

# Origin matters



SEA FROM  
FORWAY  
IN OD



# Table of contents

<b>Seafood from Norway</b>	4
<b>Norway</b>	6
A country defined by the sea	8
Sustainability is everything	9
Safe seafood	10
Committed to quality	11
<b>Norwegian fisheries</b>	12
<b>Norwegian aquaculture</b>	18
Norwegian salmon	21
From roe to market	22
<b>Species</b>	24
Salmonids	26
Whitefish	28
Cured products	32
Pelagic species	33
Prawns	35
Shellfish	36



—Origin matters

# Seafood from Norway

Norwegian Seafood is a high quality product because it comes from the pure and cold nature of Norway. Premium products are something we strive to ensure customers all over the world.

When you find seafood with the country of origin mark you are guaranteed that the seafood:

- Comes from the cold, clear waters of Norway
- Is responsibly managed by the Norwegian government
- Is handled by competent people

SEAFOOD  
FROM NORWAY



Look for this country of origin mark when buying seafood, and you will find the perfect choice for your best recipes.



# Norway – A country defined by the sea

The unique combination of nature, culture and management gives Norwegian seafood a world-class position in terms of quality, tradition and sustainability.



The sea has played an important role in our daily life for over a thousand years. Long fjords, small islands and minor inlets are perfect environment for fishing and aquaculture. These rich ocean resources have formed a solid foundation for vigorous local communities along the entire Norwegian coast.

Here in Norway, fishing and aquaculture aren't just an industry, it's a way of life. People have exploited the resources with respect and knowledge built up over generations. There is no doubt that we are a proud seafaring nation with deep respect for our cold and clear sea, the long coastline and the high mountain ranges.

This pride is reflected in the unique taste of the Norwegian seafood, that emerges from the clear, cold waters of Norway.

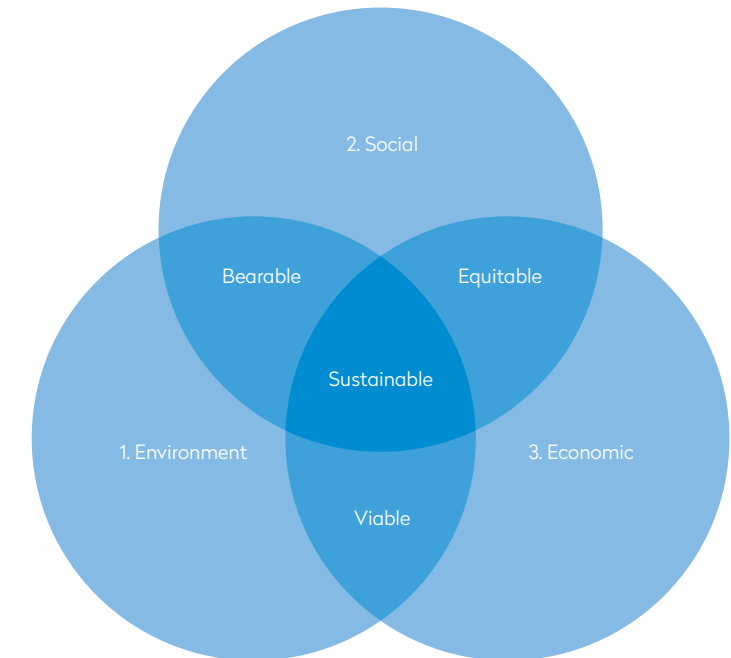
Norwegian seafood culture contributes to both good health and great cuisine. This is something also the world around us has discovered. Every day, more than 34 million meals of Norwegian seafood is served in more than 140 different countries across the globe.

The production of Norwegian seafood has evolved in terms of technology, experience and knowledge, but it has never lost a sense of respect for the environment, for the sea or for the people.





“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”



## These aren't our fish – We are just looking after them

**Did you know?** Norway has one of the largest research and development community for seafood in the world.

Because the sea is so important to us, we will always have a strong focus on it to ensure it will always maintain future generations. Therefore Norway is focused on sustainable management. The authorities, researches and the industry work closely together in order to make sure that the Norwegian fisheries and aquaculture are conducted within a sustainable framework. Because we are aware of the fact that whether it takes place on land or in the sea, all food production has an environmental impact. The UN World Commission on Environment and Development defined sustainability as:

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs”.

## Sustainability is everything

For many years, Norway has been one of the leading nations when it comes to developing a good fishery and aquaculture management, and work every day to improve this resource system.

All the biggest Norwegian fisheries are certified in accordance with worldwide recognized international environmental standards.

Norway includes three important dimensions in the pursuit of sustainable development:

1 Environment is a dimension of sustainability. Whether it is done on land or at sea, the production or harvesting of food has an environmental impact.

2 Sustainability has a social dimension that focuses on equality. The seafood industry is among the industries that contributes most to enabling people to live and work all over the country.

3 Sustainability also has an economic dimension in regard to profitability and predictability for those who work in the industry.





## Safe seafood – Of vital importance for Norway

**Did you know?** That Norway has its own parallel to EU's EFSA (European Food Safety Authority) called Norwegian Scientific Committee for Food Safety (VKM). Its role is to carry out independent risk assessments for the Norwegian Food Safety Authority for seafood in the world.

A transparent and reliable risk management system through co-operation – an aim to deliver only high-quality, safe products to the markets.

As the second largest seafood exporter in the world, food safety is at the top of Norway's agenda, and at the heart of all we do. The continued success of the Norwegian seafood industry, as well as Norway's economy, is dependent on meeting and international food-safety demands.

The Norwegian control regulations are fully harmonized with EU regulations and Norwegian companies comply with the regulations placed on hygiene and production rules for the EU. The Norwegian seafood safety system is based on mandatory HACCP programs and the Norwegian Food Safety Authority supervise that these programs are in compliance with regulations and guidelines.<sup>1</sup>

To meet the demand for information regarding food safety, Norway has taken the following approach:

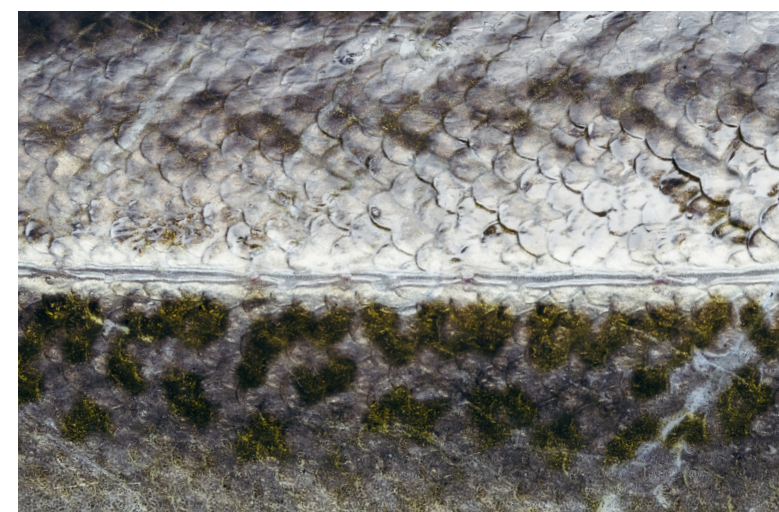
- 1 Develop a thorough system dedicated to ensure safety.
- 2 Have an open approach regarding all safety information in order to build trust.

