Swedish dietary guidelines

Healthy and sustainable diets
We assess, manage and communicate risks and benefits in food. In the interests of consumers, we work for sustainable eating habits, safe food and drinking water, and fair practices in the food trade.

We integrate environmental aspects in our activities in order to contribute to a sustainable society.
Sustainable Development Goals

Figure 1. Global rankings of the Nordic countries using the SDG Index. Green boxes indicate that a country is on track to meet that SDG, or has already achieved the goal. Yellow and red indicate that a country risks not reaching or is seriously off course for achieving the goal, respectively. This image has been adapted from its original version and reproduced with permission from Sustainia & Nordic Council of Ministers.17

RISK FACTORS IN SWEDISH DIETS 2017 (both gender, all ages)

Percent of total DALYs

Data from Institute for Health Metrics and Evaluation
We need to do more!

• Prioritize climate and biodiversity

• Climate change and the loss of biodiversity requires fast and powerful measures

• A system change is needed – the public sector can be at the forefront
Sweden’s environmental objectives

- Reduced Climate Impact
- Clean Air
- Natural Acidification Only
- A Non-Toxic Environment
- A Protective Ozone Layer
- A Safe Radiation Environment
- Zero Eutrophication
- Flourishing Lakes and Streams

- Good-Quality Groundwater
- A Balanced Marine Environment, Flourishing Coastal Areas and Archipelagos
- Thriving Wetlands
- Sustainable Forests
- A Varied Agricultural Landscape
- A Magnificent Mountain Landscape
- A Good Built Environment
- A Rich Diversity of Plant and Animal Life

http://www.swedishepa.se/Environmental-objectives-and-cooperation/Swedens-environmental-objectives
The generational goal

“The overall goal of Swedish environmental policy is to hand over to the next generation a society in which the major environmental problems in Sweden have been solved, without increasing environmental and health problems outside Sweden’s borders.”
Main messages:

• Eat greener
• Eat ”lagom”
• Be active

Swedish food based dietary guidelines 2015 – Good for health and the environment

Process for developing guidelines

- Dietary habits in Sweden
- Environment
- Consumer perspective
- Focus groups
- Risks with foods
Scientific assessment reports for the environment
Eggs

No advice

Health aspects
- Eggs contain all essential amino acids. The yolk contains, amongst other things, polyunsaturated fatty acids, fat-soluble vitamins like A, D and E, and water-soluble vitamins such as B₉, riboflavin and folate. Egg yolk also contains minerals like iodine, iron, calcium, zinc and selenium. One egg contributes about a third of the recommended intake of selenium for an adult woman.
- In NNR there are no recommendations regarding limiting the intake of cholesterol.
  - One egg gives about 200 mg cholesterol. In healthy individuals, the creation of intrinsic cholesterol is regulated so that any excess cholesterol in food reduces the body's production of cholesterol. There are large individual variations in the absorption of cholesterol and how it affects the serum cholesterol. In individuals with a disturbed cholesterol metabolism, there might be a need to limit cholesterol from foods. For healthy individuals, the NNR conclusion is that an increased consumption of plant-based foods and a decreased consumption of meat and fatty dairy products would give a sufficient reduction of the cholesterol intake in the Nordic population [39].
  - NNR 2012 has not studied any specific health effects of eggs. The reason is that this does not give a result when comparing different dietary patterns. So, eggs are not included in the dietary patterns that increase or decrease the risk of chronic diseases, which could be partly due to that it's difficult to measure how much egg is in a diet.

Consumption
- According to Riksmaten - Adults 2010-11, the average consumption of egg is 14 grams a day, but in that figure egg from composed dishes such as pancakes and omelettes is not included. According to statistics from the Swedish Board of Agriculture, the consumption of egg corresponds to half an egg per person per day.

Other factors that have been considered

Environmental aspects
- The environmental impact of eggs is low compared to other foods of animal origin, and it is a climate-smart source of protein. The largest environmental impact of eggs comes from the chicken feed, especially soy feed. Due to an increased demand for soy as a protein feed, the soy production in the world has seen a significant increase. If the soy production is done on deforested new lands or if grass lands are cultivated, this releases carbon that was bound in the ground and in the trees. This causes large emissions of greenhouse gases and can contribute to a decreased biological diversity. In conventional soy cultivation, large amounts of plant protection products are used. There is also ecological soy production, where no chemical plant protection products are used [44]. Certain industries and companies are actively working towards using responsibly produced soy in their production, within the framework of the Swedish soy dialogue [45].

Animal protection aspects
- In Sweden we have stricter requirements regarding animal protection than many other member states within the EU do, which means that food-producing animals in Sweden have a relatively good environment up to the slaughter, from an animal husbandry perspective. In Sweden, the use of antibiotics for animals is the lowest in the EU. This decreases the risk for occurrence and spreading of multi-resistant bacteria, which also is important for public health in the long term [47].
- Sweden is one of the countries in Europe with the lowest occurrence of multi-resistant bacteria in food-producing animal husbandry [48]. The low use of antibiotics is, amongst other things, a result of animal care and subsequent low incidences of disease.
- Thanks to a national program for salmonella control, Sweden has a very low occurrence of salmonella.

Advice before 2015
The Swedish National Food Agency has previously not given any advice regarding eggs.

