

Getting food during the German occupation of Western Finnmark (1940–1944)

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In this article the author describes the food supply in the western part of Finnmark County. Despite the fact that the authorities tried to control the food supplies and secure equal access to food for all inhabitants, food distribution was never equal and civilians had to work hard and use their imagination in order to get some food to eat.

1 Introduction

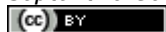
Nutrition as a topic was absent in historical studies for a long time. Food as a part of our daily routine is an almost invisible thing for historians. The changes have started to happen about two decades ago. As Clarkson and Crawford write “...nutritional history is moving out of the cellar”¹. Today quite a lot of books have been published about human nutrition during various historical periods, but this work is still far from being finished. Aside from historical reports on Norwegians’ diet during the war², nutrition on its own was very seldom a subject of interest for Norwegian authors³. This seems to me to be a bit strange. As we can see in articles by Mølmann et al. (2015) and Khatanzeiskaya (2015), insufficient nutrition was a cause of various health problems, so it is very important to study nutrition during the times of crisis.

The topic of nutrition seems to me to be very comprehensive. It includes people’s daily diet, cuisine, ways of getting food, scientific approach to food (what kind of food is supposed to be healthy and how much of it is needed for each individual and so on) and much more. I believe that it is impossible to completely uncover the whole topic of civilians’ nutrition in one article. So I have decided to devote this article to the study of food supply or the ways of getting food by inhabitants in Western Finnmark during the German occupation. I hope I will continue working with this topic and will write about other sides of Norwegians’ nutrition during WWII later.

¹Clarkson and Crawford 2001, 2.

²As Strøm 1948.

³In fact the only Norwegian book about nutrition during WWII is Anny Bjerkebæk’s children’s book *Krigsmat: ernæring og dagligliv for barn 1940-1945*. This topic was also mentioned in several other works, like Hjeltnes 1986.



The reason why I have chosen to focus on the western part of Finnmark is that the differences between the western and eastern parts of the county of Finnmark caused by military activity were great. While the eastern part of the county was almost a near-frontline area, the western part was a “hinterland”. This surely had consequences for both import of food and local production. The situation in Western Finnmark, though it had some peculiarities, seemed to be much more like in the rest of the country.

Most people in normal conditions have several different sources of food. Food can be purchased at a grocery store or directly from farmers, produced or picked for one’s own consumption, or received as ready meals at restaurants, canteens and cafés. The way an individual prefers varies a lot. Town dwellers are more likely to buy foodstuffs at shops or eat in canteens, while country folk are less dependent on distribution chains and consume more food of their own production. People who have paid jobs are less likely to produce the food themselves as they can buy it relatively easily. All the above-mentioned opportunities were present in Western Finnmark during World War II.

My research is mostly based on written sources such as municipal and private archives (archives of Hammerfest, Karasjok and Berlevåg⁴ municipalities, the archive of a regional trading company Feddersen & Nissen), local newspapers (*Vestfinnmark Arbeiderblad* / *Vestfinnmark Folkeblad* / *Finnmark Folkeblad*) and annual reports by regional medical officers as well as some statistical yearbooks published by the Norwegian Central Statistical Bureau (Statistisk Sentralbyrå) during and shortly after the war. I also use some personal memories of people who lived in Finnmark during World War II, but mostly as exemplification. It seems to me that personal memories and especially oral sources should be the subject of a separate study due to their variety and quantity.

2 Food provisions in extreme situations

War and famine are closely connected. A nation or a territory does not even need to take part in military activities; serious difficulties with food provisions can happen as a result of disruptions in transport communications caused by war, especially in case of import-dependent regions. Norwegians had learned this during World War I.

⁴Though the latter has never been a part of Western Finnmark, its archives contain a great collection of directives and prescriptions made by central authorities.

Despite the fact that Norway was neutral during the whole war, it had faced serious difficulties with food provisions.

Finnmark County was always dependent on import of food. Traditionally many food products like corn, salt, sugar, vegetables etc. were imported to Finnmark. Periods when food provisions from the other regions were irregular led to hunger periods. Though inhabitants of Finnmark often had several legs to stand on, as fisherman-farmer households had continued to exist in the pre-war period, still not all types of foodstuffs were produced in Finnmark; and those that were, were often in small amounts that were insufficient to feed the entire population.

The Norwegian government desired to protect the population from starvation and consequently intervened in the system of food production and distribution. It took into account past experience and had started to prepare plans in case of emergency a long time before the war started. Government policy during the early stages of the war was shaped by decisions of two committees: a Norwegian Economic Self-help Council (Norges økonomiske selvhjelpsråd) created in 1933 and an interministerial committee - Governmental Consulting Committee (Regjeringens rådgivende komité) created in 1938. They had produced a plan of action and proposed some anti-crisis measures like rationing of some essential goods that were implemented at the very beginning of the war⁵.

New administrative bodies created after the outbreak of the war - the Ministry of Provisions with its subdivisions like the State Nutritional Committee and the Directorate for Provisions and Rationing as well as the Directorate of Prices, a subdivision of the Ministry of Internal Affairs, and the Price Police - were intended to work out and implement governmental policy towards food provisions during the time of crisis.

This policy consisted partly of measures tested during World War I, such as control on prices and distribution of products or creation of food reserves, and partly of completely new measures, such as an attempt to achieve an independence from the import of food. As no particular food reserve could last forever, the only way to secure food provisions during times of crisis was to produce food inside the country. So the government had focused its efforts on an increase of domestic production as well as changes in people's diet. More Norwegian food together with reduction of consumption of imported food products seemed to be a way out of crisis.

⁵Kolsrud 2001, 439.

The rationing system was the most important tool the authorities had. It allowed control of people's access to different food products and protection of the most vulnerable groups of the population.

3 Rationing

The even distribution of foodstuffs among the entire population of the country was extremely important for a nation to survive in times of crisis. Even if there were enough food products in the country to feed all its inhabitants, there was still a risk of starvation to some part of the population if some people could not get the foodstuffs they needed because they were lacking in a specific region or because the others consumed more than they ought to. The rationing system was thought to prevent such dangerous distortions in the system of food distribution.

Rationing of food products during World War II was introduced in Norway as early as in September 1939. Cereals, flour, sugar, coffee and tea became rationed⁶. Products that were imported to Norway were the first to be affected by the war. As communications with the outer world became worse and major trading partners changed as the result of German occupation in 1940, import of several types of products like tea and coffee had completely stopped. From the end of 1941 only substitutes of these products could be bought.