With the Ministry of Trade, Industry and Fisheries and the Ministry of Health and Care Services at the top of the governing structure, the Norwegian Food Safety Authority, the National Institute of Nutrition and Seafood Research (NIFES), the Directorate of Fisheries and other (institutions all work together with the seafood industry in a system based on internal control in every link of the food chain, dedicated to ensure seafood safety. Each organization executes its own tasks and co-operates to create the surveillance system. This system leads to thorough risk management, ensures seafood safety and protects consumer interests.

In 2014 NIFES took over 11 000 tests of salmon and the results all confirm that salmon is safe and healthy to eat. The results are available for all to see.<sup>2</sup>

<sup>1</sup> HACCP (Hazard Analysis Critical Control Point): a systematic preventive approach to food safety from biological, chemical, and physical hazards in production processes that can cause the finished product to be unsafe, and designs measurements to reduce these risks to a safe level.

<sup>2</sup> [nifes.no/en/trygg-oppdrettsfisk](http://nifes.no/en/trygg-oppdrettsfisk)



## An uncompromising commitment to quality

The high quality and safety of food is ensured by:

- A safe marine environment.
- Quality management at every stage of the food chain.
- Interaction with consumers.
- International co-operation to share scientific research and experiences.

There has been a significant increase in the recognition of Norwegian Seafood over the last years. Its quality, nutritional value, freshness, taste, and other criteria have also been researched, and as a result, it has earned a good reputation for its taste and quality. Norwegian Seafood is recognized as a high-quality product that satisfies the consumers in taste as well as safety.



# Norwegian fisheries



Norwegian fisheries combine generations of hard earned fishing experience with the latest technology. This combination gives a high level of quality that shines through in the unique taste of the species from Norwegian fisheries.





No one can say for certain when the story of Norway's fisheries started, but we do know that it is a rich and hugely diversified history. Rock carvings in Northern Norway dating back to the early Stone Age show fishing of halibut from boats made of hide.

Leiv Eiriksson, the famous Viking, sailed with supplies of stockfish when he discovered America, and the first ship exporting fish to Brazil set sail with clipfish on board in 1692. The history is one thing, but there is so much more. Norwegian fisheries symbolize the future for many people, both in Norway and abroad.

Norwegian fishermen have easy access to large shoals of a great number of species. A fisherman can sail at

dawn and return the same day with seafood of the highest quality as fresh as it can be.

Our ultra modern fishing fleets have strong focus on quality. These vessels are supplied with equipment that allows the fish to be cooled to 0°C within a few minutes. The use of special freezing technologies enables the Norwegian fisheries business to work fast and efficiently as the vessels are unloaded in port. Some vessels stay at sea for weeks at a time where they produce and freeze the fish to below -20°C within hours.



The history of Norwegian fisheries shows that different dimensions of sustainability have at various times faced challenges, but also how the authorities, researchers and the industry have worked to meet these challenges:

- Initiatives to counter unlimited fishing have been very important for Norway in order to ensure environmental sustainability. The authorities grant concessions to all who are involved in the industry, and each species is subject to comprehensive and detailed quota regulations.
- The quotas are determined as a result of international negotiations. This means that the most critical management decision—the amount of fish that can be harvested from a given stock—is an internationally determined premise for a domestic decision-making process. The quotas are established based on national and international studies and research.
- Throughout the entire process— from catching to processing, storing and exporting—the quality of the fish is monitored by the Directorate of Fisheries in Norway.
- Norway has a ban on discard of fish, both because it is a waste of resources and also because such fish are not registered in the statistics, making it more difficult for researchers to calculate the size of stocks. Norway is the world leader in adopting measures to reduce discards of fish.
- There is strict enforcement of rules regarding fishing gear.





# Norwegian aquaculture



Norway's deep, protected fjords give us waters with just the right current and temperature – a perfect aquaculture environment.

Norwegian seafood is farmed in the cold, clear waters where it grows slowly and therefore gains a pure and fresh taste. Natural conditions combined by competent people contribute to give Norwegian farmed seafood its fantastic and distinctive character. This also ensures that the quality will be consistently high every time a new consignment arrives from Norway.

The aquaculture industry behind aquaculture also has a long history as it embraces businesses from the cornerstone of many Norwegian coastal communities. In several of these communities, aquaculture has created vital jobs for many people that all work hard to produce healthy and delicious products. Aquaculture is a major export industry and very important for Norway.

Norway is in the forefront of innovation and development in this area, and we will provide the conditions for this to continue in the future. →





## Norwegian salmon

Norwegian Salmon is raised in the cold, clear waters of Norway. Not only is Norwegian Salmon's delicious taste popular with all ages, it's packed with proteins, Omega-3, vitamins and minerals, making it a highly nutritious choice.

Salmon is the dominant and most important species in Norwegian aquaculture. Norway is the world's largest producer of Atlantic salmon, and it accounts for about 70 % of Norwegian seafood exports. Each day 14 million meals of Norwegian Salmon are served worldwide and Norway exports salmon to more than 100 countries around the world.

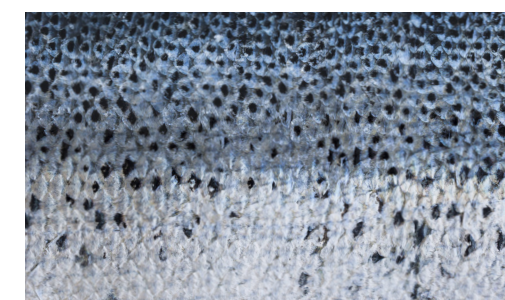
Salmon farming is a strictly controlled food production and there are stringent quality standards at all levels. The industry has committed themselves to several initiatives to reinforce efforts to combat challenges within aquaculture. There are precautions against salmon louse, measures to deal with escape, measures to secure fish health as well as the entire welfare of the fish. Research, development and innovation are central in the work to further develop the entire value chain in Norwegian aquaculture.

Norwegian aquaculture operates in the natural environment that we all share, and that imposes obligations on everyone concerned. The industry and the public authorities are working together to manage aquaculture within a sustainable framework.

Within the Norwegian aquaculture you find salmon, trout, halibut, shellfish and cod.

Aquaculture makes it possible to offer seafood independently of the seasonal variations that limit traditional fisheries. In addition, it is one of Norway's most important responses to the challenge facing the world today. To produce sufficient, healthy food for a rapidly growing population. Of course within the framework of what the environment can tolerate.

- All aquaculture businesses in Norway must be licensed by the authorities to operate a fish/seafood farm.
- A typical fish farm consists of between six and ten cages, holding 3000 to 5000 tonnes of fish. The cage consists of a buoyancy element on the surface and a net bag in which the fish swim.
- A typical net bag is between 20 to 50 meters deep. The diameter of a typical net cage is around 50 metres.
- The cage consists of 2,5 % fish and 97,5 % water







## From roe to market

### Roe

The salmon production process within the aquaculture industry starts in an incubator. As is the case with wild salmon, the fish roe is fertilised in freshwater. After about 60 days in cold water at a temperature of eight degrees Celsius, the salmon fry hatch.



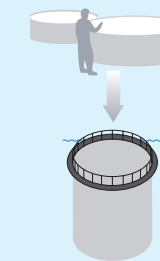
### Fry

After they hatch, the salmon fry have a yolk sac attached to their stomach, from which they draw nourishment. At this stage of their development, they are called "yolk-sac fry". The fry can be fed and transferred to freshwater tanks four to six weeks after hatching.



