

CITY FOOD POLICIES



Towards a sustainable Public Food Service in Copenhagen using the lever of education and training.

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City	Copenhagen
Country	Denmark
Population: city area	541.989
Population: metropolitan area	1,95 millions
Surface area	74,4 sq. km
Green areas	22,6 sq. km

The original contribution of the City of Copenhagen is to demonstrate how it is possible to predispose a leverage effect of public food service to improve food consumption among the population, with a specific focus on the children and teenagers.

By contrast with other cities that plan to reinforce sustainable food production, Copenhagen is focusing on food consumption and foresees the role of Public Food service in food education.

With an annual investment below 2% of the total food expenses, paid in over 10 years and including a permanent structure, the city has created an innovative training resource to empower municipal staff, starting from cooks, to be able to prepare high quality meals with organic ingredients, without increasing the price. Indeed the city has chosen to invest more in human resources and know-how, by setting people at the centre of economy.

The small size and high number of public kitchens is certainly an important factor to explain the high and rapid increase of organic food served in the public canteens managed by the city but it is interesting to see that Copenhagen, by achieving its ambitious target on organic food consumption, is now looking beyond. Københavns Madhus, (Copenhagen's house of food) is now ready to disseminate its method, by working for other structures either private or public, in and out of Copenhagen. The procurement office is looking for a more precise definition of sustainable food to

be used within public procurement tenders (sustainable is not only organic), opening new horizons by getting more diversity, quality and local food served, within the framework of the EU procurement regulations.

A rural-based gastronomy and a strong commitment to develop organic farming in Denmark

Denmark has a long history of exporting agricultural products of the very highest quality: Danish farmers produce an amount of food sufficient to supply 15 million people every year - three times the Danish population. However, only recently the country has become known internationally for its gastronomy. Recent trends, the epicentre of which is based in Copenhagen, have stimulated people's interest in a cuisine still rooted in the farmer's traditions, governed by the need for nutrition and the use of products available from nature. Potatoes, rye bread and salted meat are at the centre of most meals.

Organic production was given priority by national government for more than 25 years. Denmark has been the first country in the world to establish, since 1987, governmental rules for organic production as well as official inspections of organic foodstuffs and producers. Today, 7% of agriculture production is organic and Denmark imports around 40% of organic food for domestic consumption ([see more](#)). Basic foods like oatmeal, milk and eggs remain the most popular organic products. Thus, 36 % of all oatmeal, 35 % of all milk and 26 % of all eggs sold in Denmark are organic. According to the latest statistics from the Research Institute of Organic Agriculture (FiBL), Danish consumers purchased organic products averaging a value of 142 € *per capita* in 2010, ranking Denmark second in the world, after Switzerland ([see more](#)).

According to a research published in 2012, the sales of organics among Danish canteens, restaurants and institutions doubled within the last three years. as indicated by the latest reports of the 15 largest food service companies in Denmark, and Økosalg og Oplysning, an association of Danish organic producers with subsidy by the EU and the Danish Ministry of Agriculture. Therefore, despite the financial crisis, the organic products segment is a growing market, mainly due to public food service. The sales of organics among catering centres in Denmark reached almost 134 million euros, while the overall sales of organics doubled within three years, having raised from 61.1 million euros in 2009 to 123 million euros in 2012. The research also indicates that organics are especially popular among canteens and public institutions. In this way, organic sales among catering centres are split up as follows: 32 % canteens, 33 % public institutions, 16 % restaurants and hotels and 20 % other consumers.

The authorities support the organic sector by purchasing organic products for public sector institutions such as schools. In 2009 the Danish Ministry of Food, Agriculture and Fisheries created an Organic Eating Label for catering awarding three categories according to the percentage of organic food: bronze, (30-60% organic ingredients); silver (60-90% organic ingredients) and gold (90-100% organic ingredients); and restaurants serving at least 30% 'organic' raw materials can use the Danish mark of inspection for organic products, a characteristic red 'ø' symbol indicating significant amount of organic food. In January 2013, 343 catering establishments carry this organic food logo in Denmark. So far, the list of locations with the logo is dominated by canteens (32 %) and institutions such as hospitals, nursing homes, kinder gardens and schools (33 %), followed by restaurants and hotels (16 %). 234 establishments have been awarded the logo in bronze (30-60% of the food served is organic); 68 have the silver logo (60-90% organic food), and 41 display the gold logo (90-100 % organic food) ([see more](#)) .

