
S	Buns, sweet pastries						

In Denmark, Sweden and Norway J is divided into two different questions. Smoothies is an additional question in Denmark, Sweden and Norway. In N, traditional and local food

is divided into two different questions in Denmark, Sweden and Norway. It was a fatal error that this was not done for Finland.

Q15 What kind of lunch do you usually have?

Warm lunch

Cold lunch

It varies

Don't know/Of no relevance

Q16 Would you prefer a warm or a cold lunch?

Warm lunch

Cold lunch

Don't know/of no relevance

Q17 How do the following statements correspond with your opinions / thoughts?

Can you specify on a scale from 1 to 5, where 1 indicates that you strongly disagree and 5 that you strongly agree

	1 Strongly disagree	2	3	4	5 Strongly agree	Do not know/ No opinion
It is the individual's responsibility to eat healthy						
The public authorities are responsible for people eating too much fat and sugar						
The public authorities should not meddle in the individual's food and eating habits						
The government should focus more on price as a tool to get people to eat healthier						
There is too much focus on people's food and eating habits						

An important cause of overweight and obesity is the poor availability of healthy food in shops, snack bars, cafés, sports arenas etc.						
It should not be allowed to market and advertise fast food with contains high content of fat and sugar						
Food high in fat and sugar shouldn't be sold where children and young people are (sports halls, swimming pools, stem, etc.)						
Health tagging (such as keyhole) {COUNTRY} should be introduced in kiosks, fast food/pizza outlets, petrol stations or the likes.						
Fast food outlets should be forced to disclose nutritional facts						

Q18 How often do you bring fast food to eat at home?

- 1 Three times a week or more
- 2 Once or twice a week
- 3 1-3 times a month
- 4 Once or several times a year
- 5 More seldom or never

Q19 What would be your suggestions for a healthy fast food?

Thank you very much!

5.3 Young Health Project Poster



5.4. Young Health Concluding Seminar Program

Nordic Young Health



*Possibilities and
barriers for new, healthy
concepts in the fast
food sector*

Concluding seminar in Copenhagen

Wednesday the 10th of November 2010, 10.00-15.30
DTU, Bülowsvej 27, building 1, meeting room 2

Despite the increasing consumption rates of unhealthy fast food, young people report trying to avoid eating unhealthy. This indicates a fast food market with untapped potential when it comes to offering healthier options.

The concluding seminar will present interesting results from the Nordic Young Health project – results that will provide knowledge in relation to possibilities and barriers for new, healthy concepts in the fast food sector. Christian Bitz, nutritionist and enthusiastic lecturer, known from Danish television, will present his perspectives and inspire innovations of new healthy eating concepts.

Programme

10.00

Coffee and registration

10.30

Welcome and introduction to Nordic Young Health

Kjersti Lillebo, project leader

10.45

Access and availability in the fast food market – a qualitative mapping

Kjersti Lillebo, Cand.polit. and Jakob Wenzer, PhD.

Structural barriers are making it difficult for young people to make healthy choices in a Nordic fast food arena dominated by unhealthy foods offered at low prices, coupled with aggressive marketing and product placement. The fast food market has an untapped potential when it comes to offering healthier

and reasonable options as the current market trends and new innovation concepts steadily are focused in a more healthy direction.

11.30

Nordic young people like unhealthy fast food - but there is a potential for healthier fast food

Randi Lavik, Cand.Sociol

Among the 2/3 of the young ones who attend fast food outlets more or less regularly, the most important reason for eating fast food is: "I think typical American fast food like hot dog, hamburger etc tastes good". The next reason for visiting fast food outlets is convenience. However, the 1/3 of the young people who rarely or never visit such places, the most important reason to avoid fast food outlets is "to much unhealthy food". There

are, in other words, much potential in the market, as 1/3 of young people avoid these kinds of outlets because they believe it's too much unhealthy food.

12.00

Lunch

13.00

Attitudes and preferences towards fast food among young adults. A qualitative approach

Siri Mohagen, MSc.

Young people wish for healthier fast food alternatives, but they still like the hot dog because it tastes good, it is practical to eat, filling and low priced. Low-carbohydrate foods are perceived to be most healthy, but general knowledge among young people of what constitutes healthy fast foods is characterized by uncertainty. Gender differences are evident in attitudes towards and choice of fast foods.