The situation was getting worse and more and more products were rationed. From 1940 not only imported food products but also some domestically produced ones became rationed. Among rationed products were milk, dairy cream and cheese, edible fats, meat, eggs, bread, vegetables, fruits and fruit squash. In addition to standard rations, some specific categories of people were given additional rations for the most important groups of products like bread and fats. Among such groups were manual workers and especially those who worked far from home like fishermen, whalers and lumbermen, and also the most vulnerable groups like children, sick people and pregnant women, who could obtain extra rationing tickets for food products they needed via doctors' prescriptions. The table in Appendix 1 gives a brief overview of rationed foodstuffs, the size of rations and the groups of people who had rights to extra rations.

Customers had to be registered at grocery stores so the authorities could have better control over the distribution of products, and so rationing cards could only be used at the same shop. People who bought foodstuffs directly from farmers were

⁶Foss 1981, 8-13.

also registered. Farmers in turn had limits placed on how much food of their own production they could use for their own purposes. Some products like meat and – for some period of time – milk were not rationed but their sales to the consumer were limited. The common trait was that milk was available in inland areas where most farms were located, while on the coast the lack of milk was remarkable⁷. Western Finnmark was no exception. I will now provide a detailed description of the situation regarding milk and meat in western part of Finnmark.

3.1 Lack of milk

Authorities had introduced special measures in the summer of 1941 in order to ensure that milk would be sold initially to people who really needed it, like children and sick people. The first step was an order to sell milk primarily to children and sick people and only then to the others. Later a rationing order was issued. Farmers were obliged to inform authorities about all their customers so that the latter could not buy extra milk from other sellers. Rules for rationing of milk became stricter and stricter during the late 1941, but still this did not solve the problem.

While there was enough milk in agricultural districts and even more than in interwar period (as farmers had more money and could sell less foodstuffs of their own production and consume more), there was a lack of milk in the rest of the country, especially in towns and isolated regions. Regional medical officers in all three northern counties wrote in their annual reports about the lack of milk, which was caused by the slaughter of cows as the result of lack of fodder. According to the chief medical officer in Finnmark County – Dr. Borgersen, the situation in 1941 was so difficult that even babies on artificial feeding were lacking fresh milk⁸. His statement can be confirmed by statistics from the town of Hammerfest⁹.

The only large producer of milk in Western Finnmark was Altafjord Dairy (Altafjord Andelsmeieri) located in Hammerfest. In addition, there were milking cows in individual households in all the municipalities. Besides local milk, inhabitants in Finnmark consumed milk delivered from dairies in Troms and Nordland counties, as well as boxed milk. However, due to difficulties with transport during wartime, deliveries from other regions dropped away. Transport of milk from Alta to Hammerfest was also experiencing some difficulties, but the worst thing was the dramatic fall in volumes of milk.

⁷Gogstad 1991, 273.

⁸Borgersen 1942, 3.

⁹Anon. 1941e, 1.

The situation became critical for Hammerfest in the late autumn of 1941, when the volume of milk delivered by Altafjord Dairy had dropped by 66% since 1939. Even combined with the locally produced milk, it was insufficient to provide all sick people and children with milk and a further reduction of 56% was expected to happen in November 1941¹⁰. The District Committee of Provisions was warned about the situation.

The reason as to why milk deliveries from Alta had dropped so dramatically in 1941 was found several months later in 1942. The Municipal Committee of Provisions and the price police for Western Finnmark had uncovered that many farmers in Alta municipality avoided delivering milk to Altafjord Dairy since the war broke out. This case led to the tightening of the control over regional milk producers, deliveries of milk and sales to direct customers¹¹.

3.2 Lack of meat

As I have mentioned previously, the sale of meat was strictly regulated. The meat could be purchased only in the same shop by showing the special customer card issued by municipal committees of provisions. The amount of meat a private person could buy at a time was limited to what was sufficient to prepare one meal¹². A significant shortage of meat had existed throughout the country and Western Finnmark was no exception.

According to Harald Rasmussen's report, rations of meat in Hammerfest municipality in the spring of 1941 would amount to only 250 g of meat per person per week. However, this was more than inhabitants of Oslo had at that time¹³. But worse was to follow. The price police in Western Finnmark had informed the Ministry of Provisions in February 1942 that the inhabitants of Hammerfest had received sufficient meat for a maximum of two meat meals since September 1941, while the inhabitants of Honningsvåg had got even less - 1.33 meals, i.e. some received nothing¹⁴. Hammerfest municipality had ordered two tonnes of reindeer meat in December 1941 so that the inhabitants of Hammerfest could prepare a Christmas dinner with meat¹⁵. This was of course not enough to change the situation.

¹⁰Ibid.

¹¹Pedersen 1942.

¹²Forskrifter til gjennomføring av forordning av 24.juni 1941 om omsetning av hester, storfe m.v. Gitt av Direktoratet for Proviantering og Rasjonering. 05.07.1941, endret 09.02.1942.

¹³Rasmussen 1941, 10.

¹⁴Bjertnæs 1942.

¹⁵Anon. 1941f.

All in all milk and dairy products and meat were the most difficult to obtain, but as people were not used to eating a lot of meat, its lack was supposedly less noticeable than the lack of milk. According to Anders Gogstad, on a national basis the lack of milk was worst in Troms and Finnmark counties¹⁶.

3.3 Could rationing alone improve people's diet?

Was rationing on its own able to provide Norwegians with enough food? The chief of Oslo City Public Health Administration Dr. Andreas Diesen made a calculation of nutritional content of food rations in the third quarter of 1942. According to Diesen, an adult's ration contained 1,570 kcal, 52 g protein, while a child's ration contained 1,630 to 1,890 kcal and 54 to 65 g protein depending on age¹⁷. That was considered to be insufficient both at that time and today. Nowadays ICRC recommends use of an average "survival" ration for crisis situations of 2,400 kcal and 70 g of protein¹⁸. It was clear that people had to cover the gap between nutritional needs and nutrition provided by rationed foodstuffs somehow on their own by the use of non-rationed foodstuffs. Rations were meant to provide a safety net for the weakest groups like children and sick people. That is why children's rations were considered to be adequate. As Axel Strøm has pointed out, children of pre-school age "were especially favoured by the rationing"¹⁹.

The rationing system had limited and regulated individuals' consumption of foodstuffs, but possession of rationing cards on its own did not mean that it was possible for a person to receive the goods. Simply allocating the food among people was not enough, as it was also important to secure deliveries of foodstuffs to all inhabitants. Food had to be available in a local grocery store, and this task was very difficult, especially during the war.

