

25.05.2023

NNR2023 Committee

PUBLIC CONSULTATION ON NORDIC NUTRITION RECOMMENDATIONS 2023 (NNR 23) REPORT

GENERAL COMMENTS

SLC - The Central Union of Swedish-speaking Agricultural Producers in Finland thank you for the opportunity to comment on the Nordic Nutrition Recommendations 2023 that are intended to provide guidelines for a healthy and sustainable diet. NRR 2023 will influence and guide public meals and procurement in the Finland and will therefore also indirectly have an impact on farming, food production and processing in the Nordic and Baltic countries. It is therefore essential that all aspects are carefully and realistically considered when updating the Nordic Nutrition Recommendations. Ultimately, food production is not a factory production where what is produced is completely changed from one day to another. The NNR2023 therefore needs to support long-term development of agriculture and food production.

When discussing food issues in the Nordic countries the northern conditions for producing food and the values behind our food production should be recognized and not be equalised with global food production. There are also great regional differences between the Nordic countries in terms of resources, climate, seasons and availability of light. The Nordic countries, especially Finland, have limited possibility for a fundamental shift in the food production system when considering our cold climate and short growing season. Areas used for animal production cannot automatically be shifted and used for plant-based food production. In the Nordic and Finnish food system animals, and particularly ruminants, are key players in transforming food resources not suitable for human consumption, into highly nutritious foods. This must be considered in the Nordic Nutrition Recommendations.

A drastic reduction in animal production would not only have deteriorating effects on regional agriculture, but it would also reduce self-sufficiency and food security. In addition, it would result in increased import rates and potentially increase the pressure on global food prices. Considering a demand for increased food production globally, it appears ignorant to implement dietary recommendations in the Nordic countries that could result in decreased food production. The Nordic region is among the least climate vulnerable in the world. A reduction of national production of food can result in increased dependency on production in countries in higher risk zones in terms of climate change.

SLC does not see a complete transition from animal products to plant-based products as realistic and practicable. This is a far too simplistic way of looking at food production and consumption in the Nordic region. Animal husbandry in the Nordic region is a basic prerequisite for sustainable and functional food production and a high degree of self-sufficiency if we are to use the natural resources we have in a cold climate with a short growing season.

When developing the Nordic and Finnish Nutrition Recommendations, not only ecological sustainability but also economic, social and cultural sustainability should be taken into account. It is crucial to take into account different countries' food production capabilities, self-sufficiency and food culture. The recommendations should also enable the use of local, seasonal and organic food. Nutritional recommendations must also be accepted by consumers and the public.

For decades, farmers in the Nordic countries and Finland have endeavoured to produce all kinds of sustainable food, and we will continue to do so by persistently developing our production in an even more sustainable direction. The food chain, starting with farmers, has its own active goals to for example reduce the carbon footprint, increase energy efficiency, increase animal welfare, increase production and strengthen biodiversity, among other things. Therefore, SLC believes that nutritional recommendations of diverse diets that support all nutrient groups and take into account all dimensions of sustainability would be best for Finland's and the Nordic baseline.

SPECIFIC COMMENTS

Page 58, paragraph 3:

"Many new products have emerged on the market with the aim of replacing meat or dairy products in a meal. Such products may be part of a healthy diet, but the nutrient content of these products may vary considerably (68). The NNR2023 project has not evaluate the nutritional content of these products separately."

If we consider moving to a more plant-based diet, which includes substitutes for animal products, we should first examine plant-based and cell-cultured alternatives, before replacing animal-based products with different substitutes. According to the above quote, the NNR2023 project has not examined these, but still considers them to be part of a healthy diet. FAO:s report (2023) represents that, these substitutes cannot replace animal products in terms of nutritional content. FAO (2023) also states that these alternatives to animal products have been shown to lack important nutrients and instead contain high levels of saturated fat, sodium and sugar.

Some analyses also suggest that lab-grown meat has a higher carbon footprint than beef, as the methods currently used are still very energy-intensive. Unless more energy-efficient ways are found to produce lab-grown meat, they could be 25 times worse for the climate than beef.

