

# Food Sustainability and Gastronomy – Experience of the Nordic Countries

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## Abstract

Food sustainability and gastronomy in the Nordic countries have in recent years been combined in several different aspects. Initiatives from fine-dining professionals have been supported by the Nordic Ministerial Council and further developed over a number of years. The welfare model with and increased focus on democracy and equality as well as reduction of poverty is emphasized in the Nordic strategy for sustainable development, which also discusses issues of the environmental load from food production, issues of biodiversity and waste reduction. Attempts to combine food production and export with healthy and sustainable aspects have been emerging during the last decades in the Nordic Countries. Assessment tools for evaluating sustainability as well as nutritional quality have been developed.

The New Nordic Cuisine Manifesto has served as a platform for several of the sustainability developments in the region from fine dining to public meals. Another important initiative is the EAT Initiative, which has significantly increased the debate on food sustainability on a global level, from a Nordic origin.

Local and regional food systems can certainly be used as focus points for development of healthy, economically viable and sustainable diets. This is the case for the Mediterranean Diet as well as the New Nordic Diet.

**Keywords:** Sustainable diets; Sustainable food systems; Food security and nutrition; Sustainability

## Introduction

Sustainable development was defined in the Report of the World Commission on Environment and Development: Our Common Future (Report of the World Commission on Environment and Development, 1987). The so called Brundtland Commission report is as follows: "Sustainable development meets the needs of the present generation without compromising the ability of future generations to meet their own needs". This report, published in 1987, gave rise to a wealth of initiatives and developments in the Nordic countries, some of these focusing on a sustainable diet. A selection of the most recent initiatives are described in this paper.

## The Sustainable Nordic Region

The development of the Mediterranean Diet as a healthy choice was followed with great interest from public health nutritionists as well as health authorities in the Nordic countries, and the Mediterranean Diet was adopted as a part of dietary advice for diabetics in a Swedish publication directed towards Health care providers in 2011 (Board of Health and Welfare, 2016). The development of the Mediterranean Diet to include sustainability (Burlingame, et al, 2011) was paralleled by the development of a regional diet called the New Nordic Diet, including sustainability issues combined with health benefits, a concept that was supported by a Nordic Initiative, New Nordic Food (Nordic Council of Ministers, 2016), that started its work in 2004 with funding

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from the Nordic Ministerial Council.

In 2013, a Nordic strategy for sustainable development was published by the Nordic Council of Ministers. This was a part of the Nordic cooperation, involving Sweden, Denmark, Finland, Iceland and Norway plus the Faroe Islands, Greenland and Åland. The strategy provides some long term guidelines, leading as far as to 2025. The strategy involves the Nordic welfare model as an important part in parallel with viable ecosystems, problems with the changing climate, and a sustainable use of resources. It also includes education, research and innovation. Some concrete measures are mentioned in the strategy such as the environmental load from foods and food production, including waste reduction and management as well as sustainability of fish stocks and support of biodiversity. Proximity to food stores and building a healthy population with equal rights and working for a reduction in poverty are other important underpinnings of the strategy.

### The restructuring of agriculture in Sweden

During the last 50 years, a sharp decline in the number of farms as well as in the amount of arable land has been seen in Sweden. This development more or less mirrors that of the other Nordic countries. Small farms have been reduced in number and substituted by large units, often specialized in their production of crops or livestock. At the same time the number of farms producing organic foods has increased although the development was rather shaky to start with. In 2010, the farming area constituted only 7% of the Swedish territory (Agricultural census in Sweden, 2010).

### The Nordic Cuisine Manifesto

In 2004, a number of Nordic chefs and other food professionals published a joint Manifesto for the New Nordic Cuisine (The New Nordic Kitchen Manifesto, 2004). This document included a list of aims that form the backbone of the New Nordic Cuisine. These were:

- 1) *To express the purity, freshness, simplicity and ethics we wish to associate to our region.*
- 2) *To reflect the changes of the seasons in the meal we make.*
- 3) *To base our cooking on ingredients and produce whose characteristics are particularly in our climates, landscapes and waters.*
- 4) *To combine the demand for good taste with modern knowledge of health and well-being.*
- 5) *To promote Nordic products and the variety of Nordic producers - and to spread the word about their underlying cultures.*
- 6) *To promote animal welfare and a sound production process in our seas, on our farmland and in the wild.*
- 7) *To develop potentially new applications of traditional Nordic food products.*
- 8) *To combine the best in Nordic cookery and culinary traditions with impulses from abroad.*
- 9) *To combine local self-sufficiency with regional sharing of high-quality products.*
- 10) *To join forces with consumer representatives, other cooking craftsmen, agriculture, fishing, food, retail and wholesale industries, researchers, teachers, politicians and authorities on this project for the benefit and advantage of everyone in the Nordic countries.*

As evident from the 10 points above the collective work behind the manifesto includes the use of local ingredients, waste management, tradition, cultural aspects and combinations with imported impulses and/or ingredients. The authors are calling for a joining of forces in these developments and include ethical aspects of production as well as local and regional sustainability issues. The manifesto has since its creation inspired a wealth of scientific literature of which one example is referred to here (Bjornarå, et al., 2016), cookery books and dietary advice in the Nordic countries, including a Nordic Children's Kitchen Manifesto, stating that "Every Nordic child has the right to learn how to cook good healthy food."

A number of restaurants have followed in the name of the Manifesto, such as two of the world's best restaurants according to Guide Michelin; the famous NOMA (2 stars) in Copenhagen and Fäviken Magasinet (2 stars), in Åre, Sweden.