4 Official system of distribution of food products

A sufficient part of the food supplies was delivered to the inhabitants of Finnmark by the official system of distribution, which consisted of retail points of sale like grocery stores and public catering organisations like restaurants, café and canteens. For some types of food, like cereals and meat, this was the only legal way to get them.

¹⁶Gogstad 1991, 273.

¹⁷Diesen cited in Strøm 1954, 4.

¹⁸Perrin 1996.

¹⁹Strøm 1954, 3.

4.1 Distribution chain

As mentioned previously, Finnmark was dependent on the supply of foodstuffs from other regions, as local production was inadequate and could not cover the demand. Food products were either brought into the country by high volume importers or produced in Norwegian factories. Both categories were usually located in South-eastern Norway. Goods had then to be transported first by train to Trondheim and then by coastal transport to Hammerfest where regional distributors had their warehouses; a last leg of the trip was made by boat or land transport to grocery stores in the district.

Grocery stores also functioned as purchasing agents that purchased fish from local sources and were sometimes owned by bigger companies like regional wholesale suppliers. Feddersen & Nissen Company was one of the regional wholesale suppliers and owner of a distribution chain in coastal Finnmark. It was a relatively large trading company with its head office located in the town of Hammerfest and nine branches in fishing villages. It exported fish and fish products as well as sea mammals and at the same time functioned as a wholesale supplier for fishermen and inhabitants in fishing villages. The company had its permanent trading partners in Southern Norway which bought the fish. It also had contracts with large-scale producers of foodstuffs.

4.2 Regularity of deliveries

Assurance of regular deliveries to Finnmark was probably the most important problem for trading companies in Finnmark. As transport connections between Southern and Northern Norway worsened during the war²⁰, some trading partners gave up on order processing since it was too time consuming and difficult to send products through the entire country.

For example the Feddersen & Nissen Company was advised by the Larvik Potato Starch Factory (Larviks Andels Potetmelfabrik) in September 1940 to order potato starch and pearl sago from factories in Trøndelag (Central Norway) as it would be too difficult and expensive for the factory to send goods to Finnmark²¹. In a follow-up telegram Feddersen & Nissen had informed their partners in Larvik that other producers were not willing to co-operate with new partners and that the only way to get potato starch and pearl sago to western Finnmark was to order these from

²⁰ According to Jacobsen, shipping traffic in Finnmark had almost collapsed in January 1942 and since that time sea transport was occasional.

²¹Skaug 1940.

Larvik regardless of the cost of delivery²². The same messages also came from other companies.

In addition, a communication with distribution centres attracted a good deal of criticism. The mayor of Hammerfest made a complaint to German authorities in Tromsø in November 1941 against suppliers from Southern Norway that ignored purchase orders from Finnmark. Correspondence between German authorities in Tromsø and the mayor of Hammerfest took several months and the outcome is not clear²³. Rasmussen also wrote about the same problem. According to him, producers in Southern Norway were in fact interested in producing goods for Finnmark because this was how they could get extra quotas of raw materials, so the problem was transportation²⁴. It is hard to say if this is true or not.

Serious problems concerning deliveries of food products to Finnmark, which arose during 1940-1942, caused the lack of potatoes. Harvest failure in 1941 combined with sporadic deliveries of potatoes and lack of storage facilities had caused the situation when potatoes were excluded from people's diet for several months in a row²⁵. The problem was partially solved only in the late autumn of 1942, but a great amount of potatoes were frozen. These were also used. Information campaigns in media had started quite early, during the first winter of the war. A series of articles written by specialists and journalists provided tips on how to store potatoes and how to consume potatoes which seemed to be frozen²⁶. People's health had deteriorated as the result of undernourishment²⁷. You can read about the consequences of that in Mølmann et al (2015).

4.3 Local food reserves

Creation of local reserves was a remedy for the problem of irregular deliveries. There were some problems, however. As was the case during World War I, the major problem was that there were no storage facilities available. There were almost no resources to build new warehouses. Occupation authorities had expropriated most of the warehouses for their own needs, because Western Finnmark was a transfer point for German troops fighting at the Eismeer front. They had also employed many people on construction works, so that it was very difficult for Norwegian municipalities to find a contractor to build something for them.

²²Anon. 1940.

²³Berg 1941, 1.

²⁴Rasmussen 1941,9.

²⁵Borgersen 1943, 3-4.

²⁶ See for example Anon. 1941b.

²⁷Gogstad 1991, 273-275, 303-304.

Germans had expropriated not only warehouses and office buildings but also crucial facilities like a bakery (Hammerfest Bakeri AS). Even if the production capacity of the town's two other bakeries was sufficient to bake as much bread as needed, they did not receive enough supplies to produce it, as local authorities complained to German ones²⁸.

The war and German occupation had created extra difficulties for trading companies with deliveries of food products to Finnmark. But despite some difficulties and the fact that some types of products became unavailable, they managed to continue to supply the residents of Finnmark with food products.

4.4 Grocery stores

Retail trading had changed too. It was no longer possible to buy most of the food products freely. Wares were sold only to permanent customers, so that a person had to be registered at the shop and could no longer purchase products from other grocery stores. By doing that authorities had received improved knowledge of what kind of products were needed and where. In theory, it became possible to provide retail chains with the minimum amount of goods and there would still be enough food for customers. The storage of lots of food in warehouses was prohibited. But in practice this put a huge press on logistics as retailers became even more dependent on deliveries, which were impossible to make right on time during the war and in the periphery of the country.

Another change was introduction of maximum prices on products of daily necessity, so that owners of retail stores became unable to set prices on their own. Prices were controlled by special police, and some traders were fined for exceeding the maximum prices.

The third and most important change was the introduction of the above-mentioned rationing of most of food products. Not only did customers need to have rationing tickets in order to buy something, the retailers also had to bring up collected rationing tickets in order to purchase rationed products.

4.5 Catering institutions

Changes had also affected catering institutions, both private and municipal/state owned. As they used the same system of distribution and often purchased food products from regional wholesale suppliers, they had experienced almost the same

²⁸ Berg 1943.

difficulties as shops. However, some canteens, like those at boarding schools, were in a better situation because they got support from Sweden, so-called “Swedish help” (“svenskehjelp” or “Svenska Norgeshjälpen”); soup for children and elderly people, individual packs and deliveries of difficult-to-obtain foodstuffs for institutions²⁹. Rationing cards were in use in catering institutions too.

As both retail trading and catering in Finnmark depended on the same deliveries from southern regions, they usually had the same supplier. Unlike the situation in the Soviet Union (see Khatanzeiskaya 2015), Norwegian catering institutions did not provide an alternative to grocery stores. Civilians had to search for other alternative sources of food.

