

A GUIDE FOR RETAILERS

The Benefits of Eating Fish



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Introduction

The word superfood has been used to describe all kinds of foods in recent years, but no food is more deserving of the title than fish. A superfood is a food that has a whole range of nutrients in large amounts – a food that really offers fantastic nutritional benefits to anyone who eats it. Fish is a powerhouse of vitamins, minerals and protein, not to mention the ever-more important omega-3s. This booklet looks at the key nutrients in fish and explains how retailers can communicate the benefits of fish to their customers.

When talking about the nutrients in fish, it is very important to remember that there is a lot of legislation that covers what businesses can and cannot say about the nutrients in foods. There are strict limits about how much of a vitamin or mineral a food must have before we can talk about it to customers and very strict rules about how we talk about diseases in relation to foods. For example, it is well known that eating fish can help to reduce the risk of heart disease but it is completely illegal for a business to claim that eating fish will reduce the risk of heart disease. Businesses are not allowed to claim that a food will help to cure or treat a disease. This can get a little confusing as non-commercial groups and websites can make all sorts of claims about fish. Retailers need to remember that it doesn't matter what anyone else says about fish, there are strict rules that businesses need to follow. Some of the key rules are listed below.

1. If you want to say that a food is a '**source of**' a vitamin or mineral, then the food must contain 15% of the recommended daily amount (RDA) of that vitamin or mineral as set out by the European Commission.
2. If you want to say that a food is '**high in**' or '**rich in**' a vitamin or mineral, then the food must contain 30% of the RDA for that vitamin or mineral.
3. If you want to say that a food is '**low fat**' then it must have less than 3g of fat per 100g of the food.
4. If you want to say that a food is '**low in saturated fat**' then it must have less than 1.5g of saturated fat per 100g.
5. If you want to say that a food is a **source of** omega-3 it must have 40mg of EPA and/or DHA combined per 100g *and* per 100 calories of the food.
6. If you want to say that a food is **high** in omega-3 it must have 80mg of EPA and/or DHA combined per 100g *and* per 100 calories of the food.
7. If you want to say that a food is a **source** of protein, 12% of the energy value of the food must come from protein.
8. If you want to say that a food is **high** in protein, 20% of the energy value of the food must come from protein.

The FSAI enforces these rules so it is important that retailers follow them closely. All of the information listed in this booklet is in line with the legislation so you can use any and all of these claims when talking to consumers. Be very cautious about using claims from any other source as they may not be in line with the legislation and could land you a hefty fine!

This booklet looks at some of the general claims that we can make about fish and then goes into detail with some of the more common fish and the nutrient claims we can make specifically for them. The table on page 4 looks at the common nutrients found in fish and what you can say about them.

Why is fish so good for us?

All fish are a good source of protein. Protein is needed for normal growth and development in children and to help maintain muscle in adults. White fish and shellfish are all low in fat so they are an ideal source of protein for anyone who is trying to reduce the amount of fat that they eat. Although shellfish have a reputation as being high in cholesterol, in reality molluscs have about $\frac{1}{5}$ of the cholesterol found in 1 egg. Crustaceans (e.g. prawns) do have a little more cholesterol but a 100g serving of prawns has about 195mg of cholesterol, which is less than the amount of cholesterol found in 1 egg. Oil-rich fish do contain more fat but have the benefit of including the healthy omega-3 fats EPA and DHA. Almost all fish are rich in vitamin B₁₂ which has benefits ranging from keeping blood healthy to helping to reduce tiredness and fatigue.

Fish, Shellfish, Pregnancy and Breastfeeding

There has been a lot of confusion about the safety of fish and shellfish during pregnancy and breastfeeding. What are the facts?

FISH TO AVOID DURING PREGNANCY

The only fish that pregnant and breastfeeding women need to avoid are swordfish, shark and marlin. They must also limit tuna to 1 tuna steak per week or 2 cans of tinned tuna per week. This is due to levels of mercury found in these fish. All other fish are safe for pregnant and breastfeeding women to eat.