To go further:

- Dogme 2000: A manual on a municipal environmental cooperation in progress. This manual is the result of the work in the Dogme Life project 25 October 2007 (www.dogme2000.dk)

- Eco Metropolis Plan: our vision for Copenhagen, 2015
<http://www.proyectomilenio.org/documents/10156/52626/Copenhaguen+2015+EcoMetropolis.pdf>

- European Green Capital award
<http://ec.europa.eu/environment/europeangreencapital/winning-cities/2014-copenhagen/>

- Web site of the Copenhagen House of Food
<http://en.kbhmadhus.dk/servicenavigation/about-us/about-the-copenhagen-house-of-food>

- "The Copenhagen organic project, to foster sustainability into public food service."
https://www.youtube.com/watch?v=3UB-UOS_3A4

The Copenhagen strategy for urban resilience and sustainable development: a food policy rooted in 'Eco-metropolis – Our vision for Copenhagen 2015'

Copenhagen strategy is based on 'Eco-metropolis – Our vision for Copenhagen 2015' decided by a unanimous Copenhagen City Council in November 2007. In concrete terms, the city is member of DOGME 2000 a Danish network of cities which is enlarging to a larger Baltic area. These cities with a green profile collaborate on sustainable urban development, on the basis of the Aalborg commitments, by sharing good practices. Eco-metropolis vision is based on four pillars : World's best city for cycles, carbon neutral, green and blue, capital city, clean and healthy capital city. This strategy, as well as the consistent environmental standards achieved, was awarded in 2014 the European Green Capital Award.

Despite food policy is not explicitly mentioned, food-related environmental indicators fit into a variety of current municipal visions such as Copenhagen Eco-Metropolis 2015 and the Copenhagen 2025 Climate Plan. Copenhagen's vision is to become an ECO-Metropolis by 2015. The goal for organic conversion of public kitchens is a key part of this vision. Eco Metropolis 2015 vision started in 2007 with such objectives:

- 50% bike to work (currently 35%)
- CO₂ emissions lowered 20% compared to 2005, (currently reduced 24%)
- Clean air for citizens
- 90% of citizens should be able to walk to a park or sea-swimming pool within 15 minutes- (currently 60%-70%)
- 20% organic private consumption currently 16% (7% nationwide)
- 90% organic public consumption (currently 74, 5%).

According to the national commitment to support organic agriculture, two main objectives were identified within the mainstay "Clean and healthy big city"

1. 20% organic food in the city's food consumption
2. the city leads the way with at least 90% organic food in its institutions. For instance, the project "Copenhagen Healthy School Meals", initiated in 2002 as part of Dogme 2000, was inspired by experimental programs

ran at the beginning of Nineties in others small municipalities around the capital. It is based on environmental concerns: to reduce pesticides risk of drinking water and on nutritional requirements to encourage children to have a real meal at school instead of sandwiches.

Meeting the objective of 90% organic food in public food services without increasing the cost of the meal.

To shift from conventional to organic food and meet such an ambitious quantitative objective, the city chose not to implement a permanent increase in the budget devoted to food. Instead of paying forever the cost of the so-called "substitution" due to the price gap between organic and conventional meals ingredients, the city preferred to invest in a "tool" to facilitate a process of conversion which has required a deep change in the meal preparation and consumption and a complete reorganisation in the existing practices of food production and purchasing. Indeed, The organic goal in Copenhagen (90% for 2015) will require added funds, since the central kitchen for elderly homes is already thoroughly rationalized. Most kinder gardens have already successfully met these objectives. They were among the first public institutions to go through the "organic process" at the beginning of the 21st century. The city of Copenhagen estimates that such a conversion process has taken 10 years and cost 7,1 million €, included the launch of a permanent structure: the Københavns Madhus (Copenhagen House of Food), whereas the overall food budget of a single year is 40 million €. Now that the investment is done, the city is able to provide a higher quality service without increasing food budget.

The Københavns Madhus: a method summarised in ten basic principles to change public meals system

Københavns Madhus is an independent, non-commercial foundation established by the City of Copenhagen in 2007. It inherited the "Copenhagen Healthy School Meals" (see above) and has been working over the 900 public kitchens preparing meals for the city public food services in kindergartens, schools, social institutions, elderly homes and staff restaurants,

Therefore, the Danish Minister for Food, Agriculture and Fisheries, Mette Gjerskov, has presented a new programme, aiming to increase the use of organic ingredients in the entire public sector in Denmark by 2020, based on the organic success of Copenhagen and other, smaller, municipalities in the vicinity.

We are a vehicle for change, facilitating projects, providing consultancy, courses, supplementary

training, communicating and much more, all in the area of public meals. We are approximately 35 employees - chefs, food specialists, generalists, teachers, project managers, communicators, ethnologists, designers etc. We have many years of experience in organic conversion of public kitchens, and most of us spend a considerable amount of our time, not behind our desks, but facilitating the process towards better public food, as agents of change on the kitchen floors of Copenhagen municipality.”

(Source: Web site of the Copenhagen House of Food - Københavns Madhus)

Kitchen Lift”, a tool for change in kitchens

Table 1: a network of 900 kitchens in the city of Copenhagen

Kitchen size	small	medium	large
Number of meals prepared per day	100 - 200	500	3000 partially prepared meals
Description of services	Kindergarten, day care facilities for disabled and mentally ill persons	Elderly home, school canteens, city hall restaurant	Elderly home, school canteens, home care
Number of municipal kitchens	≈ 800	75	2
percentage of organic food per meal	90 %	60 - 70%	75% (school meals) - 22% (elderly meals)
Number of suppliers	1	5	>5

The table 1 displays the diversity and the high number of kitchen managed by the city. A quality assessment programme has been launched in 2007 Most kinder gardens have already successfully met these objectives of the organic goal in Copenhagen (90% for 2015). They were among the first public institutions to go through the “organic process” (16, 17)

It took two years to identify potential areas of meals’ improvement in food preparation, ingredient’s quality, meal environment, nutritional value according to target groups and good working conditions. Although only very few institutions were able to meet the maximum of requirements at the very start, a general assessment of public food service quality could be made. Institutions with excellent rating received diplomas within a yearly official celebration taking place in the City Hall.