5 Locally produced food

In times when sea transport to Finnmark was intermittent, local production of food played an extra important role. In times of crisis, the best food is the one produced locally because it is much easier to deliver to consumers, even if general means of transportation fail. The nearer to the food producer the recipient is, the greater chance he/she has of getting some food. Fisheries were the main source of income for Finnmark for many centuries; animal husbandry complemented it as a main source of food for the local population, while agriculture was less important and less developed. The war brought changes into this system as it became more difficult to purchase imported vegetables, dairy products and meat in the shops, and so it was more important to be able to produce them locally. Agriculture and animal husbandry were both on the rise in Western Finnmark during the war while fisheries were stagnating.

5.1 Agriculture

The government had started pushing farmers towards increasing the planting acreage as early as the autumn of 1939, shortly after the war broke out. The Directorate of Production (Produksjonsdirektoratet, established in the autumn of 1940 as a part of the Ministry of Agriculture) asked farmers to cultivate more land than they had previously. The Directorate issued annual plans on how much land should be cultivated. Those plans were sent to regional offices of agriculture (landbrukskontorer), which divided the surplus territory between municipalities.

²⁹Gogstad 1991, 298.

Municipalities in turn distributed pieces of land between farmers. The first such plan was issued in 1941.

As we can see from table 1, these plans were never fulfilled. Even in 1942, the year when the acreage of cultivated land was at its maximum, only 70% of the planned increase was fulfilled. In fact, since 1942 the reduction of the acreage of cultivated land began. The increase of arable land in wartime involved many difficulties: a cultivation of plants in unprepared soil caused lower productivity, so there was a constant need for fertilizers. But at the same time supplies of fertilizers were quite limited because of the war. New fields were also often placed on former pastureland. In Finnmark County the planting acreage for all kinds of vegetables had grown by 30–40% in 1943 in relation to 1939, while the overall planting acreage increased by only 3.4%³⁰. This means that in most cases the same land was used for growing other plants, so that the total yield could not have changed dramatically.

Year	Planned acreage						Actual acreage		Percentage of the plan fulfilled (%)
	Total, in hectares	Increase in relation to 1939					Total acreage (ha)	Increase in relation to 1939 (ha)	
		cereals and peas (ha)	potatoes (ha)	root vegetables (ha)	other vegetables (ha)	In all (ha)			
1941	350,567	29,200	19,300	7,500	n/a	56,000	329,070	34,503	62
1942	357,667	22,660	39,300	7,500	4,721	63,100	338,776	44,209	70.1
1943	365,000	29,171	40,307	7,512	4,721	70,433	333,657	39,090	55.5
1944	365,000	29,171	40,307	7,512	4,721	70,433	327,524	32,957	46.8

Table 1. Planned and actual increase of acreage of cultivated land in Norway in 1941–1944³¹

Type of plants	Amount in 1939
Barley	0.6 ha
Potato	157.4 ha
Turnip, cabbage, carrot	3.9 ha
Fodder plants	867.8 ha
Apple, plum, and cherry trees	4 trees
Redcurrant, gooseberry and blackcurrant	296 bushes

Table 2. Agriculture in pre-war Western Finnmark^{32,33}

³⁰ NOS X.99, 9-10.

³¹ From NOS X.99, 3-4.

³²I.e. the municipalities of Kautokeino, Alta, Talvik, Loppa, Hasvik, Sørøysund, Kvalsund, Måsøy, Kjelvik, Kistrand, Karasjok and Hammerfest.

³³From NOS IX.191, 100–101, 137, 258–259.

Comparison of so-called “food units”³⁴ through the years shows that the total yield stayed at the same level during the war, though there were some annual variations. However, there were changes which cannot be traced by comparing “food units”. Yield of cereal crops in 1944 was half as much as it was in 1939, while yield of potatoes and root vegetables varied from year to year and was almost at the same level as it was before the war³⁵.

Tables 2 and 3 show the situation in agriculture and animal husbandry in Western Finnmark in the pre-war period. In a way, these statistics refute the well-known argument that it was impossible to grow important crops in Finnmark because of harsh climate conditions. As we can see, not only vegetables but also cereals, fruits and berries were grown in Finnmark, but only the production of vegetables was of significant size. It is also notable that most of the vegetables were used as a fodder for domestic animals as animal husbandry seemed to be more important than agriculture.

Agriculture in Finnmark was on a very limited scale. Despite the fact that Finnmark County constituted 15% of the land area of Norway, only 1.6% of the Norwegian population lived there at that time and cultivated land in Finnmark accounted for only 0.23%³⁶ of the overall cultivated acreage in Norway. It is obvious that local agriculture could not provide enough food for the inhabitants of Finnmark.

Animal type	Animals in 1939
Cattle	9,010
Sheep	30,380
Goats	6,032
Pigs	188
Rabbits	4
Poultry ³⁷	3,610
Reindeer ³⁸	66,644

Table 3 Animal husbandry in pre-war Western Finnmark³⁹

³⁴ Statisticians operate with so called “food units” (“föreheter”). 1 “food unit” was equivalent to 1 kg of wheat, rye, barley or peas, 1.2 kg oat, 1.1kg cereal blend, 4.5 kg potatoes, 9 kg turnips, 12 kg fodder turnips, 2.5 kg hay, 4.1 kg straw, 2.5 kg dried “green fodder” (From NOS X.99, 31).

³⁵NOS X.99, 29-30.

³⁶ NOS X.99, 9.

³⁷ Only adult chickens are taken into account.

³⁸ The number is given for the whole Finnmark.

³⁹ From NOS IX.191, 202-205, 258-259, 302.

5.2 Animal husbandry

Animal husbandry was well-developed in the years before the war. Fisherman-farmer households were very common in coastal communities in the pre-war period. During the 1930s the livestock population in Finnmark had grown by approximately 40%⁴⁰. At the beginning of the war fodder resources were dramatically reduced. Import of compound feed (kraftfôr) to Norway had almost stopped and the domestically produced fodder was rationed in order to reduce the competition for foodstuffs between people and domestic animals. The use of grain and potatoes as fodder was prohibited. Similar measures were introduced in other European countries occupied by Germans because reduction of livestock was seen as a way to avoid starvation by diversion of feed crops to human consumption⁴¹.

The lack of fodder led to a drastic reduction of the livestock population as people had nothing to feed the animals with. The need was so great that even horses were sometimes slaughtered. The local wholesale supplier and owner of a retail chain in Finnmark, the Feddersen & Nissen Company had discussed the question of the slaughtering of horses with its agents in various districts as even they were unable to find enough fodder to keep all animals alive⁴².

