Food Inspection in Denmark
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Reports on meat and milk presented to the League of Nations on the occasion of the visit of European Health Officers in 1924

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Since its creation in 1922, the Health Organisation of the League of Nations assumed to intervene directly in the instruction of public health experts as a cornerstone to implement health policies both nationally and internationally. Several lines of action were developed in this direction, the first one covering the publication of how health care services were organised and how they operated in different European countries. These included san-
The organisation of travelling exchanges involving health experts in different countries was an initiative early developed by the Secretariat of the League of Nations and the health authorities in different countries. The International Health Board of the Rockefeller Foundation assumed the program and contributed with generous grants to those exchange visits, the first of them taking place in October 1922. The plan was settled according to different schemes: some visits were devoted to exchange of public health officers; others, applied to specialists in tuberculosis, children's health, school hygiene, health administration of harbours, statistical demographers, etc. In 1930, six hundred officers, not only of state members, such as the United States of America, Latin America, United States of America, Canada, Western Africa, India and Japan.1

The work of the Interchange of Public Health Personnel was to be conducted along different lines to bring public health administrators in different countries into closer relationship with each other, making comparative evaluation of the organisation and legislation. One of the first steps was the publication of specific reports to inform the organisation and working the public health services in several European countries. Those reports contained information on the administrative regulations, health legislation, social diseases, sanitary campaigns and main health problems, as well as the cooperation between private associations and health authorities.1

On the occasion of the interchange study tour organised for medical officers of health from twenty-one countries by the Health Organisation of the League of Nations in June 1924, forty-five lectures were given in Denmark. Two of them were devoted to the control of quality and inspection of meat and milk food. H.C. Mørkeberg, chief veterinary inspector of Denmark, discussed the situation of meat inspections and Dr. Christiansen, professor of the Veterinary and Agricultural College, lectured on the inspection of milk.2

The inspection and quality control of meat in Denmark

Similarly as in most European countries, the Danish Act of January 1858 granted power to municipalities to arrange the health policies, among them meat inspection.3 As a matter of fact, meat inspection was not made effective in Denmark until the end of the 19th century. In 1881 an inspection service was established in Copenhagen for meat exposed to sale, and in 1887 a public slaughterhouse was erected being the only endowed with permission for slaughtering. Gradually other similar provisions as to meat inspection were incorporated in other municipalities, although the only one category of meat inspection were initially heterogeneous and no mutual recognition hampered the meat trade. Almost simultaneously with the start of the meat inspection a crisis in the export of cattle and

pigs happened and owing the prohibitive measures abroad a number of export slaughters were erected all over Denmark. A bill was passed by the Government in 1904 to ensure that only sound meat was sent abroad. Th s regulation empowered the Government to prevent the export through a system of meat quality inspection. The bill dealt with fresh meat only, being amended in 1908 including also salted and smoked meat, and off l and meat products obtained there from. Finally the Home Meat Inspection Act was issued in 1906. It made an arrangement according to which meat inspection as a guarantee for quality control was established and could be introduced into any municipality without being revised or subjected to further conditions. Th s Act was amended by another passed in 1911, according to which also second-class meat of animals slaughtered at public abattoirs or export slaughterhouses could be introduced into municipalities all over the country without demanding further imports.4

In 1908 the Ministry of Agriculture was empowered to take measures for the prevention of export of meat, off l and meat products from cattle, sheep, goats, horses and pigs when there was a suspect that it was originated from ill animals which made the meat unfit for human consumption. The use of preservatives was also limited and controlled. The new regulations tried to benefit the export trade. Therefore, only the so-called export slaughterhouses were authorised and the work was supervised by the inspecting veterinary surgeon appointed by the Ministry of Agriculture. Inspectors were present during the slaughtering, supervising the classifi cation of meat, taking action should anything occur contrary to the prescribed regulations, and supervising the stamping, as well as taking care of regulations, cleanliness and the hygienic conditions and state of health of animals, facilities and employees. The slaughtered animals were inspected by the veterinary surgeon both alive and after the slaughtering, while organs were still present and could be explored, supervising the classification of meat and off l in accordance with the Ministry of Agriculture regulations into two categories: first and second class. Meat and off l being sound and fi t for human consumption was considered fi t class. When it showed good appearance, not becoming depressed for abnormal smell, taint or other reasons. At the export slaughterhouses pork and off l of pigs of the fi t class was classifi ed into two categories. Second class and off l which should only be eaten boiled or minced, and meat that could be eaten raw with little risk for health "but which, owing to ill-nourishment, abnormal smell or less appetising appearance, is unfit for classification as first class product."