Reference:

FAO. 2023. Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps. Rome, FAO.
<https://doi.org/10.4060/cc3912en>

Klein, A. (2023). Lab-grown meat could be 25 times worse for the climate than beef. New Scientist. Available at: <https://www.newscientist.com/article/2372229-lab-grown-meat-could-be-25-times-worse-for-the-climate-than-beef/>

Page 125, paragraph 3:

"There are currently no major water stress issues in Nordic countries. Considerations could also be extended to imported supplies – for example, decreasing imports from water-scarce regions (e.g., in Spain) and regions that are likely to become water stressed."

When considering greenhouse production and its environmental effects it is vital to take into account the water footprint of the greenhouse production. Finnish greenhouse production has great advantages in terms of responsible water use. It takes 20–35 liters of water to produce one kilo of greenhouse grown

tomatoes or cucumbers. In Spain, for example, the water footprint is 91 times higher, about 3 165 liters per kilo of tomatoes.

Reference:

Silvenius, F., Usva, K., Katajajuuri, J. M. & Jaakkonen, A. K. (2019). Kasvihuonetuotteiden ilmastovaikutuslaskenta 2004 ja 2017 todellisten energiankulutustilastojen perusteella sekä vesijalanjälki. Luonnonvarakeskus. Helsinki. 28 s. Available at: https://slc.fi/uploads/dokument/Kasvihuonetuotannon-ilmastovaikutus-tutkimus2019_Luke_WEB.pdf

Page 137, paragraph 1:

"Red meat contributes with high-quality protein, monounsaturated fatty acids, iron (with high bioavailability), zinc, vitamin A and vitamins B1 (thiamine), B2 (riboflavin), B6 and B12 in a regular diet, ..."

According to FAO (2023), Terrestrial animal source food (TASF) gives higher-quality proteins than other foods and iron and zinc in red meat are more bioavailable and have a greater digestibility than iron and zinc from plant-based food. FAO (2023) also suggest that beef consumption in early life may improve cognitive outcomes.

Reference:

FAO. 2023. Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps. Rome, FAO. <https://doi.org/10.4060/cc3912en>

Page 137, paragraph 2:

"Despite being a good source of nutrients, regular intake of more than 350–500 grams red meat per week, especially processed meat, may increase the risk of colorectal cancer, cardiovascular diseases and type 2 diabetes (71, 209, 210)."

Processed meat should be referred to separately and not as part of the red and white meat recommendations, as the intake of processed meat differs greatly in terms of nutritional content and risk for diseases.

Reference:

Libera, J., Iłowiecka, K., & Stasiak, D. (2021). Consumption of processed red meat and its impact on human health: A review. International Journal of Food Science & Technology. <https://doi.org/10.1111/ijfs.15270>

Page 137, paragraph 3:

"High production and consumption of ruminant meat is a major contributor to GHG emissions, especially methane (25, 199), in total being approx. 4- and 7-fold higher on a protein basis compared to pork and poultry, respectively (211)."

Lehtonen et al. (2020) present through the climate roadmap for agriculture that 75 % of Finnish agriculture's GHG emissions come from the soil and that the key factor in reducing agricultural emissions is through resource-efficient land use. By increasing carbon sequestration in mineral land, reducing emissions from peatlands and increasing the efficiency of biogas and solar energy production, agriculture's GHG emissions can be reduced by 29 percent by 2035 and 38 percent by 2050.

Biogas, which can be produced from animal faeces and extra grass fodder, has significant potential for energy production. Farmers could produce 1.2–1.6 TWh of energy from biogas by 2050, of which cattle faeces would account for about 70 %.

References:

Lehtonen, H., Saarnio, S., Rantala, J., Luostarinen, S., Maanavilja, L., Heikkinen, J., Soini, K., Aakkula, J., Jallinoja, M., Rasi, S., Niemi, J. (2020). Maatalouden ilmastotiekartta – Tiekartta kasvihuonekaasupäästöjen vähentämiseen Suomen maataloudessa. Maa- ja metsätaloustuottajain Keskusliitto MTK ry. Helsinki. Available at: <https://slc.fi/klimatvagkarta>

Leino, M., Huuskonen, A., Jansik, C., Järvenranta, K., Mehtiö, T. ja Viitala, S. (toim.) 2023. Synteesi suomalaisen nautakarjatalouden kestävydestä : Synteesiraportti. Luonnonvara- ja biotalouden tutkimus 7/2023. Luonnonvarakeskus. Helsinki. 123 s. <http://urn.fi/URN:ISBN:978-952-380-604-7>

Page 137, paragraph 3:

"Meat from dairy cows has a lower GHG emissions than meat from sucker cows."