Not all animals were slaughtered during the war, as milk-producing cows and goats and draught animals were kept alive as long as possible. According to official Norwegian statistics goat and sheep-keeping increased in Finnmark during the war; in 1944 there were 26% more goats, 3.5% more dairy cows and 11% more sheep than in 1939⁴³. Livestock of other categories had been reduced, especially pigs, as they were “people’s direct competitors for food”⁴⁴. Many informants who lived in the countryside told that they had domestic animals until the evacuation order came.

5.3 Fisheries

The fisheries industries was a major one in Finnmark and most of the local inhabitants were somehow connected with it. Fish was a leading export article for Finnmark County. Fisheries had also suffered some difficulties because of war activities: it was dangerous to put to sea because of mines and constant threat of air and submarine raids. Most of the fishermen had stopped sailing to distant fishing

⁴⁰ To be exact, by 38.4% for cattle, 48.5% for sheep, 11.5% for goats and 295% for pigs (NOS X.99, 202-205). I am not taking reindeer into account here.

⁴¹Voglis 2006, 21.

⁴²For example see letters of 26 and 28 November 1940 sent from the head office of Feddersen & Nissen’s to agent Jens A. Horst in Kjøllefjord.

⁴³ NOS X.99, 40.

⁴⁴Ibid., 36.

grounds. At the same time it was still possible to continue fishing in straits and fiords, of which there are a lot in Western Finnmark⁴⁵. German authorities were also interested in Norwegian fish, and a German fish processing plant was opened in Hammerfest during the war. According to Bjørn-Petter Finstad, Hammerfest municipality was a “borderland” between eastern municipalities, where fishing was drastically reduced during the war, and western municipalities, where fisheries had continued almost as before⁴⁶.

Fish catches were uneven in various municipalities during the war: while catches reduced dramatically in some municipalities, they increased in the others. The overall catch in Norway ranged from 67% to 84% of the pre-war level⁴⁷, but the total catch in Western Finnmark did not vary noticeably from the pre-war period⁴⁸. As proximity to the producer of food products was of crucial importance, there are reasons to believe that the population in Western Finnmark was provided with fish in sufficient quantities.

As we could see, local agriculture and animal husbandry in Western Finnmark was unable to provide all the inhabitants with enough food, even though there was a significant increase in planting acreage in comparison with what had happened on the national level. A possible explanation could be that local inhabitants were not so interested in agriculture during the pre-war period. Agriculture in northern areas is connected with significant risk and usually not so profitable. As one fisherman from Magerøysund said: “Before the war it was unprofitable for people to grow potatoes because potatoes were so cheap here in the North. (...) But when the war began everybody started growing potatoes”⁴⁹.

On the other hand, animal husbandry was an important co-producer of food for many families already in pre-war years, and they tried to keep animals alive as long as it was possible even though they experienced remarkable difficulties with fodder.

So could growth of domestic production of foodstuffs cover the loss of imports? According to consultant Bjørnstad from the Association of Norwegian Milk Producers (Norske Melkeprodusenters Landsforbund) potatoes and fish were not staple food for most of Norwegians in pre-war years as they accounted for only 7% and 3% of Norwegians’ diet respectively⁵⁰. But as is the case with all average rates, there was major regional variation. Hence on the one hand it was possible for

⁴⁵Finstad 1993, 67.

⁴⁶Ibid., 78.

⁴⁷Ibid., 74.

⁴⁸Ibid., 78.

⁴⁹Ibid., 106.

⁵⁰Anon. 1941a.

Norwegians to eat more of these products, but was it possible to produce more of them?

Fisheries had continued almost undisturbed in Western Finnmark, though on the national level there was a significant decrease in fish catches. Fisheries were of crucial importance for coastal dwellers both as a source of food and as a source of income. As we can see, despite all the measures, Finnmark was still dependent on food imports, but at least there was some food to prevent people from starving to death.

6 Search for extra sources of food

In a period with rationing of foodstuffs and unsteady deliveries to Finnmark, it was of crucial importance for people to somehow secure their access to food. And naturally the most secure foodstuff in such conditions is the one you produce yourself. The war gave rise to kitchen gardens over the whole country. In Finnmark people had started to grow vegetables on their own small allotments. Several witnesses from Finnmark told that their families had started growing potatoes during the war⁵¹. But here we should distinguish between potatoes and other vegetables as potatoes were well-known to residents of Finnmark and potato fields had existed before the war; while people were more sceptical to other vegetables. Undernourishment and lack of vitamins during the war had helped to change this attitude⁵².

6.1 Kitchen gardens

As I have already mentioned, combined fisherman-farmer households were usual in coastal Norway in the pre-war period. Families had to have more than one source of income in order to secure food provisions in periods with lack of fish. Many households had both cows and sheep, but few grew vegetables in kitchen gardens. Regional medical officers complained that the local population was not used to eating vegetables. Doctor Harald Borgersen had noted in his annual medical reports from 1939 and 1940 that people's diet was still very unbalanced, almost without fruits and vegetables because they were expensive and also because people were not used to them⁵³. At the same time potatoes were an exception from that trend. Dr. Borgersen had mentioned in same reports that cultivation of potatoes was

⁵¹ See for example Johnsen and Lund 2002, 44 and Finstad 1993, 106.

⁵² Gogstad 1991, 274.

⁵³ Borgersen 1940, 3.

constantly growing in the years before the war and that there were so many potatoes in inland districts that it was possible to “export” surplus production⁵⁴.

While country dwellers had kitchen gardens all the time, it became also very important for town dwellers to get an allotment of land where they could grow some vegetables. While studying statistics, I have found an interesting fact. There was only one municipality in Western Finnmark – the town of Hammerfest – that had no registered cultivated land in the years before the war⁵⁵. Yet some inhabitants had domestic animals, mostly cows, sheep and goats. In fact the towns of Hammerfest and Vardø were the only towns in Northern Norway that had no registered cultivated land on their territory⁵⁶. This situation had changed at the beginning of the war.

In Hammerfest, the local housewives’ association (Hammerfest Husmorforening) had initiated the process of organisation of kitchen gardens where volunteers could grow some vegetables and primarily potatoes in the spring of 1941⁵⁷. They had formed a special committee and asked the Hammerfest municipal council for help. Land was taken on lease and divided between a couple of dozen of volunteers. The latter had to cultivate vegetables on it and could use the entire yield for food.