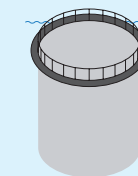
### Smolt

After 10 to 16 months, the salmon will weigh between 60 and 100g and can be moved from freshwater to salt water. At this stage, they lose the parr marks on their skin, as they become dark on top and silver on the bottom. They also undergo organic changes and can now filter salt water out through their gills and kidneys. This process is called "smoltification" and is necessary if salmon are to survive in the sea.



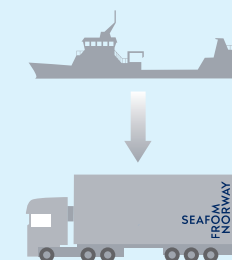
### Salmon

The salmon are kept in net pens in fjords. Depending on the target weight of the salmon, they will be left in the pens for between 14 and 22 months. Smaller salmon weigh between 3 and 4 kg, whilst larger fish can reach up to 6 kg. Norwegian law stipulates that only sterile salmon can be farmed in fjords.



### Finished product

Once the salmon are ready for slaughter, they are carefully pumped from the net pens into a tank on a wellboat and transported to the production site. The top priority is ensuring that the journey is stress-free for the salmon in the interests of their welfare and to avoid any compromise on quality. When the fish reach the production site, they are stunned, slaughtered, gutted and washed, before being sorted by size and quality and put on ice in cooling cases. The cold chain must not be broken and the temperature should never drop below 4 degrees Celsius. Around 3 hours after the salmon are taken out of water, they will already be making their way to chillers within Norway or in one of the 100 countries that import Norwegian salmon.



4–6 weeks



FRESH WATER



10–16 months



SALT WATER

14–22 months





# Species

Get to know  
our species







## Atlantic salmon

Farmed salmon from Norway is enjoyed in more than 100 countries, and you find it on sushi menus all over the world. In fact, Norwegian salmon was the first type of salmon to be used in sushi dishes. Salmon is also known for its versatility and can easily be included in all kinds of cuisines.

Norway pioneered the development of salmon farming. Since the breakthrough of ocean based farming in the 1970s, Norway has kept its position as the world's leading producer of farmed Atlantic salmon. Since 1998, Norway has more than tripled its production of salmon, to around 1 million ton. Today, 14 million meals made with farmed Norwegian salmon are served every day.

The popularity of farmed salmon from Norway can be explained by the steady supply and the controlled food production. Unlike many other types of fish and food items, fresh salmon is available all year round. Seafood from Norway also has a good reputation for having safe food regulations and strict quality requirements. Norwegian aquaculture is regulated by comprehensive guidelines that ensure that the fish is of the highest quality and is safe to eat.

### Ocean farmed

Farmed salmon from Norway start life in freshwater, with small yolk fry hatching from the eggs. After 8 to 18 months, the fry have grown into smolt of around 100g and are ready to be moved to seawater. The smolt are usually set in large cages in the sea at sites where there is good water flow and favourable environmental conditions. In the sea the salmon grow from 100 grams to a weight of around 4–6 kilos, when it is ready to be slaughtered. This takes 14 to 22 months, depending on factors like the water temperature and the fish feed used.

Knowledge is key to good fish health, and there is a lot of research and development carried out about fish welfare, management in the fishing industry and development of technical solutions.

### Products

Norwegian salmon is sold in the following forms:

- Fresh or frozen fillets
- Fresh or frozen whole fish
- Smoked

Farmed salmon from Norway is sold all year round.

### Size

4–6 kilos

### Area

Farmed salmon is raised in cages in the sea along the Norwegian coast

### Diet

Pellets

(<http://laksefakta.no/index.php/Norsk-havbruk/Dette-spiser-laksen>)

### Other names

- Latin: *Salmo salar*
- English: Atlantic salmon
- French: Saumon atlantique
- German: Lachs

### Nutrition

Atlantic salmon is especially rich in:

- Protein, building and maintaining every cell in the body.
- Marine omega-3 fatty acids that prevent and reduce the development of cardiovascular diseases, and which are important building blocks in the brain.
- Vitamin D, which is necessary to get the right balance of calcium in the body to maintain and strengthen the bones.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

**Nutritional value in 100g raw farmed Salmon (edible part)**  
Energy: 932kJ / 224kcal

### Nutrients

Protein:	20g
Fat:	16g
Saturated fatty acids:	3g
Trans fatty acids:	0g
Monounsaturated fatty acids:	5,9g
Polyunsaturated fatty acids:	5g
Cholesterol:	80mg
Carbohydrates, in total:	0g

### Vitamins

Vitamin A:	26RAE
Vitamin D:	10µg
Riboflavin:	0,11mg
Folate:	7µg
Vitamin B12:	3,5µg

### Minerals

Iron:	0,3mg
Selenium:	30µg

Source: Matvaretabellen (<http://www.matvaretabellen.no/fish-and-shellfish-g4/salmon-farmed-raw-04.220>)

Havforskningsinstituttet ([http://www.imr.no/temasider/fisk/laks/laks\\_i\\_oppdrett/nb-no](http://www.imr.no/temasider/fisk/laks/laks_i_oppdrett/nb-no))

Laksefakta (<http://laksefakta.no/>)

Salmon academy (link)



## Fjord Trout

Norwegian trout, branded Fjord Trout, is an ocean farmed trout. It is raised in the pure and cold Norwegian fjords where seawater meets fresh meltwater from the glaciers and snow. Fjord Trout is a premium niche product renowned for its exquisite quality.

There are several varieties of trout. Freshwater trout and sea trout are referred to as common trout, and are related to Atlantic salmon. The trout farmed in Norway is rainbow trout, which was brought to Norway from North America in the late 19th century.

It is well known for its superb quality and has become a favourite amongst chefs all over the world. Fjord Trout is more sensitive to high temperatures than Norwegian salmon and is therefore perfect for raw, marinated and lightly cooked dishes.

The skin of the Fjord Trout is similar to salmon, with a lustrous and silvery colour. Fjord Trout meat has a deep red-orange colour with white marbling that give the fillets a luxurious feel. The meat has a healthy sheen and is firm, yet tender and mellow. Fjord Trout has a remarkably rich flavour with a pure aftertaste. The taste resembles shellfish and crab and is often more complex and delicate than other types of red fish.

### Ocean farmed

The success story of Norwegian fish farming started with Fjord Trout. The pioneering work established by the first Fjord Trout farmers was crucial for the development of the aquaculture industry as we know it.

Today, Fjord Trout is a niche product with a low production level—around 1/20 of the total production of salmon.

Fjord Trout is farmed in the pure, cold Norwegian fjords where they grow to a weight of 2–5 kilos, which is generally a bit smaller than the salmon.

To ensure consistent, high quality, the Norwegian Seafood Council and the Fjord Trout industry have developed a quality standard for Norwegian farmed trout. This Quality Standard has strict criteria for how to farm, pack and transport Fjord Trout. It is registered and approved in accordance with ISO norms, Standards Norway (standard n°NS 9412:2010).

### Products

Fjord Trout is sold in the following fresh or frozen form:

- slices
- fillets
- as whole fish

### Size

2–5 kilos

### Area

Fjord Trout is kept in cages in the fjords along the coast of Norway.