Up to 80 % of the Finnish red meat production is from dairy cows, which reduces the environmental impact compared to red meat from beef breeds.

Finland uses a high quality breeding program for dairy cows, which focuses not only on improving production and fertility, but also their health, sustainability and the nutritional content of milk and meat. The milk–meat program, which uses both dairy- and meat breeds for insemination, also provides dairy cows and their calves with a good meat value, and therefore both milk and meat from dairy cows are of high value. Finland also cooperates closely with Sweden and Denmark in breeding, which leads to better results and promotes genetic diversity. For example, work and research is constantly being done to reduce emissions and improve the composition of milk and meat from dairy cows through both breeding and feeding.

Reference:

Leino, M., Huuskonen, A., Jansik, C., Järvenranta, K., Mehtiö, T. ja Viitala, S. (toim.) 2023. Synteesi suomalaisen nautakarjatalouden kestävydestä : Synteesiraportti. Luonnonvara- ja biotalouden tutkimus 7/2023. Luonnonvarakeskus. Helsinki. 123 s. <http://urn.fi/URN:ISBN:978-952-380-604-7>

Page 137, paragraph 3:

"Although Nordic/European ruminant meat production has relatively low GHG emissions per kg meat produced compared to other world regions (211), the high consumption of red meat is the most important contributor to GHG emissions from the diet in the Nordic and Baltic countries."

There is no reason to evaluate all Nordic or European countries together in case of GHG emissions, as they also differ from each other. The total GHG emissions from beef in Finland is the fourth lowest among 30 different countries. All other Nordic countries are below Finland in the list. In case of the total GHG emissions from milk production, Finland has the sixth lowest value among 30 countries and here only Norway, as a Nordic country, is ahead of us. Other European countries such as Germany, France and Italy have much higher total GHG emissions than Finland in beef and milk production, not to mention the GHG emissions of e.g. India and Brazil.

Reference:

Leino, M., Huuskonen, A., Jansik, C., Järvenranta, K., Mehtiö, T. ja Viitala, S. (toim.) 2023. Synteesi suomalaisen nautakarjatalouden kestävydestä : Synteesiraportti. Luonnonvara- ja biotalouden tutkimus 7/2023. Luonnonvarakeskus. Helsinki. 123 s. <http://urn.fi/URN:ISBN:978-952-380-604-7>

Page 137, paragraph 3:

"Imported fodder ingredients contribute to the environmental footprint through fertilizer, pesticide, water and land use, and high feed concentrate demand may also run contrary to more sustainable agricultural practices in the Nordics."

Cattle in Finland are not fed soya and even in the case of monogastric animals such as pigs and poultry, efforts are being made to switch to other Finnish feed alternatives. The import of feed for red meat production, which was mentioned in the quote as a significant part of the ecological footprint, therefore does not apply to Finland. However, sometimes the origin of rapeseed meal used as animal feed is not from Finland. The carbon footprint of rapeseed meal is though significantly lower, as it is a by-product, compared to imported soya. In Finland, 42 % of the by-products of the food industry are also used as animal feed or as fertilizer for raw materials, which results in a closed biological circle.

Finland's agricultural land in relation to the total area of the country is the smallest in EU, only 7 %, including 30 % grassland, which means 2 % of the total area of the country. The land use for feed production is therefore marginal. The use of fertilizers is also regulated in Finland. In terms of water use, native grassland, the main feed for cattle in Finland, plays a major role as it uses green water. The large amounts of water reportedly needed for one kilogram of meat and milk are therefore 90 % green water, while blue water is usually only needed for washing and drinking. Our abundant water resources should also be considered in comparison to importing feed and thus burdening the scarce water resources of other countries.