Conclusion
Eggs contribute, amongst other things, with selenium and Vitamin D, nutrients that many in Sweden have difficulty getting enough of. From an environmental perspective, it's a good thing to replace meat with eggs. Eggs can play a beneficial part in a healthy diet, but since eggs, unlike for example fish, don't show positive or negative results in comparisons between different dietary patterns, the Swedish National Food Agency does not deem it necessary giving any particular advice regarding eggs.

---
[11] Information from the Swedish Board of Agriculture
VEGETABLES AND FRUITS

Eat lots of fruit, vegetables and berries!
Ideally, choose high fibre veggies such as root vegetables, cabbage, cauliflower, broccoli, beans and onions.

FIND YOUR WAY
– how to make it work

GORGEOUS GREENS
Make space for vegetables, and use them as a foundation for your meals. Create beautiful salads with colourful vegetables, root vegetables and beans. Sprinkle a few nuts or seeds over the top. Think green even when you’re eating out or buying ready meals.

ICED NICE
Always keep fresh vegetables at home. They’re just as nutritious as fresh ones, and they won’t go all wrinkly in the fridge. Freeze summer berries to enjoy them with porridge or yohurt in winter!

VARIETY IS THE SPICE OF LIFE
Bell, starchy, greens, nuts, seeds, grill, roast with breadcrumbs, puree. All kinds of preparatory methods and options are available to you!

MIXED TO THE MAX
Smoothies made from vegetables, fruit or berries are one way of making sure you enjoy all the benefits of fresh produce without losing the fibre.

DISCOVER LEGUMES
Make harimens, falafel, bean burgers, chilli con carne, soups or stews from beans, chickpeas or lentils. Use garlic, lime, chilli, curry or herbs to add flavour.

ENJOY SEASONAL PRODUCE
Some vegetables, fruit and berries can’t be stored for any length of time. So take the opportunity to enjoy them when they’re in season. This is when they’re cheapest, tastiest and most eco-friendly.

COLOURFUL IS GOOD FOR YOU
Vegetables, fruit and berries contain lots of vitamins, minerals and other things that are good for you. Protective substances produce the various colours. That’s why eating colourful food doesn’t just look great, it’s good for your health as well.
Lots of vegetables and fruit are rich in fibre, which has all kinds of positive effects on the body. Fibre makes you feel full up and keeps your bowels moving.

Eating lots of vegetables and fruit reduces the risk of problems such as obesity, cardiovascular disease and some types of cancer. It’s a good idea to eat at least 500 grams of vegetables and fruit every day. This is equivalent to two generous handfuls of vegetables, root vegetables and legumes and two pieces of fruit, for example. But increasing your vegetable and fruit intake even slightly is good for your health. Potatoes aren’t included in those 500 grams, but they’re a good food anyway.

LITTLE ENVIRONMENTAL IMPACT
High fibre vegetables are an eco-friendly choice. They have less of an impact on the environment than salad greens and can be stored for longer.
Ecobidding makes it easier to find fruit and vegetables that have been grown in eco-friendly ways. Only a very small number of chemical pesticides can be used in organic farming, and climate certification is helping to reduce climate impact.
Our conclusion with the guidelines

- It is feasible to combine evidence of what is optimal nutrition with evidence of environmental impact into dietary recommendations to populations.

- Health and environment can often go hand in hand, although it is quite possible to eat well from one perspective and bad from the other.

The guidelines can be found at www.livsmedelsverket.se
## Going forward – Sustainability in NNR2022

### Challenges

- Need to include more environmental aspects than climate impact
- Loss of biodiversity can be difficult to measure numerically but is essential for sustainable diets
- There must be room for qualitative reasoning and knowledge

### Opportunities

- The NNR process ensure high scientific quality, transparency and credibility
- National resources and knowledge can be combined to create a deeper and wider knowledge foundation to be used in national contexts
- The Nordic and the Baltic countries can be international front runners
Focus on the health and environmental dimension of sustainability in different food groups

Environmental impact of food systems can be both negative and positive, e.g. regarding biodiversity

Need to address not only production in the Nordic countries but also consumption, since imported food has had an environmental impact in the countries they come from. However, consumption and imports differ between our countries

The environmental information should be useful over many years, not at a level of detail that quickly becomes out of date
Going forward – general comments

• A high level of transparency ensure that data can be used over longer time while allowing for easier update of parts of data sets

• Food systems that are not resilient to climate change are unsustainable. Systems must be able to adapt to uncertain conditions caused by e.g. climate change

• Essential to recognize that the sustainability of food production and consumption is highly affected by actions in other sectors + depends on measures taken outside the food sector, e. g. in transportation, energy generation and urban planning
Going forward – general comments

Don't generalize too much

• At a global level, biodiversity decreases as a result of today's animal production, but in Sweden, grazing livestock contributes to biodiversity as many endangered species are linked to natural pastures

• Environmental impact is site specific

• There are differences within each food group, so a basis for being able to nuance the dietary advice is needed. If we say "eat more fruit" and only the consumption of tropical fruits increases, or if we say "eat less meat" and the consumption of the meat that has a positive impact on biodiversity is reduced, then we risk increased environmental impact
Other uses than national food based dietary guidelines at the Swedish Food Agency

• “the Keyhole” - Nordic food label for healthy choices
• Recommendations adapted for public meals served in schools, nursing homes and hospitals
• National objectives and indicators for sustainable food consumption at an overall level of society

Research into food and sustainability is being conducted all of the time. It is important to conduct systematic reviews of the knowledge we possess in the field so that we can have a scientific basis for our work
Thank you!

anna-karin.johansson@slv.se