### Diet

Pellets

### Other names

- Latin: *Oncorhynchus mykiss*
- English: Rainbow trout
- French: Truite arc-en-ciel
- German: Regenbogenforelle

### Nutrition

Trout is especially rich in:

- Protein that builds and maintains every cell in the body.
- Marine omega-3 fatty acids that prevent and reduce the development of cardiovascular diseases, and which are important building blocks in the brain.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

**Nutritional value in 100g raw trout (edible part)**  
Energy: 693kJ / 166kcal

### Nutrients

Protein:	19g
Fat:	10g
Saturated fatty acids:	2g
Trans fatty acids:	0g
Monounsaturated fatty acids:	3,5g
Polyunsaturated fatty acids:	3,2mg
Cholesterol:	73mg
Carbohydrates, in total:	0g

### Vitamins

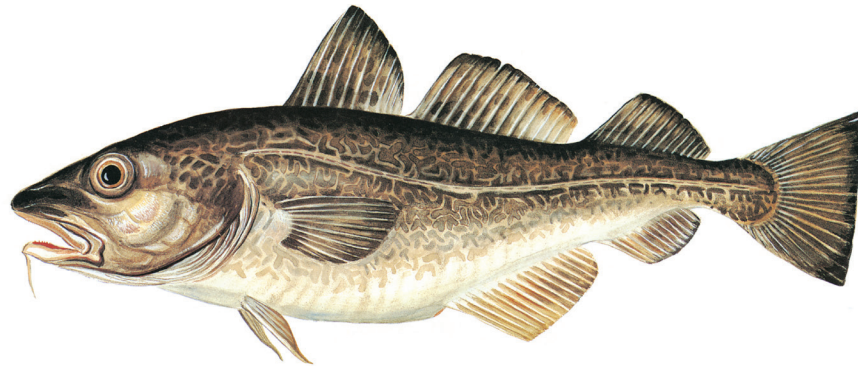
Vitamin A:	32RAE
Vitamin D:	16,9µg
Riboflavin:	0,13mg
Folate:	5µg
Vitamin B12:	4,8µg

### Minerals

Iron:	0,3mg
Selenium:	30µg

Source: Matvaretabellen <http://www.matvaretabellen.no/fish-and-shellfish-g4/trout-farmed-raw-04.256>





## Cod

Each winter, Norwegian cod migrates to spawn along the coast. The cod taking this journey is called Skrei, and this is also the name used commercially to indicate its outstanding quality. The migration contributes to the fish's distinctive firm, lean and tender flesh, giving it a superior taste and a wonderful flaky texture.

Norway has the largest cod stock in the world, and cod is one of the most common and economically important species for Norwegian fisheries.

Cod is characterized by its long body, large head and distinctive chin barbells; a kind of beard used to search for food. It is a benthic fish (meaning that it lives near the bottom of the ocean), although larger cod also live in open waters.

In Norway there are two main types of cod: The stationary coastal cod that lives at the bottom of the sea in shallow waters along the coast, and the migratory northeast Arctic cod that matures in the Barents Sea and appears at the Norwegian coast to spawn—this is the type the locals call Skrei.

Over 90% of the Norwegian catch comes from the northeast Arctic cod stock, which grows up in the cold, clear waters of the Barents Sea. The cod can live for up to 40 years.

### Wild catch

Cod fishing takes place all year around, but peaks from January to April when the cod is spawning. The main area for the cod to spawn is in Lofoten and Vesterålen. It is caught using various methods including bottom trawl, Danish seine, long line, gill net, fish pots and hand line. Cod is mainly wild catch, but it is also farmed on a small scale.

### Products

Cod is sold in the following fresh or frozen form:

- Slices
- Fillets
- As whole fish
- Dried
- Salted

### Maximum size

Up to 169 cm and 55 kg

### Area

Norway's stocks of cod can be found along the Norwegian coast and in the Barents Sea.

### Diet

Fish and crustaceans

### Other names

- Latin: *Gadus morhua*
- English: Cod
- French: Cabillaud, Morue
- German: Dorsch, Kabeljau

### Nutrition

Cod is a lean fish and especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Vitamin B12, which is important for the body to produce new cells, including red blood cells. Vitamin B12 can contribute to preventing anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

### Nutritional value in 100 g farmed raw cod (edible part)

Energy: 358 kJ / 84 kcal

### Nutrients

Protein:	20 g
Fat:	0,5 g
Saturated fatty acids:	0,1 g
Trans fatty acids:	0 g
Monounsaturated fatty acids:	0 g
Polyunsaturated fatty acids:	0,2 g
Cholesterol:	82 mg
Carbohydrates, in total:	0 g

### Vitamins

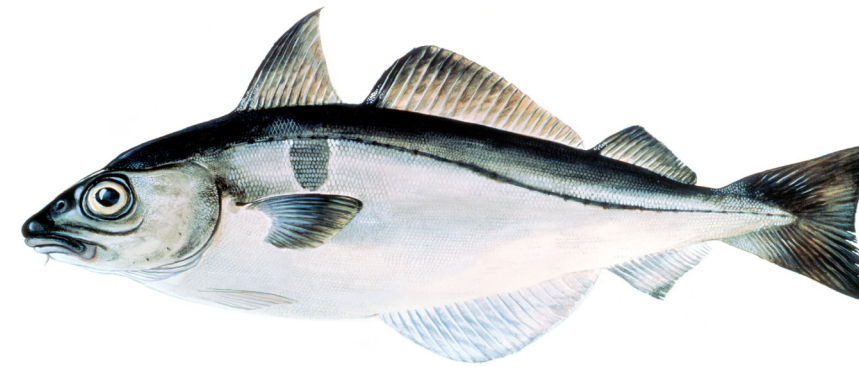
Vitamin A:	2 RAE
Vitamin D:	0,7 µg
Riboflavin:	0,09 mg
Folate:	12 µg
Vitamin B12:	1 µg

### Minerals

Iron:	0,2 mg
Selenium:	30 µg

Source: Matvaretabellen (<http://www.matvaretabellen.no/fish-and-shellfish-g4/cod-farmed-raw-04.326>)

Reference: Havforskningsinstituttet ([http://www.imr.no/temasider/fisk/torsk/nordostarktisk\\_torsk\\_skrei/nb-no](http://www.imr.no/temasider/fisk/torsk/nordostarktisk_torsk_skrei/nb-no))



## Haddock

Haddock belongs to the cod family and is easily recognized by the dark spot on its side. In Norway, it is often used to make traditional fish cakes—the delicate, lean meat holds together well, which makes it particularly suitable for minced fish dishes. It is also one of the most common species for fish and chips.

Haddock is a benthic fish found at depths between 40 and 300 metres, and it thrives in flat areas with sand, clay or gravel beds. There are several stocks of haddock; one in the Barents Sea; along the west coast of the United States north to Newfoundland; in the east from Portugal to Iceland, in Skagerrak; and in the North Sea.

Juvenile haddock in the Barents Sea are relatively stationary, while larger adult fish migrate far and wide. When they are 8–11 centimetres in size, the fish drift with the current towards the seabed where they settle. Haddock matures between 4–7 years of age, when they are 40 to 60 centimetres long. They spawn from

March to June, along the western edge of Tromsøflaket, part of the coastal banks of Northern Norway. The haddock has a lifespan of approximately 20 years.

### Wild catch

The fishing of haddock takes place all year around. The most important fishing equipment is fishing line, nets, Danish seine, trawl nets and long line. In the summertime, pelagic long lines are used off the coast of eastern Finnmark.

### Products

Haddock is sold in the following forms:

- Fresh or frozen fillets
- As whole fish
- Salted
- Smoked

### Maximum size

Up to 1,1 metres and 14 kg

### Area

Norway's stock of Haddock can be found along the Norwegian coast, from Stad to Svalbard.