The Norwegian government had supported such initiatives and strived to use those few allotments that were available in towns as effectively as possible. In addition to the information campaigns described previously, a number of circulars were sent to local authorities. For example, the Directorate of Production had sent a circular to all municipalities in February 1943 with recommendations on how to use allotments more effectively. The vegetable growers who were laborious and used their allotments effectively the previous year should have a possibility to keep these allotments in 1943, while those who did nothing and let weeds grow should be placed at the very end of the queue if they reapplied for allotments⁵⁸.

While on the one hand this was a good opportunity for people to secure some food provisions, on the other hand these people lost the opportunity to buy vegetables because they could no longer obtain rationing cards for vegetables. Gardening was dependent on the weather and we may suppose that not all of these hobby gardeners knew how to grow vegetables. To make sure that no one would be left without vegetables, the authorities made an exception for people who had

⁵⁴Ibid., 3.

⁵⁵Yet there were some animal farms, and so about 0.8 ha of pastures.

⁵⁶NOS IX.191, SS. 256-259.

⁵⁷Hansen 1941.

⁵⁸Mosling 1943.

allotments smaller than 48 m² per person and for those who lived in harsh climate conditions where it was too risky to grow vegetables⁵⁹.

6.2 Gathering

Another possibility to get some fresh food full of vitamins was to pick berries and mushrooms. Inhabitants of Finnmark were well acquainted with it, but many of them had limited access to territories where they could pick berries and mushrooms. Due to German military activity many territories in Western Finnmark were closed to civilians. For example, almost the whole of Kvaløya Island⁶⁰ was a restricted area during the war. Moving around was allowed only along the roads. Locals remember that they nevertheless picked berries on the roadside. Another possibility was to take a local boat to nearby fiords where berry picking was permitted. Yet not all civilians were obedient. Some of them risked their lives violating the orders issued by occupational authorities and wandered into restricted areas.

Marion Palmer's informants told about an old woman Elen Olsen from the municipality of Kvalsund who stepped on a mine and died as she was picking berries in a minefield in Repparfjord. According to Olsen's grandson Aksel Sandnes, Elen was aware of the dangers of walking across the minefield, but she was also a keen berry-picker and "inside the fence there were a lot of lingonberries, so she had fallen to temptation to nip into the gap in barbed wire"⁶¹.

The lack of sugar was also a serious obstacle to the canning of berries. Reidun Nilsen from Rolvsøy believed that berries were the least used source of food at that time because it was so difficult to conserve them⁶². Even though sugar was rationed and difficult to get, it was still possible to conserve some berries. Several books with practical recommendations on how to conserve fruits and berries without sugar were published during the war, like *Conservation and sugar rationing (Syltetid og sukkerkort)* by Thora Grahl-Nielsen, *We can against all the odds: without sugar (Vi sylter tross alt: uten sukker)* by Juliane Solbraa-Bay, and *Canning without sugar or with small amount of sugar (Sylting uten sukker eller med lite sukker)* by Henriette Schønberg Erken. Such a variety of titles shows not only that the problem was very serious, but also that there was a demand among people for recommendations of how to preserve fruits and berries.

⁵⁹Anon. 1944c.

⁶⁰An island in Western Finnmark where the town of Hammerfest is situated.

⁶¹Palmer 2010, 60.

⁶²Johnsen and Lund 2002, 47.

Some kinds of berries like cloudberry and lingonberry are not as perishable as the others. Cloudberry, for example, could be cooked without sugar, and there were quite good chances that it would be edible for a long period⁶³. Berries could also be dried and used later. But at least there was an opportunity for inhabitants in Finnmark to get extra portions of vitamins during the berry season in late summer and early autumn.

6.3 Exotic food

When all traditional sources of food were already taken into use, people had to discover new and exotic types of food. Some of them, like whale or seagull meat, became part of the daily diet during the war. The similar search for new foodstuffs also happened in the North-western part of the Soviet Union (see Khatanzeiskaya 2015).

Nowadays whale meat is sold in almost every Norwegian shop but it was quite exotic for people in the 1940s. Harald Rasmussen wrote a lot in his report about whale meat and its use as a substitution for beefsteak and mutton. "I have eaten whale meat myself as beefsteak, in meatballs and so on. It is good. It reminds me of beef a bit"⁶⁴. He also wrote that he saw a lady in a butcher shop in Harstad who loved ground whale meat and said: "I hope that you have more of this ground whale meat left"⁶⁵. His major attention to whale meat and numerous utterances about its possible usage as food looks to me like an attempt to justify the use of whale meat and to make it look more attractive to the municipal authorities that were in charge of rationing. Supplying whale meat was easier than supplying other types of meat, which meant there was greater availability for customers.

Seagull meat was even more exotic. It is unknown how much it was used, but we do know that wildfowl was part of the diet, especially for town dwellers. A small notice devoted to the export of seagull meat from Honningsvåg to Horten (southeastern Norway) was published in *Vestfinnmark Folkeblad* on 21 May 1941. The notice quoted the newspaper *Gjengangeren*, which claimed that one seagull cost NOK 2.80 in Oslo, NOK 1.25 in Stavanger and that 200 seagulls from Honningsvåg were sold in Horten for NOK 2 each⁶⁶. According to the same article, seagull had a taste that was reminiscent of razorbill ("alke" in Norwegian) and they were caught in special traps that measured 4 by 4 metres – large enough for several hundreds of

⁶³Ibid.

⁶⁴ Rasmussen 1941.

⁶⁵Ibid.

⁶⁶Anon. 1941d.

seagulls. The fact that seagulls were sold far away from Finnmark shows that the local inhabitants had enough meat not only for their own consumption, but also for sale.

Peoples' ingenuity was almost unlimited when it concerned the search for substitutes for lacking food products. Norwegians were especially inventive at finding alternatives for their favourite drink – coffee. Coffee beans could be reused in different ways, replaced by burnt cereals and even potatoes. The latter variant got its own name – “pot-ka” – from words “potet” (potato) and “kaffe” (coffee)⁶⁷.

People were forced by circumstances to be inventive and to find new foodstuffs.

Besides more or less legal opportunities to get food, there were also illegal or unethical ways of getting food, like swapping with Germans, purchasing on the black market or theft.

6.4 “German” food

Germans were not always competitors in the struggle for food. Sometimes they provided an extra opportunity to get some food, at least for some of the inhabitants in Western Finnmark. It was possible to exchange some products like fish, wool and butter with Germans in order to get some difficult-to-obtain products. Germans who were billeted in private houses could share some food with owners of the house if they had friendly relationships. And good relationships were not rare here in Northern Norway. Norwegian children remembered German “bonbons” (sweets) for a long time.