Reference:

Leino, M., Huuskonen, A., Jansik, C., Järvenranta, K., Mehtiö, T. ja Viitala, S. (toim.) 2023. Synteesi suomalaisen nautakarjatalouden kestävydestä : Synteesiraportti. Luonnonvara- ja biotalouden tutkimus 7/2023. Luonnonvarakeskus. Helsinki. 123 s. <http://urn.fi/URN:ISBN:978-952-380-604-7>

Page 137, paragraph 3:

"Their ability to utilize grass make ruminants important for resource utilization (including outfields), and if well managed and avoiding overgrazing, grazing ruminants may contribute to biodiversity and keeping cultural landscapes open in some settings in the Nordics (212-214)."

Suckler cows and native breeds are better able to utilize all kinds of plants in natural pastures than dairy cows. The role of ruminants as natural grazers is irreplaceable, as they keep landscapes and natural biotopes such as pastures along waterways open, which increases biodiversity.

All of Finland's native habitats are highly endangered and the proportion is constantly decreasing. In 2019, the proportion of native habitats was about 56 000 ha, of which 34 000 ha were managed. To try to prevent the extinction of important native habitats, they need to be managed and the best cost-effective and ecological way to do this is through grazing.

References:

Leino, M., Huuskonen, A., Jansik, C., Järvenranta, K., Mehtiö, T. ja Viitala, S. (toim.) 2023. Synteesi suomalaisen nautakarjatalouden kestävydestä : Synteesiraportti. Luonnonvara- ja biotalouden tutkimus 7/2023. Luonnonvarakeskus. Helsinki. 123 s. <http://urn.fi/URN:ISBN:978-952-380-604-7>

Kärkkäinen, L. & Koljonen, S. (toim.) 2023. Arvio EU:n biodiversiteettistrategian 2030 vaikutuksista Suomessa (2. painos). Luonnonvara- ja biotalouden tutkimus 33/2023. Luonnonvarakeskus. Helsinki. 359 s. <http://urn.fi/URN:ISBN:978-952-380-662-7>

Page 137, paragraph 3:

"The largest proportions of overall environmental impacts from pig meat production tend to be a result of the cereals and soy in feed production and manure management (25)."

Finnish pigs get their main diet from domestic barley. In addition, they usually receive some wheat, oats, fababeans, rapeseed meal, industrial by-products and on average only 3.5 % soya of the dry matter intake. The proportion of soya in the feed is constantly being reduced and replaced with Finnish protein sources. The ambition of the Finnish food chain is a total self-sufficiency in protein feed.

Reference:

Perttilä, S., Högel, H., Kuoppala, K., Niskanen, O. & Rinne, M. 2022. Ruokinnallisilla vaihtoehdoilla resilienssiä kotieläintuotantoon. Luonnonvara- ja biotalouden tutkimus 97/2022. Luonnonvarakeskus. Helsinki. 95 s. <http://urn.fi/URN:ISBN:978-952-380-556-9>

Page 138, paragraph 3:

"Based on meta-analysis of RCTs and observational studies on red meat and health outcomes, it is recommended to consume no or a limited amount of red meat in the diet, with a maximum intake of 350 grams of red meat per week."

According to FAO (2023) "Terrestrial animal source food (TASF), within healthy dietary patterns, can make vital contributions to efforts to meet the global nutrition targets for 2025 endorsed by the World Health Assembly¹ and the Sustainable Development Goals (SDGs) that aim to reduce stunting among children under five years, low birthweight, anemia in women of reproductive age (15–49 years), overweight among children under five years, and obesity and diet-related non-communicable diseases (NCDs) in adults.". This should be taken into account for the NNR2023 recommendations, when suggesting a decrease or a removal of red meat in the diet.

Reference:

FAO. 2023. Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps. Rome, FAO.
<https://doi.org/10.4060/cc3912en>

Page 141, paragraph 1:

"Milk and dairy products are rich in calcium, iodine, riboflavin, B-12 and other nutrients."