### Diet

Benthos (small animals and plants living at the bottom of the sea), fish and roe from herring and capelin

### Other names

- Latin: *Melanogrammus aeglefinus*
- English: Haddock
- French: Églefin
- German: Schellfish

### Nutrition

Haddock is especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin B12, which is important for the body in producing new cells, including red blood cells. Vitamin B12 can contribute to preventing anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at NIFES ([www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)).

### Nutritional value in 100 g raw haddock (edible part)

Energy: 290 kJ / 68 kcal

### Nutrients

Protein:	16,6 g
Fat:	0,2 g
Saturated fatty acids:	0 g
Trans fatty acids:	0 g
Monounsaturated fatty acids:	0 g
Polyunsaturated fatty acids:	0,1 g
Cholesterol:	46 mg
Carbohydrates, in total:	0 g

### Vitamins

Vitamin A:	2 RAE
Vitamin D:	0,5 µg
Riboflavin:	0,11 mg
Folate:	9 µg
Vitamin B12:	2 µg

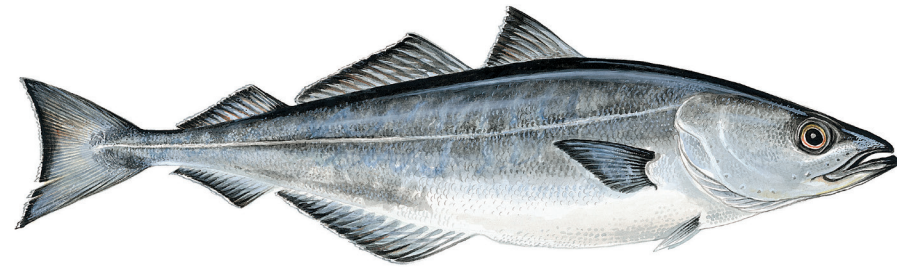
### Minerals

Iron:	0,1 mg
Selenium:	30 µg

Source: Matvaretabellen (<http://www.matvaretabellen.no/fish-and-shellfish-g4/haddock-raw-04.110>)

Havforskningsinstituttet ([http://www.imr.no/temasider/fisk/hyse/nordostarktisk\\_hyse/nb-no](http://www.imr.no/temasider/fisk/hyse/nordostarktisk_hyse/nb-no))





## Northeast Arctic saithe

Saithe has a more characteristic taste than most white fish species. Its distinctive flavour goes well with spicy dishes. Saithe meat also has a firm texture making it well suited to frying.

Saithe is a codfish that can be found both near the surface and on the seabed down to a depth of 300 metres. It is a shoaling fish that may gather in large numbers where there is plenty of food.

Northeast Arctic saithe becomes sexually mature at the age of 5–6 years and spawns in winter along the Norwegian coast, from Lofoten to the North Sea. The spawning period peaks in February, after which the young drift passively northwards with the currents. Small saithe appear in southern and western Norway during spring, and by

the coast of Finnmark as late as August. They migrate a long way from the areas where they feed and grow, and can live up to 30 years.

### Wild catch

The fishing of saithe takes place all year round along the Norwegian coast. Common equipment is bottom trawl, purse seine, gill net, Danish seine and hand line.

### Products

Saithe is sold in the following forms:

- Fresh or frozen fillets
- Whole fish
- Clipfish/dried fish

### Maximum size

Up to 1.3 metres and 20 kilos

### Area

Norway's stock of Saithe can be found all along the Norwegian coast from Stad to the Kola Peninsula

### Diet

Copepods, krill and other pelagic crustaceans; herring, sprat, blue whiting, juvenile haddock and Norway pout

### Other names

- Latin: *Pollachius virens*
- English: Saithe/Coalfish
- French: Lieu noir
- German: Köhler/Seelachs

### Nutrition

Saithe is especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Vitamin B12, which is important for the body in producing new cells, including red blood cells. Vitamin B12 can help to prevent anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

### Nutritional value in 100 g raw saithe (edible part)

Energy: 292 kJ / 69 kcal

### Nutrients

Protein:	16,5g
Fat:	0,3g
Saturated fatty acids:	0g
Trans fatty acids:	0g
Monounsaturated fatty acids:	0,1g
Polyunsaturated fatty acids:	0,1g
Cholesterol:	49mg
Carbohydrates, in total:	0g

### Vitamins

Vitamin A:	2RAE
Vitamin D:	0,8µg
Riboflavin:	0,20mg
Folate:	12µg
Vitamin B12:	4µg

### Minerals

Iron:	0,1mg
Selenium:	30µg

Source: Matvaretabellen (<http://www.matvaretabellen.no/fish-and-shellfish-g4/saithe-raw-04.029>)

Havforskningsinstituttet ([http://www.imr.no/temasider/fisk/sei/nordostarktisk\\_sei/en](http://www.imr.no/temasider/fisk/sei/nordostarktisk_sei/en))



## Atlantic halibut

Norwegian halibut is both a wild and an ocean farmed species in Norway. Its delicate white meat has a firm, juicy texture. It is the perfect choice for special occasions as it goes well with a variety of ingredients and cooking styles, making it easy to create a quality meal that can be enjoyed by many people.

### Wild halibut

Atlantic halibut is a large flatfish found on both sides of the North Atlantic Ocean. Younger fish live in relatively shallow water, while older fish can be found as deep as 2000 metres. Spawning is between December and May, and females can lay as many as 3,5 million eggs in deep pits on the fishing banks along the coast and in the fjords. It takes 18 months to reach maturity. The Atlantic halibut hunts for fish just a few metres above the seabed.

### Ocean Farmed

Atlantic halibut is vulnerable to overfishing as it grows slowly, matures late and is territorial. To manage halibut stocks for long-term sustainability, halibut has been established as a farmed species. Halibut commands a relatively high market price, so fish farmers are focused on ensuring that they produce a premium product. Farmed halibut begin life in special

in-door stock plants, a protected seawater environment, which prepares the halibut for relocation when they have reached approximately 2 kg. Then they are moved to selected fjords, where they mature in open sea net or landbased pens, and are reared on a special nutrition-rich diet, which ensures high quality roe. The living areas are expanded as the fish grow in size to 6 kg, at which time they are considered to be ready for harvesting.

### Wild catch

Halibut fishing uses net, trawl, Danish seine and other fixed equipment. Fishing is prohibited between 20 December and 31 March. The rest of the year halibut is considered to be in season.

### Products

Atlantic Halibut is sold in the following fresh or frozen form:

- Slices
- Fillets
- As a whole fish

### Maximum size

Wild catch: Wild female halibut can weigh as much as 200 kg.

Ocean farmed: Farmed halibut is usually harvested when it attains a weight of 6–7 kg.

### Area

Wild catch: Norway's stock of Atlantic halibut can be found along most of Norway's coastline and in the fjords.

Ocean farmed: Farmed halibut reach maturity in the cold, clear deep fjords of northern Norway.

### Diet

Wild catch: A predatory species that eats bottom fish such as tusk, cod, sculpin and haddock, and pelagic species like herring, capelin, and squid.