All supervised and approved meat at an export slaughterhouse was stamped and labelled. Pigs of class I A were stamped (Lue-brandy) with the identifi cation of the slaughterhouse and the word "Denmark." The stamp used for meat and off l of class I A horses, cattle, sheep and goats, as well as pigs of class I B, was a blue oval containing the identifi cation of the slaughterhouse and the sentence "Denmark. I. Kl. Statskontrol." Similarly for class II a rectangular black stamp stated "Denmark. II. Kl. Statskontrol." identifying as well the specifi c slaughterhouse. A special label was used for the export of off l I to countries placing obstacles in the way of complete exploration at the slaughterhouse. The animal ex-
amination was carried out to the extent permitted by the import regulations of the destination place and the products were labelled only after evidence that the meat was in conformity with Danish regulations for 1st class.

Meat and off 1, which could not be classified as 1st or 2nd class should be destroyed or made up for technical purposes in special rooms under the supervision of a veterinary surgeon, according to the regulations. However, when it was considered fit for human consumption after sterilisation, the meat was distributed directly from the slaughterhouse to consumers inside the country after being sterilised under supervision. The export of meat and off 1 only was allowed for export slaughterhouses authorised by the Ministry of Agriculture, although certain factories could be authorised as well under the supervision of an inspector appointed by the Ministry. Nevertheless anybody was allowed to export blood, intestines, tallow and fat, with the exception of raw non rendered pigs’ fat to Great Britain and Ireland, as well as, for technical use only, pork rinds, brains, bladders, pancreas, gall-bladders, ovaries, spleen and feet of cattle with the hoofs attached.8 For Great Britain and Ireland, special rules were in force and only meat classified as 1st class A was exported. The exception was pork classified as 1st or 2nd class B by a municipal inspector, which could be exported as mess pork in casks filled with brine. Tinned meat, sausages and other kinds of prepared meat, in order to get exported, were prepared at special factories approved by the Ministry of Agriculture. Veterinary inspectors were appointed by the Ministry to supervise that the prescribed regulations were carried into effect. For this manufactured and tinned meat both 1st- and 2nd-class was accepted, whereas only 1st-class and off 1 could be used for manufacturing sausages and other types of prepared meat. No other preservatives than salt, saltpetre, sugar and wood smoke were accepted. Meat and off 1 of dead, not slaughtered animals was prohibited for sale or dispose for any sort of human consumption. Meat and off 1 of horses, cattle, sheep, goats and pigs suffering from disease before slaughter could not be offered for sale for human consumption unless an authorised veterinary surgeon, in accordance with the rules drawn up by the Ministry of Agriculture, issued a certificate stating that meat and off 1 I represented no risk for human consumption.9 Although sanitary regulations approved by the Ministry of Agriculture were in force for the whole country, municipalities were empowered to include further regulations on food control and hygiene regulations. Municipal meat inspection, similarly as export inspection, applied to horses, cattle, sheep, goats and pigs. In municipalities in which meat inspection was well established, animals were not exposed for sale for human consumption or in the manufacture of mince-meat, tinned meat, sausages and any sort of prepared meat devoted to sale before the inspecting veterinary surgeon appointed by the municipality had approved it for human consumption and market sale. Th s did not apply to meat and off 1 which, in accordance with existing laws, were exempted from inspection, as well as to foreign meat, smoked or salted abroad, which might be offered for sale with the permission of the Board of Health.