Milk and dairy products are a good source of calcium and other nutrients as mentioned above. FAO (2023) lifts the health outcomes for dairy products, as it increases infant weight during pregnancy, but also birth length, school-aged children's and adolescents height, while it decreases overweight and obesity. In adults, dairy products can reduce risk of mortality, stroke, type 2 diabetes, hypertension, colorectal cancer, breast cancer, obesity, osteoporosis and fractures. In elderly people dairy products and TASFs may reduce for example sarcopenia, fractures, frailty, dementia and Alzheimer's disease.

The latest Finnish nutrient recommendations (2014) also mentions that dairy products and spreadable fats with vitamin D have improved the intake of the important vitamin D in all population groups.

References:

FAO. 2023. Contribution of terrestrial animal source food to healthy diets for improved nutrition and health outcomes – An evidence and policy overview on the state of knowledge and gaps. Rome, FAO.
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Statens näringsdelegation. (2014). Mat ger hälsa – Finska näringsrekommendationer 2014. Available at:
https://www.ruokavirasto.fi/globalassets/teemat/terveytta-edistava-ruokavalio/ravitsemus--ja-ruokasuositukset/sv/naringsrekommendationer_2014_web.pdf

Page 141, paragraph 4:

"Although conditions to produce dairy in the Nordic countries may, in some cases be somewhat favourable, substantial part of the feed used, including soy, is imported thereby contributing to environmental stress outside the Nordic countries (25, 26, 66, 68)."

As mentioned earlier, the diet of cattle in Finland is not based on soya and only to a small extent on imported feed, but mostly on native grassland plants. Grassland is extremely important for Finland and the Nordic countries, partly because our climate hinder the production of some cereals and other crops at higher latitudes. Here, however, grassland cultivation can be a good, or sometimes the only, alternative for food production. Grasses are perennial and efficient at sequestering carbon, improving soil structure and diversity, and some are also nitrogen-fixing. In turn, grassland can only be utilized by ruminants, the main source of red meat. They convert grassland plants, that cannot be eaten by humans, into meat and milk as valuable sources of nutrition.

The proportion of suitable land only for grassland production increases as we move further up Finland. In Kainuu, 80 % of the land is used for grassland, and in Lapland basically nothing but grassland is grown.

References:

Leino, M., Huuskonen, A., Jansik, C., Järvenranta, K., Mehtiö, T. ja Viitala, S. (toim.) 2023. Synteesi suomalaisen nautakarjatalouden kestävydestä : Synteesiraportti. Luonnonvara- ja biotalouden tutkimus 7/2023. Luonnonvarakeskus. Helsinki. 123 s. <http://urn.fi/URN:ISBN:978-952-380-604-7>

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Kärkkäinen, L. & Koljonen, S. (toim.) 2023. Arvio EU:n biodiversiteettistrategian 2030 vaikutuksista Suomessa (2. painos). Luonnonvara- ja biotalouden tutkimus 33/2023. Luonnonvarakeskus. Helsinki. 359 s. <http://urn.fi/URN:ISBN:978-952-380-662-7>

Lehtonen, H., Saarnio, S., Rantala, J., Luostarinen, S., Maanavilja, L., Heikkinen, J., Soini, K., Aakkula, J., Jallinoja, M., Rasi, S., Niemi, J. (2020). Maatalouden ilmastotiekartta – Tiekartta kasvihuonekaasupäästöjen vähentämiseen Suomen maataloudessa. Maa- ja metsätaloustuottajain Keskusliitto MTK ry. Helsinki. Available at: <https://www.mtk.fi/ilmastotiekartta> <https://slc.fi/klimatvagkarta>

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Perttilä, S., Högel, H., Kuoppala, K., Niskanen, O. & Rinne, M. 2022. Ruokinnallisilla vaihtoehdoilla resilienssiä kotieläintuotantoon. Luonnonvara- ja biotalouden tutkimus 97/2022. Luonnonvarakeskus. Helsinki. 95 s. <http://urn.fi/URN:ISBN:978-952-380-556-9>

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SLC - THE CENTRAL UNION OF SWEDISH-SPEAKING AGRICULTURAL PRODUCERS IN FINLAND

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