Ocean farmed: Farmed halibut are reared on a nutrition rich diet of live processed seafood

### Other names

- Latin: *Hippoglossus hippoglossus*
- English: Atlantic halibut
- French: Flétan de l'Atlantique
- German: Heilbutt

### Nutrition

Atlantic halibut is especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin D, which is necessary to balance calcium in the body, which maintain and strengthen the bones.
- Vitamin B12, which is important for the body in producing new cells, including red blood cells. Vitamin B12 can contribute to prevent anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical pro-cesses in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

### Nutritional value in 100 g raw Atlantic halibut (edible part)

Energy: 515 kJ/123 kcal

### Nutrients

Protein:	17g
Fat:	6,1g
Saturated fatty acids:	1g
Trans fatty acids:	0g
Monounsaturated fatty acids:	3,1g
Polyunsaturated fatty acids:	1,2g
Cholesterol:	50mg
Carbohydrates, in total:	0g

### Vitamins

Vitamin A:	17 RAE
Vitamin D:	9,7µg
Riboflavin:	0,05mg
Folate:	7µg
Vitamin B12:	0,7µg

### Minerals

Iron:	0,2mg
Selenium:	60µg

Source: Matvaretabellen <http://www.matvaretabellen.no/fish-and-shellfish-g4/halibut-atlantic-raw-04.014>

Havforskningsinstituttet (<http://www.imr.no/temasider/fisk/kveite/kveite/nb-no>)





## Cured products

Saltfish, Clipfish and Stockfish are cured products with a culinary history to tell. Cured products are produced based on traditional methods of processing and preserving, making each variety unique in taste and texture.

Cured products is a generic term for salted, salted and dried, and dried products. Saltfish, Clipfish and Stockfish all fall into this category. The methods used conserve the fish by removing water while still preserving all the nutrients and prolonging its premium quality.

Driven by the strong traditions and natural conditions found along the Norwegian coastline, our fishermen have passed down this knowledge through generations, ensuring that only top-quality products emerge from our cold, clear waters.

The different products are sorted according to quality and size, giving a wide assortment of ready products to suit your own needs. All cured products can be bought dry and then be soaked at home, or as desalted products that are ready to be cooked. With their distinctive flavour and texture, cured products lend them-

selves to countless cooking possibilities. Perfect for braising, stewing, roasting, frying, grilling – the opportunity to create new food experiences is unlimited.

Saltfish, Clipfish and Stockfish from Norway have been appreciated for generations many places in the world, and contain important nutrients as well as having valuable health benefits.

For instance, Norway has been exporting Stockfish to Italy and Brazil since the 15th and 16th century. All three products can be made from either cod, saithe, ling, tusk or haddock – choose your own favourite.

**The difference between the products are** Saltfish is salted and matured for 10–20 days, depending on the method used. The salt preserves the fish and gives it its valued taste and texture. After desalting, the fish is ready to be cooked, assuring a perfect result.

Clipfish is drysalted and matured for about 20–25 days, then dried for approximately two to four days, which gives it a distinct flavour. The dried fish contains 47% water with all its nutrients preserved inside. It can

then be kept for several months in chilled conditions until it is ready to be desalted and soaked in the kitchen.

Stockfish is a product of nature, demanding first-class raw materials and the optimal weather conditions only found in Northern Norway. After being caught and cleaned, the fish is immediately hung outside on wooden racks to dry for about 3 months, then matured for 4–12 months. The perfected, finished product is achieved by a delicate balance of wind, rain, sun and a temperature just above 0°C.



## Mackerel

Mackerel from Norway is considered a delicacy in many parts of the world. It is a lively fish with juicy meat that is a great source of omega-3.

Mackerel is a fast, pelagic fish – meaning it lives in the open waters being neither close to the bottom nor near the shore. It is found in the northeast Atlantic Ocean, from the northwestern part of Africa to the Barents Sea, and westwards from the Norwegian Sea to Iceland and Jan Mayen. Mackerel prefers relatively warm waters with a temperature over 6 degrees.

In European waters, it is managed as one stock – northeast Atlantic mackerel, which is divided into three spawning groups: North Sea mackerel, which spawns in the North Sea and Skagerrak (May to July); western mackerel, which spawns west of Ireland and the British Isles (March to July); and southern mackerel, which spawns off the coast of Spain and Portugal (February to May). The fish spawn in the surface layers of the sea, and the larvae grow to 20 centimetre in a few months.

The scope of the spawning stock is calculated by their annual egg production, measured in international, scientific surveys throughout the spawning season (February to July). During this time, the numbers of eggs produced by individual females are also measured.

After spawning, the western and southern mackerel migrate to the Norwegian Sea, and later to the North Sea and Skagerrak where they mix with the North Sea mackerel. The mackerel does not have a swim bladder and has to swim constantly in order not to sink. It can live up to 25 years.

### Wild catch

The premium catch period is September to November when the Mackerel swims from the feeding areas i. The Norwegian Ocean and back to the spawning areas. This is when the fat content is the highest, making the mackerel especially tasty and packed with healthy omega-3 and EPA/DHA fatty acids. This explains the international popularity of Norwegian mackerel, which is caught when the fish is of the highest quality.

Norway use mainly purse sein when fishing for Mackerel. This distinguishes Norway from other exporters and contributes to the high quality of Mackerel from Norway. Trolling line is also used along the coast and pelagic trawl at sea.

### Products

Mackerel is sold in the following forms:

- Fresh and frozen fillets
- Whole fish
- Smoked
- Fanned

### Maximum size

65 cm and 3.5 kg, usually not larger than 1 kg.

### Area

Norway's stock of Mackerel can be found in the North Sea and sometimes in the north of Norway

### Diet

Plankton, fish larvae and small fish

### Other names

- Latin: *Scomber scombrus*
- English: Mackerel
- French: Maquereau
- German: Makrele

### Nutrition

Mackerel is especially rich in:

- Protein that builds and maintains every cell in the body.
- Marine omega-3 fatty acids that prevent and reduce the development of cardiovascular diseases, and are important building blocks in the brain.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

### Nutritional value in 100 g raw mackerel from May – June (edible part)

Energy: 516 kJ / 123 kcal

### Nutrients

Protein:	18,6 g
Fat:	5,4 g
Saturated fatty acids:	1,2 g
Trans fatty acids:	0 g
Monounsaturated fatty acids:	2,2 g
Polyunsaturated fatty acids:	1,3 g
Cholesterol:	68 mg
Carbohydrates, in total:	0 g

### Vitamins

Vitamin A:	14 RAE
Vitamin D:	6 µg
Riboflavin:	0,36 mg
Folate:	1 µg
Vitamin B12:	12 µg

### Minerals

Iron:	0,9 mg
Selenium:	30 µg

Source: Matvaretabellen (<http://www.matvaretabellen.no/fish-and-shellfish-g4/mackerel-may-june-raw-04.022>).

Havforskningsinstituttet (<http://www.imr.no/temasider/fisk/makrell/makrell/nb-no/temasider/fisk/kveite/kveite/nb-no>).





# Herring

Herring from Norway is world-famous for its quality and beautiful silvery colour. The cold and clear water in the north means slow growth and perfect tasting herring.

Herring is a pelagic fish that lives in large shoals and migrates along the coast and out to sea, down to depths of 200 metres. There are two main populations of herring: Atlantic herring and Pacific herring. They are categorized according to where and when they spawn, their size, their growth and how they migrate.

The Atlantic herring is the largest population and the two breeds are Norwegian spring-spawning herring and the North Sea herring. The Norwegian spring spawning herring spawns in February and March, at the bottom of the sea along the coast of Norway. The eggs hatch after about 3 weeks and the larvae drift with the current northwards into the Barents Sea. After 3–4 years, the herring leaves the Barents Sea and migrates southward to join the spawning stock. Herring is itself an important prey for cod, saithe, sea birds and

whales, and large numbers of killer whales follow the herring during migration.