13.30

Do young people accept healthy fast food?

Fjóla Dröfn Guðmundsdóttir, BSc. and Alfons Ramel, PhD.

Results indicate that a healthy alternative to common fast food is well accepted by young adults who

regularly eat fast food. Despite the perceived fish flavour, the healthy meal was rated similar to the reference product. Measurements of blood variables indicate that the healthy fast food containing lots of fibre, fish, and salad and fruit juice exerts less stress on postprandial metabolism than the reference meal.

14.00

Coffee

14.30

How can we get young people to eat healthy fast food?

Perspectives from Christian Bitz – a health realist

Christian Bitz, cand.scient. in human nutrition, an enthusiastic lecturer and writer will give the closing presentation. Christian Bitz has been doing research in appetite regulation, palatability, diets and lifestyle-related diseases. He has just been voted onto a finale for becoming the best lecturer in Denmark in the category 'Health'. His mission is clear: health has to taste and feel fantastic and not be based on hocus-pocus or ascetic health principles.

15.00-15.30

Conclusions and discussion

Registration

Participation is free. For registration send an e-mail to Mette Rosenlund Sørensen, mers@food.dtu.dk, with your name, institution, address and e-mail. Final date for registration is the 27th of October. Maximum of participants is 70.

Nordic Young Health and project participants

Nordic Young Health is a collaborative project among Nordic researchers in consumer research and nutrition. The project involves Centre for Consumer Science (CFK) in Sweden, National Consumer Research Centre (NCRC) in Finland, DTU National Food Institute, Department of Nutrition in Denmark, National Institute for Consumer Research (SIFO) and Nofima Food in Norway, University of Iceland and Landspítali-University Hospital, Unit for Nutrition Research in Iceland. The project is financed by Nordic Innovation Centre.

By establishing cooperation between consumer research institutions, authorities and businesses, the Nordic Young Health project aims to produce new knowledge on the personal, socio-economic and structural determinants influencing Nordic youths' food practices and preferences in the fast food sector. The aim is to translate this new consumer knowledge into innovative concepts that can lead to better fast food products and menus, and, secondly, to stimulate effective policies which can make healthier choices more easily available for young people.

For more information;
<http://www.nofima.no/mat/prosjekt/nordicyounghealth>

Table of abstract

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Abstract: A major public health threat in Nordic societies are the increasing rates of overweight. The fast food sector is an important arena to study in order to open up for changes in this trend especially among children and the young. The aim of the project Nordic Young Health: Possibilities and barriers for new, healthy concepts in the fast food sector was to produce new knowledge on the personal, socio-economic and structural determinants influencing young people's fast food practices and preferences. New knowledge was gathered through surveys in four Nordic countries and qualitative fieldwork in two Nordic countries. Furthermore, young people's attitudes towards products on the current fast food market were investigated and translated into innovative concepts through the testing of an improved menu. Attention was paid to dissemination of results as an integral part of the project. Similar barriers for healthy eating were revealed by the studies: Only few healthy options were found, healthy options were too expensive for young people, some choice was found in city centres, but hardly any in the outskirts. Suggestions for how to increase the consumption of healthy fast foods included, for example, that it should be made the standard and not something special you have to ask for. Furthermore, healthy fast food should taste good and be reasonably priced. In particular, young people hoped for fast food with less fat, or that is less processed, with more fruit, vegetables and wholegrain.		
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Nordic Young Health

Possibilities and barriers for new, healthy concepts in the fast food sector

A major public health threat in Nordic societies are the increasing rates of overweight. The fast food sector is an important arena to study in order to open up for changes in this trend especially among children and the young. The aim of the project Nordic Young Health: Possibilities and barriers for new, healthy concepts in the fast food sector was to produce new knowledge on the personal, socio-economic and structural determinants influencing young people's fast food practices and preferences. New knowledge was gathered through surveys in four Nordic countries and qualitative fieldwork in two Nordic countries. Furthermore, young people's attitudes towards products on the current fast food market were investigated and translated into innovative concepts through the testing of an improved menu. Attention was paid to dissemination of results as an integral part of the project.

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We stimulate innovation, remove barriers and build relations through Nordic cooperation

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