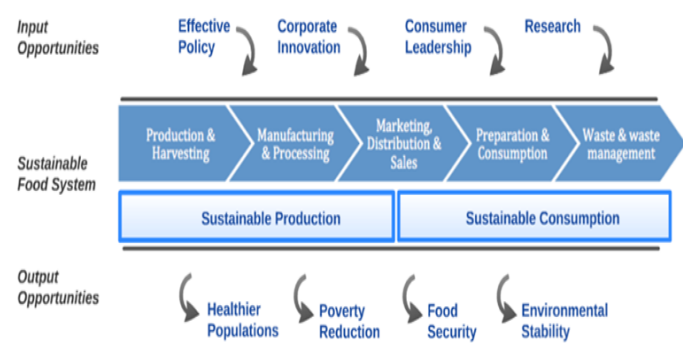
The current activities run by the Nordic Ministerial council in regards to the New Nordic Food include a democratization of good food, concentrating on public meals and food tourism.

### Towards a Swedish food strategy

In recent years, a Swedish food strategy (Swedish Ministry of Enterprise and Innovation, 2015) is being developed by initiative from the left-wing & environmental party coalition government. This strategy aims to be a total strategy for the whole food system, including production, consumption, the public sector, restaurants and culinary experiences, with health as a part of the focus. The government is hosting an open dialogue, and a proposition will be presented to the Swedish government shortly. Sustainability, production, food tourism and food export are important parts of this strategy, keeping a connection between the export strategy and the food strategy. A goal is to increase the amount of organically produced and consumed foods as well as to make the healthy and sustainable choice easier for the consumer.

### The EAT initiative

The EAT Foundation, 2016 is co-founded from the Stordalen Foundation, The Welcome Trust and Stockholm Resilience Center, together building a forceful Eat Foundation. This Foundation has as its goals to work towards transformation of the global food system before 2050 in order to sustainably feed a healthy population of nine billion people globally at that time. The Foundation is chaired by Gunhild A Stordalen, a physician and Phd, who stated as follows: *The core objective of the EAT Foundation is to drive new interdisciplinary knowledge and facilitate translation into policy development and business actions.* Since 2014, three Stockholm Food Forum events have been hosted by the EAT Initiative and more than 500 scientists and decision makers have followed these events, where scientists, politicians and food professionals have made their voice heard in regards to sustainable development.



*Examples of Input and Output Opportunities for a sustainable food system; courtesy of the EAT Initiative (EAT; 2016)*

### Environmental consequences of farming

An interesting development of a tool for assessing nutritional quality in conjunction with sustainability was demonstrated in a recent publication (Rööf, et al., 2015) from the Swedish Agricultural University. The study shows that the usual Swedish diet as compared to the recommended diet as compared to the Low-Carb-High-Fat (LCHF) diet all fell short of sustainability goals. The nutritional quality was in some cases high and un-necessarily high in regards to some nutrients, such as vitamin C and protein (especially LCHF). The demonstrated method can be used for assessing diets in a combined manner for environmental and health purposes.

### Conclusions

The Nordic countries have come a long way when in developing strategies and actions around a sustainable food system. The concept the New Nordic Food emerged from the restaurant sector and has since had a major influence in all Nordic countries, paving the way for sustainable, healthy and culinary interesting food, not only in the fine-dining area, but also as a concept for public meals as well as for food and agriculture systems as a whole. The development of a food strategy in Sweden is furthering the local production systems and uses an approach to combine a consumer-oriented food production and –service with an innovation-oriented marketing strategy for increasing food export.

The New Nordic Food Manifesto and the following development has had a large impact in regards to creating knowledge and interest among food professionals as well as the public for locally and ethically produced foods and to increase the focus on cultural heritage, seasonality and open landscapes. Furthermore, the term public gastronomy, stemming from the same initiative, is of increasing importance in the Nordic countries, looking into the possibilities of creating healthy, sustainable and culinary attractive meals using local produce. Bridging the gaps between gastronomy, food production, sustainability and public health nutrition is increasingly important and the regional aspects of food systems have now reached a point where major developments can take place, on regional as well as global level.

This is certainly the case when it comes to the Mediterranean Diet as well as the New Nordic Food, not to mention other interesting regional food systems.

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### Reference

1. A Good Life in a Sustainable Nordic Region-Nordic Strategy for Sustainable Development. (2013) Nordic Council of Ministers.
2. Agricultural census in Sweden. (2010) Eurostat
3. Bjornarå, H.B., Overby, N.C., Stea, T.H., et al. The association between adherence to the New Nordic Diet and diet quality. (2016) Food Nutr Res 60: 31017.
4. Burlingame, B., Dernini, S. "Sustainable Diets: the Mediterranean Diet as an Example". (2011) Public Health Nutr 14(12A): 2285–2287.
5. New Nordic Food - The emergence of a new Nordic food culture. Nordic Council of Ministers.
6. Rööf, E., Karlsson, H., Withöft, C., et al. Evaluating the sustainability of diets – combining environmental and nutritional aspects. (2015) Envir Sci Policy 47: 157-166.
7. Report of the World Commission on Environment and Development: Our Common Future. (1987) United Nations
8. Socialstyrelsen, (Board of Health and Welfare). Kost vid Diabetes (Dietary advice for Diabetics). (2011) Stockholm.
9. Swedish Ministry of Enterprise and Innovation. Towards a Swedish Food Strategy. (2015) Stockholm.
10. The New Nordic Kitchen Manifesto. (2004) The Nordic Ministerial Council.
11. What is EAT? (2016) EAT.