In municipalities with public slaughterhouses all slaughtering had to take place there. All animals Laboratory tests of food are an important part of the work in foodstuff control. Photo: Brother Bernild around 1905.
were inspected both before and after the slaugh-
tering by the veterinary surgeon, and the working
conditions and the hygienic state of facilities were
inspected under permanent inspection. When meat and off l
of animals slaughtered at public slaughterhouses
was classified as class I, it might be introduced for
sale in any municipality. Denmark. The same
municipalities applied class II at class II at the exam-
ination of the slaughterhouse, although in that case
the municipality where the meat was going to be
introduced had no right to demand a re-inspection.10
In addition, products were stamped in the way
established in the sanitary regulations, stating the
quality of the meat and the place of stamping.
Municipalities lacking a public slaughterhouse
but owning municipal meat inspection according to
sanitary regulations, sometimes established provi-
sions forcing that all horses, cattle, sheep, goats and
pigs slaughtered should be inspected by the vet-
inary surgeon both before and after slaugh-
tering or simply after doing it. In those cases slaughter-
houses could introduce their products for sale into
any Danish municipality, when they were classified
d as class I, without re-inspection or further im-
positions. Nevertheless, a series of additional provisions were
to be observed.11
The animal was inspected by the veterinary sur-
gon at the slaughterhouse both before and after
slaughtering; heart, lungs, kidneys, spleen, etc.,
except when containing disease secretion, as well
as the intestines, the stomach, the kidneys, the
head, tongue and udder of large cattle and horses,
and the lymphatic glands should not be removed
from the animal. The stamping was placed as specified in the reg-
ulations, stating the quality of the product, the place
of slaughter, distinguishing from imported meat and
any other stamped on the control station.

The inspecting veterinary surgeon, his salary,
and the regulations affecting the inspection, were
reviewed in the Ministry of Agriculture. The meat
inspection was under the supervision of the Chief
Inspectors appointed by the same Ministry.
When the veterinary surgeon lived far away from
the municipalities under his responsibility instead
of the inspection usually took place only after.
At the examination, the animal was presented with the
osseous system and all the internal organs should be
present and placed or marked in such a manner
that it could be immediately seen to which animal
they belonged. In the municipalities where animals
were not inspected before, meat could not be sold
in other municipalities where inspection was es-
tablished. Control stations were also established
in those municipalities without stamps showing per-
mision for sale. Meat stamped at the control sta-
tion was sold only at the sale of meat for
slaughtered animals, and the stamping had taken place or in munici-
palities without their own meat inspection.
In addition, the Home Office prescribed special
regulations concerning cleanliness in public and
export slaughterhouses, sausage factories, shops,
storerooms and also the hygienic conditions of all
facilities involved and employees. Some additional
issues could be also considered. For instance, each
municipality decided whether including trichina
inspection or not. As a matter of fact, in Denmark
the trichina was treated as a sanitary consideration,
and consumption it should show negative reaction to
what might be sold as milk, cream and the like.
Inspecting the quality of milk
In the same meeting devoted to public health of
the insurance from twenty-two countries promoted by
the League of Nations, Dr. Christian Ljung, Professor at
the Veterinary and Agricultural College, contrib-
uted a report on the milk inspection in Denmark,
which followed the same pattern as Mörkeberg's report
in Sweden. In Denmark, at least 4.75 per cent of natural butter
fat was obtained from cattle tests with tuberculin under special veterinary inspection. The type of milk fulfilled special provision and local sanitary
regulations approved by the Home Office to pro-
tect children's diet. In skimmed, half skimmed and
hand skimmed milk a part of the natural fat was
abs-
tration of any natural constituents had been made
and no foreign substance added.13