People had no scruples stealing food from German warehouses. To steal from an enemy was considered to be a patriotic action and was often encouraged. One woman from Kvalsund told Marion Palmer about an episode when boys had stolen various foodstuffs like vegetables, bread and flour from Germans and taken them home. Their mother said that it was OK to steal from Germans⁶⁸. The Germans, of course, became alerted after several episodes had happened and one day started an investigation but were unable to find the thieves⁶⁹.

Boys placed themselves in extraordinary danger because they could have been shot by German guards. Kurt Holm from Hammerfest told about an episode when as an eight-year- old boy he was almost shot by a guard at a German storage facility

⁶⁷Anon. 1941c.

⁶⁸Palmer 2010, 33-34.

⁶⁹Ibid., 33.

in Tromsø where he was searching for food. It was only by good fortune that he was not injured⁷⁰.

Not all parents turned a blind eye to such thefts. John Mikkelsen from Havøysund received a beating from his mother after he and his friend stole German sausages because they put their lives at unnecessary risk⁷¹. It is also important to note that boys risked not only their lives but the good relations local inhabitants had with German authorities, too.

So those civilians who lived close to Germans during the war sometimes had better chances of obtaining extra food either legally, cooperating with Germans and putting their reputations as “good Norwegians” at risk, or illegally, putting themselves and their neighbours in great danger. Perhaps this did not increase the overall amount of food in the area, but at least it varied people’s diet.

6.5 “Black” market

Among other illegal ways of getting food was, of course, the “black” market. It is difficult to say how widespread it was to purchase foodstuffs illegally as those who had participated in such dealings tried to avoid publicity. In fact Axel Strøm had mentioned that he had difficulties while recruiting participants into his research of Norwegians’ diet during the war among inhabitants of Oslo because many were unwilling to put on the record where their food came from and how much it cost. The “black” market was flourishing during the years of German occupation⁷².

Authorities had organized a propaganda campaign against the “black” market in the media in order to erode public support of illegal traders. The local newspaper *Finnmark Folkeblad* had printed the following slogan on the front pages of several editions: “If there were no black marketeers, everybody would have bigger rations and better living conditions. Help the authorities to stop their scurvy actions. Report them to the police.”⁷³, but it did not help much.

Elsa Storvik remembers about an illegal meat market at a quay in Kvalsund: “... there was a hatch in a pier where people came and sold reindeer meat. They rowed under the pier, and those who stood on the pier pulled meat through the hatch”⁷⁴. Once an official wanted to bring a charge against Elsa's father because he was one of those people who bought meat illegally, but the case was never opened as Elsa's

⁷⁰Stenvold, Bogomolov and Mølmann 2012, 18.

⁷¹Mortensen 2005, 57.

⁷²Strøm 1948, 6 and 10.

⁷³Anon. 1944b.

⁷⁴Palmer 2010, 70.

father had reminded the official that the official himself was among people who purchased that meat, as well as other local members of Nasjonal Samling, and the Germans.

Mutual cover-up had surely contributed to the fact that there were few cases concerning illegal sale of food products. However, some trials did exist. In February 1944, three merchants from Hammerfest had confessed in local court that they bartered some 50 to 60 kg of illegally produced meat for rationed foodstuffs of sugar, flour, coffee-substitute and tobacco. One of them was acquitted while the two others were sentenced to 45 days of conditional imprisonment, a fine of NOK 400 and confiscation of the meat's value⁷⁵. According to the newspaper, this was the first such serious case in Hammerfest since the war started.

As we can see, there were several other opportunities to get some food besides purchasing it at the shop. The possibilities varied a lot depending on the geographical location. Generally town dwellers had fewer opportunities of getting extra food as cultivation of kitchen gardens involved more difficulties for them than for country dwellers. A pressure on the local market meant food prices were likely to be higher in towns. Residents of the only town in Western Finnmark could not pick berries and mushrooms near the town borders because of military restrictions, but they were still able to take a local boat to the neighbouring villages and pick berries there. Nevertheless distinctions between town and country were quite visible. As Ferdinand Fredriksen from Kvalsund recalled, people in Hammerfest lacked food, so they visited the countryside to put on some weight⁷⁶.

7 Conclusion

Norwegians had several opportunities to get food during the period of German occupation. The purchase of foodstuffs at grocery stores continued to be the main way of getting food during the war despite a limited assortment of goods and difficulties with deliveries of food products to remote areas. Other possibilities were to buy food from private people (both legally and illegally), grow some edible plants or keep animals, pick berries and mushrooms or get some food from the Germans. In general, food provisions became more decentralized during the war, as food production became less centralized.

⁷⁵Anon. 1944a.

⁷⁶Palmer 2010, 29.

Rationing of necessary products was introduced very early in order to provide equal access to difficult-to-obtain foodstuffs for all inhabitants. Authorities had favoured several groups of inhabitants like children, sick people, pregnant women and manual workers. These groups had access to extra food rations. Of all these groups, children were the most vulnerable, and thus received extra protection from the authorities. On paper children's rations provided enough calories and proteins, yet in reality it was far from being so. As for rations for the general public, they were not supposed to provide people with all required nutrients. People had to turn to alternative ways of getting food. So the problem of getting food was not solved by the introduction of a rationing system alone.

Further, the presence of rationing tickets did not necessarily mean that a person was able to purchase something with these tickets, as even rationed products were not always available in shops. The shortage of milk and meat was the most noticeable. Deliveries to Northern Norway were more irregular as the result of occupation and military activities. Food reserves were created during the war on both a local and regional level in order to secure food provisions. This secured provisions of potatoes to Western Finnmark, but only from around the middle of the war.

Local production of foodstuffs was blooming, while imported products like coffee or cocoa became extremely rare. More and more people had started growing potatoes and vegetables in kitchen gardens. Access to fish was good in the coastal communities of Western Finnmark during the whole period of German occupation. Animal husbandry was widespread in the whole of Finnmark, in coastal areas and in the inland, in the countryside and in towns. It provided essential support for the local population in periods with low fish catches. Lack of fodder was only partially a hindrance to the growth in animal population. New and exotic surrogates were invented in order to substitute the lacking food products.

There was an opportunity for those who lived close to Germans to exchange some products for food or simply to steal food from the occupants, which involved some risk. Another risky option was to purchase food products on the "black" market.

In general, people who lived in the countryside had better access to food products than town dwellers, as the food producers were nearer and locally produced food was much easier to get than imported food. We should also remember that life was difficult for most inhabitants of Finnmark during the pre-war years, too. So the war and rationing did not necessarily mean that the situation

became much worse than it was. The economic situation of many families improved during the war and hence (theoretically) the opportunity to get a better diet.