## Wild catch

The premium catch period of the North Sea herring is during summer, when the fat content can reach a level as high as 25%. The fat content of Norwegian spring spawning herring varies throughout the year, but it is at its highest in the autumn. The herring can live up to 25 years. Common equipment used is purse seine, pelagic trawl and net.

## Products

Herring is sold in the following forms:

- Frozen fillets and flaps
- Whole frozen fish

## Size

Norwegian herring are graded and sold by size. The most common size categories are: under 200 g, 200–300 g, 250+g, 300+g, 350+g.

## Maximum size

Norwegian spring-spawning herring, up to 40 cm and 500 g.  
North Sea herring, up to 35 cm and 450 g.

## Area

Norway's population of Herring is found along the Norwegian coast in the North Sea and in the northeast Atlantic.

## Diet

Plankton

## Other names

- Latin: *Clupea harengus*
- English: Herring
- French: Hareng
- German: Hering

## Nutrition

Herring is especially rich in:

- Protein that builds and maintains every cell in the body.
- Marine omega-3 fatty acids that prevent and reduce the development of cardiovascular diseases, and are important building blocks in the brain.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

**Nutritional value in 100 g raw herring winter (edible part)**  
Energy: 776 kJ / 187 kcal

## Nutrients

Protein:	15,2 g
Fat:	14 g
Saturated fatty acids:	2,9 g
Trans fatty acids:	0 g
Monounsaturated fatty acids:	5,9 g
Polyunsaturated fatty acids:	3,3 g
Cholesterol:	68 mg
Carbohydrates, in total:	0 mg

## Vitamins

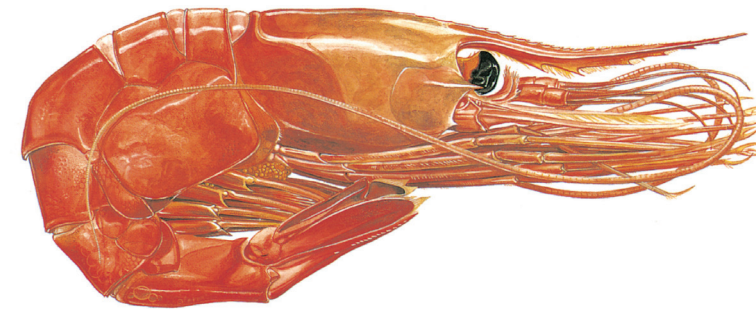
Vitamin A:	6RAE
Vitamin D:	11,5 µg
Riboflavin:	0,30 mg
Folate:	11 µg
Vitamin B12:	12 µg

## Minerals

Iron:	1 mg
Selenium:	50 µg

Source: Matvaretabellen (<http://www.matvaretabellen.no/fish-and-shellfish-g4/herring-winter-raw-04.032>)

Havforskningsinstituttet ([http://www.imr.no/temasider/fisk/sild/norsk\\_vargytende\\_sild/nn-no](http://www.imr.no/temasider/fisk/sild/norsk_vargytende_sild/nn-no))



# Prawns

Norwegian Prawns grow up in cold clear water. They have a firm texture and a light, pink colour. Prawns are considered a delicacy and a favorite among consumers. The fresh, sweet and slightly salty taste goes well with a wide range of hot and cold dishes.

There are 3 Norwegian prawn populations: one in the Barents Sea, one in the North Sea and Skagerrak and one in the fjords. Prawns thrive in deep cold waters, but are found nearer the surface at night where they feed on animal plankton. The prawn is hermaphroditic – it starts life as a male and completes life as a female.

The age of the sex change and spawning time are different for the 3 populations. The prawns in the Barents Sea complete the change at the age of 4–7 years and spawn from June – October. In the North Sea and Skagerrak, prawns change sex between 2–6 years of age and spawn in June – November, and the prawns in the Norwegian fjords, finally, go through the change between 1,5 and 2,5 years and spawn in October – November.

The female prawn carries the roe under her abdomen and seeks out shallow waters where the larvae hatch. The larvae then float close to the surface to feed on plankton. Prawns live up to a maximum of 10 years.

## Wild catch

The premium catch period is in the winter when the prawns carry roe. Prawns are caught with trawl all year around.

## Products

Prawns are sold as in the following forms:

- Fresh or frozen shell-on prawns
- Cooked and peeled prawns in brine
- Cooked or raw peeled prawns, frozen or in MAP

## Maximum size

Prawns in the Barents Sea: 16 cm and 20 g

Prawns in the North Sea and Skagerrak: 18 cm

Coastal and fjord prawns: 16 cm and 20 g

## Area

Prawns in the Barents Sea: The entire Barents Sea, most often at a depth of 200–500 metres

Prawns in the North Sea and Skagerrak: North Atlantic

Coastal and fjord prawns: In most of the Norwegian fjords and coastal regions, often at a depth of 200–500 metres

## Diet

Prawns in the Barents Sea: Organic matter, carrion, small crustaceans and worms

Prawns in the North Sea and Skagerrak: Plankton, small benthic, dead plant and animal remains

Coastal and fjord prawns: Organic matter, carrion, small crustaceans and worms

## Other names

- Latin: *Pandalus borealis*
- English: Deepwater prawn
- French: Crevette nordique
- German: Tiefseegarnele

## Nutrition

Prawns are especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Vitamin B12, which is important for the body in producing new cells, including red blood cells. Vitamin B12 can help to prevent anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

Havforskningsinstituttet <http://www.imr.no/temasider/skalldyr/reke/nb-no>





## Red king crab

Red king crab is considered a delicacy and is particularly interesting because of its versatility. It can be used in both hot and cold dishes and the superb, juicy claw meat has a naturally sweet taste.

The red king crab, also called Kamchatka crab, is native to the North Pacific. It was introduced to the Barents Sea by Soviet scientists in the 1960s, and has spread to Norwegian waters since then.

The red king crab is a cold water species found at depths from 5 to 400 metres, depending on the season. As they grow they seek out to deeper waters, however they come out of the depths during the mating season. After hatching, spawning and mating, they return to the bottom of the sea and stay there until next year. They have a life span of around 15 years.

### Wild catch

The Norwegian red king crab fishery in the Barents Sea started as an experiment as late as in 1994. In 2002, the fishery became commercial. Red king crab is caught

year round in special crab pots for up to 100 crabs. As they are caught in limited numbers, the fishermen can handle each king crab individually. The whole process from catch to production is characterised by a high level of care and attention, which gives them a unique quality. The crab is a collective resource that Norway and Russia administer together.

### Products

Norwegian red king crab is available in the following forms:

- Alive, frozen, raw or cooked as whole crabs (only the innards in the carapace are removed)
- Clusters (3 legs and a claw joined together)
- Single legs and claws

### Maximum size

Up to 23 centimetres carapace length and 8 kilos.

### Area

Norway's stock of Red king crab can be found along coastal waters and tributaries in the southern region of the Barents Sea.

### Diet

Bottom species, plants.

### Other names

- Latin: Paralitodes camtschaticus
- English: Red king crab
- French: Crabe royal
- German: Kamschatka-Krabbe

### Nutrition

Red king crab is especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin B12, which is important for the body to produce new cells, including red blood cells. Vitamin B12 can contribute to preventing anaemia.
- Selenium is an important contributory substance in an enzyme that fights harmful chemical processes in the body.