This program allowed the Københavns Madhus to develop a method suitable to produce a meal with 90% organic food without increasing the cost respect to a conventional meal. Such method is widely applied, excepted in the two largest kitchen producing 3000 meals per day, which serve "only" 60 to 70% organic meal. The method is mainly based on buying seasonal food and preparing meal courses from scratch; a particular attention is also paid to food waste and leftovers.

Ten principles have been defined. The staff working in Københavns Madhus are fully aware that the true potential of the methodology is to open wider perspectives of deep change and progress that go far beyond organic food quantitative objectives for public food service.

The 10 basic Principles of Københavns Madhus

1. Less meat and different meat – use the whole animal, also the cheap cuts
2. More vegetables – greens in season - diversity
3. More potatoes – better potatoes
4. Fruit in season - fruit alone is not enough
5. More or different use of bread and grains
6. Beware of the sweet and expensive
7. Composition of the menus - difference between every day and feast
8. Old housekeeping virtues - Rational kitchen operation (less waste)
9. Critical use of full-and semi-manufactures, more ingredients
10. Find the weak point, one or more of the above

Urban agriculture, still in infancy

By contrast with the Public Food Service project in which the municipality adopted a clear action plan with specific infrastructure and methodology, the City of Copenhagen is unsure about urban agriculture relevance for its own food security because of the low potential regard to food quantities and also because of the level of pollution which can interfere with the quality of the food. A standard law called the Jordforureningsloven, or Soil Contamination Act (§8 and §72b), is used to regulate the environmental and human health aspect of the practice, as a precautionary principle: according to this law, all soil in Copenhagen is contaminated to a certain degree, and people in charge with urban agriculture project must apply the Act by cleaning the soil, laying asphalt or gravel, but also using raised beds, gardening on rooftops or growing in soilless mediums.

However, beyond food production, a positive role of urban agriculture is foreseen, as a catalyst of social integration and environmental educational. The Copenhagen School Garden Association has played a historical role in shaping political support for urban agriculture since the beginning of the 1900s. The school gardens are well-integrated into school curriculums and provide experiential learning for children. The municipality chose to use a “demand driven” approach according to the will

of citizens, providing support for projects along with affiliated partners such as the Local Agenda 21 Centres, Local Committees and Copenhagen City and Port Development.

Educating and empowering future generations

Although public food service improvement concerns indistinctly all eaters, from children at schools, to adults in staff restaurants and also elderly people living in nursing or retirement home managed by the city, school meals represent a specific challenge to create a framework for healthy decisions and food habits, even later in life.

Traditionally, school meals are not part of Danish culture: children were mainly used to eat sandwiches and teenagers above 14 are allowed to leave the school, and often chose to eat nearby the school, in a commercial restaurant. At the beginning of the project in the early 2000, very few schools were offering warm meals and have a proper canteen. Even if more schools now have a canteen, many children still bring from home a lunch box; only 20 to 25 % of the pupils are buying the organic school meals proposed daily in the municipal schools.

Parents can order meals until 10am using a website where they also find information about school meals, including organic ingredients for instance. Meals are partially prepared in one of the two central kitchens, transported overnight in the schools where school staff heat them and prepare basic complements such as rice, pasta etc. To cope with the lack of infrastructures, it is not unusual that meals are served in the classrooms and that elder pupils themselves bring the food to the youngest.

Eat-Cuisine: accommodation to context and ambition of food education

EAT program started in 2009, to develop an enjoyable, healthy food culture in schools, able to compete with the fast food of the streets and to give the students a sense of satisfaction to the teenagers.

Although EAT meals contain 75% of organic products, food taste is the key issue, to attract the students, whereas parents appreciate that their children receive a balanced meal.

32 schools have access to readymade EAT menus offering the choice between two different hot meals and one sandwich every day (all well nutritionally balanced for children). Meals are cooked every day, by specifically trained staff, from scratch, with seasonal products in one of the two central kitchens and delivered in the schools. The program has become a success story in Copenhagen and the House of Food plans to expand the programme to others municipalities.

Food schools

A new model of school organisation has been experimented in seven schools, which focus on food and meals. The model goes beyond introducing a kitchen and a restaurant. The students are involved in the whole process from menu planning and production to the presentation of the actual meal. The schools are daily producing meals in their own kitchens and have food, meal culture as a central part of their curriculum. The menus are prepared by the chef

of the kitchen and validated by the municipality also according to nutritional value. They are used as "laboratories" testing new ideas which can be replicated in other schools in the city and at day-care centres. The next step is to increase the number of food schools, and due to the success the city has committed that any new school built in Copenhagen would join such program.

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Public Food Service: a kitchen in Copenhagen. © Risteco
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