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Appendix 1. Norwegian food rations in 1941–1944

Types of products	General prescriptions (adults)	Special groups		
		Children	Sick and pregnant	Others ⁷⁷
Flour and bread, cereals	50 g per ticket (potato starch, coarse flour, pearl sago, peas, beans ⁷⁸ , rice, pasta, Japanese rice, puffed oats, corn flakes, shredded wheat and so on ⁷⁹); 28 tickets per week; 40 g per ticket (hard baking ⁸⁰), 65 g per ticket (soft baking); 28 per week; Week rations: 1120 g hard baking or 1820 g soft baking or 1400 g flour	High-grade flour, “barnemel” (“child flour”), semolina; extra rations for teenagers from the families without cows (“Særkort for ungdom”) of 75 g flour per day	Rationing cards for high-grade flour; Extra ration of up to 150 g high-grade flour (only for those who already have rationing cards for high-grade flour); extra ration of up to 350 g regular flour per week for blood givers (max 12 weeks) and 700 g per week for pregnant women	For manual workers (kroppsarbeidere) ⁸¹ : to 4 extra cards for bread and flour and/or up to 2 rationing cards for bread for travellers (“reisebrødkort”) per month (75 g flour per day to 225 g flour per day); women got 1 card less than men doing same work; special rations for teenagers (aged 12–20); Members of families of Norwegian volunteers to Waffen-SS could get their rations
Malt essence		450 g per month (for children of 1–6 months old, after prescription, only for artificial feeding)		
Sugar	1 ticket = 200 g, i.e. per week	200 g sugar spread (“sukkerpålegg”) per person for those who have “Særkort for ungdom” (per 22. period)	Extra ration of up to 30 g per day (by prescription)	
Syrup	400 g dark sugar syrup (“mørksirup”) per period (3.5 months?); stop of			

⁷⁷ Travellers who stayed for less than a month could get a “travel bread card” (“reisebrødkort”), a restaurant card for fat, a rationing card for sugar, and rationing card for coffee substitute. Those who stayed for a longer period of time could obtain general rationing cards.

⁷⁸Except canned peas and beans

⁷⁹Roasted grain is a coffee substitute or coffee additive so it could not be rationed as flour and bread.

⁸⁰Traditional cookies as “Sirupsnipper” and “peppernøtter” had to be considered as hard baking.

⁸¹Depended on how heavy the work was. There was a detailed list for all legal occupations.

		sales to private persons since July 1944			
	Cocoa	Not available for adults since rationing was introduced in mid-December 1940	Children (aged 1-12) : 1 ticket = ½ hg cocoa or 125 cooking chocolate or 100 g “sugar cocoa” (“sukkerkakao”) i.e. per month	Extra rations not allowed	
	Chocolate	Rationed since mid-November 1941; available from time to time; 100 g per extra ticket during the period January-February 1941		Not allowed	
	Coffee	Not available; rationed since mid-December 1940, completely stopped a year later		No	
	Coffee substitutes ⁸²	40 g per week (one rationing ticket)	Only for persons older than 10	Not allowed	Extra 20 g per week ⁸³ (one rationing ticket for 2 weeks)
	Tea and tea substitutes	45 g per ticket; rationing of tea since December 1940, sales of tea had completely stopped a year later		Not allowed	
Milk	Whole milk (rationed since 20. August 1941)	0.8 l to 1 l per day as at fall 1941; totally prohibited since December 1941; producers were allowed to use max ¾ l (later ½ l) per person per day	0.25 l to 0.75 l per day depending on age	Extra rations of up to 1 l per day (by prescription)	
	Skimmed milk (rationed since December 1941)	Up to 0.25 l per day (since December 1941)	0.25 l per day for teenagers (ages 16-19)		
	Milk powder or condensed milk	4 tickets per month (only in some municipalities); 1 ticket = ½ box milk powder or ½ box condensed milk			Buyer card for fishermen (“Fiskerkjøpekort”): 4 tickets, each = 1 box condensed milk or ½ box milk powder; for

⁸²Surrogate of corn, oak nuts and so on.

⁸³For fishermen, seamen, lumbermen and miners.

Getting food during the German occupation of Western Finnmark (1940–1944)

					fishermen and whalers
Dairy cream	Out of market since 1942		Not allowed		
Cheese	250 g to 1000 g cheese (depending on fatness and type) per rationing period (22. period, spring-summer 1944)		Not allowed		
Edible fats ⁸⁴ ; rationing had started in June 1940	1 ticket = 250 g butter or margarine or 200 g compound lard (kunstspisefett) or oil (spiseolje); 30 g butter or margarine or 24 g compound lard or oil per day; Cod liver oil produced for medical purposes ca. 110/115 g per special card	Special cards, except those whose parents produce milk	Extra ration of 25–50 g butter or margarine per day; special card for cod liver oil (medisintran)	Extra 5 g to 15 g ⁸⁵ of butter or margarine per day; cod liver oil (medisintran) for special groups of workers (those who work in the darkness, especially drivers)	
Meat and bacon	Not rationed, but production and sales were very limited ⁸⁶ ; canned meat and fish products were rationed		Extra ration of 25 g bacon per day	Extra ration of 300 g per week	
Eggs			Extra ration of 1 egg per day		
Vegetables	Cards for those who cannot grow or do not have enough ⁸⁷		Extra ration of up to 500 g per day; 100 g per day for pregnant and feeding		
Potatoes ⁸⁸	Cards only for those who have no opportunity to grow potatoes; reduced ration for those who grow not enough for themselves; 3 kg per			Up to 4 extra cards for those who have extra cards for flour and bread for heavy work or night work; extra cards for travellers who	

⁸⁴I.e. butter, margarine, emulsions of butter, margarine or its raw materials, vegetable oil and fat, processed tallow, compound lard, refined fish oil; but not lard or raw tallow.

⁸⁵Manual workers

⁸⁶Customers had to be registered as regular buyers at retailers and could not buy more meat than was enough to make one meal.

⁸⁷48 m² per member of household, 1 ticket = 2 m²

⁸⁸Except those households which had kitchen gardens with potatoes of size at least 200 m² per member of household. Those who had smaller gardens could obtain rationing cards for lacking amount of potatoes. Exception: those who lived in harsh climate conditions where yield cannot be guaranteed.

	ticket i.e. 3 kg per week			cannot take enough own potatoes with themselves; 3 kg per ticket
Fruits and fruit squash	Extra tickets on rationing cards for vegetables, only for those who do not have own fruits	Sometimes when available, for extra ticket		
Honey		250 g for Northern Norway (per week)	Not allowed	