Source:

Havforskningsinstituttet  
<http://www.imr.no/temasider/skalldyr/kongekrabbe/nb-no>



## Great scallop

Great scallop taste like shellfish with a hint of the open sea, making them an irresistible treat. They can be eaten raw, lightly steamed, fried or gratinated. To really impress your guests, serve them in their decorative shells.

Great scallop live on sandy seabeds and in shallow waters as well as in depths of more than 100 metres. Many live at a depth of 10–30 metres, within reach of divers. They can be found from the Oslofjord to Vesterålen, although they are most common in the western parts of the country and Nordland in the north.

The scallop is a hermaphrodite that spawns in the summer. Fertilisation takes place in the open water, where the larvae develop. The larvae then swim freely for a month before they settle on a firm foundation. It takes about 4–5 years for the shells to reach a size of 10–12 centimetres, when they are ready to be harvested.

Norwegian scallop has a fine colour and muscle with good structure and taste. They can live for more than 20 years.

### Wild catch

In Norway, great scallop are hand-picked and harvested by experienced divers. Kept free of sand and sorted according to size, they are delivered to the receiving facilities the same day in perfect condition. When reaching the receiving facilities they are stored in tanks with a good flow of fresh, cold seawater.

This is a unique process: almost everywhere else, scallop are harvested using trawlers or dredgers.

Harvest takes place all year around but they only carry roe some parts of the year, depending on where in the country they are found. Research is currently carried out on how to develop great scallop as a farmed species. After hatching, they are cultivated in crates in the sea and then set out on the seabed.

### Products

Great scallops is available in the following forms:

- Alive
- Frozen
- As frozen muscles
- Gratinated
- Muscles in a sugar and salt solution

### Maximum size

Up to 18 centimetres and 500–600 grams.

### Area

Norway's stock of Great scallop can be found all along the Norwegian coast from the Oslofjord to Vesterålen

### Diet

Phytoplankton, bacteria, other micro-organisms and dead organic material.

### Other names

- Latin: Pecten maximus
- English: Great scallop
- French: Coquille St. Jacques
- German: Kamm-Muschel

### Nutrition

Great scallop is especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin D, necessary to balance calcium in the body, which maintains and strengthens the bones.
- Vitamin B12, which is important for the body to produce new cells, including red blood cells. Vitamin B12 can contribute to preventing anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

### Nutritional value in 100 g raw scallop (edible part)

Energy: 345 kJ / 81 kcal

### Nutrients

Protein:	17,9 g
Fat:	1,1 g
Saturated fatty acids:	0,2 g
Trans fatty acids:	0 g
Monounsaturated fatty acids:	0 g
Polyunsaturated fatty acids:	0,4 g
Cholesterol:	126 mg
Carbohydrates, in total:	0 g

### Vitamins

Vitamin A:	4 RAE
Vitamin D:	4,2 µg
Riboflavin:	0,09 mg
Folate:	18 µg
Vitamin B12:	4 µg

### Minerals

Iron:	0,6 mg
Selenium:	20 µg

Source: Matvaretabellen  
<http://www.matvaretabellen.no/fish-and-shellfish-g4/scallop-raw-04.114>  
 Havforskningsinstituttet (<http://www.imr.no/temasider/skjell/kamskjell/nn-no>)





## Blue mussel

Blue mussels are found all along the coast of Norway. They are easy to prepare and can be served in many creative ways as a starter, a main course or as an ingredient in different seafood dishes.

Blue mussels are found at a depth of 0 to 10 metres, often forming mussel banks on the shoreline in the intertidal zone (the area above the water at low tide and under the water at high tide). In Norway they are often harvested for recreational use. The season is all year around, but they are at their best in autumn and winter.

Blue mussels usually spawn between April and June, when the water temperature is 8–10 degrees. The fertile eggs become larvae that swim freely for about a month until they attach themselves to stones, boats and mooring lines with strong filaments called byssus. Blue mussels live up to 20 years or longer.

### Harvesting

In blue mussel farming, spawning mussels are collected from wild populations. The mussels are cultivated using suspended long lines in seawater – ropes are suspended in the sea in locations with a good current, and the mussels attach themselves to the ropes as they drift by in the water. This method of cultivation gives

several qualitative advantages. As the mussels are suspended freely in seawater, they do not accumulate deposits of sand and mud – neither inside nor outside the shell. The low winter temperatures make the shells robust, enabling them to withstand exposure to cold and ice. They also get a fresh sea aroma and whole shells. Even if the shells open when they are taken from the sea, they will soon close again if you tap or gently squeeze them.

All commercial blue mussels must be approved by the Norwegian Food Safety Authority. The mussels and the water quality are checked thoroughly before they are shipped to market, and they arrive at the packing facility within hours after being taken from the sea. Consequently, you can be confident that Norwegian blue mussels in the shops have the highest quality and are safe for human consumption.

### Products

Blue mussels is available in the following forms:

- Packages of 1 kilo.

### Maximum size

Up to 10 centimetres in length.

### Area

Norway's stock of Blue mussels can be found all along the coast of Norway, often in belts of vast quantities in the tidal waters or in the fjords.

### Diet

Blue mussels live by filtering phytoplankton that float by in the seawater, thereby contributing to cleaner and clearer seawater.

### Other names

- Latin: *Mytilus edulis*
- English: Blue mussel
- French: Moule commune
- German: Miesmuschel, Pfahlmuschel

### Nutrition

Blue mussels is especially rich in:

- Protein that builds and maintains every cell in the body.
- Vitamin B12, which is important for the body to produce new cells, including red blood cells. Vitamin B12 can contribute to preventing anaemia.
- Selenium, an important element in an enzyme that fights harmful chemical processes in the body.

More nutritional data can be found at [www.nifes.no/en/prosjekt/seafood-data](http://www.nifes.no/en/prosjekt/seafood-data)

### Nutritional value in 100 g raw blue mussels (edible part)

Energy: 229 kJ / 54 kcal

### Nutrients

Protein:	10,4 g
Fat:	1,4 g
Saturated fatty acids:	0,3 g
Trans fatty acids:	0 g
Monounsaturated fatty acids:	0,3 g
Polyunsaturated fatty acids:	0,6 g
Cholesterol:	41 mg
Carbohydrates, in total:	0 g

### Vitamins

Vitamin A:	14 RAE
Vitamin D:	0 µg
Riboflavin:	0,27 mg
Folate:	37 µg
Vitamin B12:	25 µg

### Minerals

Iron:	5,8 mg
Selenium:	51 µg

Source: Matvaretabellen  
<http://www.matvaretabellen.no/fish-and-shell-fish-g4/mussel-blue-raw-04.053>

Havforskningsinstituttet  
<http://www.imr.no/temasider/skjell/blaskjell/nb-no>



The background of the page is a scenic photograph of a Norwegian fjord. In the foreground, the water is shimmering with sunlight. A small boat is visible in the middle ground. The background features steep, snow-capped mountains under a clear sky. The overall color palette is dominated by blues and whites, with a dark blue vertical bar on the left side of the page.

The Norwegian Seafood Council is the Norwegian seafood industry's organisation for joint market development.

The Norwegian Seafood Council works together with the Norwegian fisheries and aquaculture industry to develop markets for Norwegian seafood through market insights, market development and reputational risk management. The Seafood Council has its head office in Tromsø and representatives in twelve of Norway's most important seafood markets. The Norwegian seafood industry finances the activities of the council through fees levied on all exports of Norwegian seafood. The Norwegian Seafood Council is a public company owned by the Ministry of Trade, Industry and Fisheries.

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