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A bottle from the children's milk program.
"The Dairy "Myg" near Næstved.
Photo: Private collection, Poul G. Lyng.
Two types of inspection took place: inspection of elaborates. In larger towns, especially in smaller towns and rural districts, regulations varied considerably. In some districts no initiative of the municipalities to make demands and children’s milk. "As to the sanitary condition of milk, except for the ministerial decree contained almost no provisions for the fat percentage for whole milk in 3.25. Moreover, the municipal authorities. As a matter of fact, the regulations in the whole Denmark, but more rigorous regulations in the capital city also applied for the milk trade. In the case of milk selling in Copenhagen "... in a dwelling attached to a dairy became ill of any illness pointing to acute infectious fibrils disease (including typhus, diphtheria, scarlet fever or any other violent acute threat disease, meningitis, acute rachitis, erysipelas, cholerina) or any other serious chronic disease (including tuberculosis of the lungs) a doctor must be called immediately, who, if he thinks fit, should at once report the sickness to the City Board of Health, who then can demand the patient to be removed from the place in question". No person suffering from any extended or infectious skin disease or who has any large wounds or whose hands or face are bandaged, or persons in connection with sick cows "proceeding of milk from healthy cattle, milked and treated, the only other commodities allowed for sale in the same shop are the following: bread, cucumbers, butter, margarine, lard, eggs, soda-water, beer, fruit, juices in bottles, pasteurised milk - heated to 80º C and immediately cooled to at least 8º C, was only sold in bottles on which the date of the pasteurising and the name of the inspector on the place of consumption, but also of the milk-producing stocks. After each inspection of the milk-producing stocks and inspection of the milk at the place of consumption: trade, treatment, sanitary conditions and control of any sort of adulteration.167 In the mid 1920s provisions for the inspection of milk-producing stocks had been made by a number of municipal districts in Denmark, primarily by Copenhagen but also by some others, mainly large urban municipalities.

"In respect to the metropolis, the milk inspection of which presents the greatest interest, the inspection of the stocks from which the metropolis is supplied with milk consists in: inspection of the sanitary conditions of stocks under review, their keeping (cleanliness) and feeding, as also the milking and carrying out of same as well as the first treatment of the milk. the same inspection is exercised towards the stocks from which cream is supplied for sale in Copenhagen. The inspection exercised by veterinary surgeons takes, in the case of stocks supplying children’s milk, place at least twice per month, in the other cases as a rule but once per month.168 A second level of quality control was inspection on the place of consumption, comprising the treatment of milk, the hygiene conditions and the verifiability that milk intended for human consumption was not adulterated. It included also inspection of equipment and cleanliness of milk-shops, varying greatly in the different municipalities.169 Again more detailed provisions were established in larger urban municipalities. Milk exposed for sale in Copenhagen was under control of the City Board of Health and sellers and producers should be registered with the sanitary police. Premises not exposed, treated, kept and sold were submitted to regulations concerning equipment and cleanliness. "Should milk not be exposed for sale in air-tight, closed bottles, the only other commodities allowed for sale in the same shop are the following: bread, cucumbers, butter, margarine, lard, eggs, soda-water, beer, fruit, juices in bottles, chocolate and sweets in closed bottles of transparent glass; pasteurised milk - heated to 80º C and immediately cooled to at least 8º C, was only sold in bottles on which the date of the pasteurising and the name of the inspector on the place of consumption, but also of the milk-producing stocks. After each inspection of the milk-producing stocks and inspection of the milk at the place of consumption: trade, treatment, sanitary conditions and control of any sort of adulteration.167 In the mid 1920s provisions for the inspection of milk-producing stocks had been made by a number of municipal districts in Denmark, primarily by Copenhagen but also by some others, mainly large urban municipalities.

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Under some kind of hygienist ideology, the State emerged as the regulator of inequalities and the main advocate of citizens’ rights.23 As a result, Western countries developed a public administration ranged from the local municipalities until the state central administration trying to challenge the so-called market failures mainly through educational, sanitary and social policies.

It is relevant to frame the emergence of food inspection under those coordinates. The surveillance of food quality derived from two main elements of concern: economy (free market) and health. The economic dimension of the food production and food supply became especially relevant as a result of the deterioration of the global food system, which had been built in the second half of the 19th century. War conflicts and the industrialisation caused food production and trade to collapse worldwide, with terrible consequences for the individual states. A series of social and economy factors encouraged protectionism, interfering international trade. Moreover the growing industrialisation of meat, milk, chocolate, oil, sugar…, as opposed to traditional local manufacturing and consumption, made necessary the regulation of production, strict surveillance of fraud and adulteration, and the control of additives, colourings and preservatives. Basically, new rules were needed to stake the boundaries of what was permissible and unacceptable in human diet. As a consequence, food inspection emerge as a necessary association between experimental science, public health policies and economy, to guarantee healthy food and free concurrence, something essential for the legitimation and success of liberal democracies.

Sources

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