Myths

WOMEN SHOULD AVOID OIL-RICH FISH DURING PREGNANCY DUE TO TOXINS

This is false. Oil-rich fish is very beneficial during pregnancy mainly due to the omega-3s but also because it is a rich source of minerals. It is recommended that pregnant and breastfeeding women eat at least one serving of oil-rich fish per week – more would be better!

WOMEN SHOULD AVOID SHELLFISH DURING PREGNANCY

Another myth! There is no reason to avoid shellfish during pregnancy. Shellfish is particularly rich in minerals like iodine and zinc which are needed for healthy growth in children and for healthy skin, hair and nails. As long as shellfish is from a reliable source and well cooked, there is no reason it cannot be enjoyed during pregnancy.

Nutrients and what we can say about them

The table on page 4 looks at what you can say about nutrients when talking to customers about the nutrition in fish. If you are talking about fish in general, you can mention any of the claims below but be careful to say 'most fish are a good source of B₁₂' or whatever nutrient you are talking about. When you are talking about a specific fish, check the page for that fish to see which specific claims you can make. *Remember: not all fish contain all of the nutrients listed below – check the nutrients for each fish before you make a claim.*

Nutrient	What can I say about it?
Protein	Protein helps to build and maintain muscle Protein is needed for healthy bones Protein helps with normal growth and development in children
Vitamin A	Helps to keep skin healthy Helps to maintain good vision Needed for a healthy immune system
Vitamin D	Needed to help absorb calcium and phosphorus Needed for healthy bones and teeth Needed for a healthy immune system
Vitamin E	Antioxidant
Vitamin B₁ (Thiamin)	Helps to release energy from food Needed for a healthy nervous system Needed for a healthy heart
Vitamin B₂ (Riboflavin)	Helps to keep skin healthy Needed for normal metabolism Helps to keep blood healthy Needed for a healthy nervous system
Vitamin B₃ (Niacin)	Needed for healthy skin Helps to reduce tiredness and fatigue
Vitamin B₆	Helps to reduce tiredness and fatigue Needed to help keep hormones healthy Helps to keep the immune system healthy Needed for healthy blood
Vitamin B₁₂	Needed to help release energy from food Helps to keep blood healthy - especially red blood cells Helps to keep homocysteine levels healthy Helps to reduce tiredness and fatigue Need for a healthy nervous system
Iron	Needed to make healthy red blood cells Helps to reduce tiredness and fatigue Needed help the brain to work well Helps to keep your immune system healthy
Potassium	Helps to keep blood pressure healthy Needed for healthy muscle function
Phosphorus	Needed for healthy bones and teeth Helps to release energy from food
Zinc	Important for fertility and reproduction Needed to keep levels of testosterone healthy Helps the body to metabolise carbohydrates Helps to keep bones healthy Needed for healthy skin, hair and nails.
Selenium	Needed for healthy hair and nails Essential for the production of healthy sperm Helps to keep the thyroid healthy Antioxidant
Iodine	Needed for normal, healthy brain function Important for healthy metabolism Essential for healthy skin Important for healthy growth in children Needed to help make thyroid hormones Needed for a healthy nervous system
Omega-3 DHA	Helps maintain normal brain function Needed for healthy vision Helps to keep blood triglyceride levels healthy Helps with normal brain development in babies during pregnancy when eaten by the mother Helps with normal visual development of babies up to 1 year
Omega-3 DHA and EPA (together)	Needed for a healthy heart Helps to keep blood pressure healthy

In the next few pages we look at the specific claims that you can make for different fish and shellfish.

What Can I Say About...?

White Fish

In general, many white fish like cod, hake, haddock and whiting contain the same key nutrients. All are excellent sources of protein and are low in fat.

COD

Key Nutrients: Protein, Vitamin B₁₂, Iodine, Selenium, Potassium, Low Fat, Low Saturated Fat.

Cod is a rich source of protein and is very low in fat and saturated fat so it is suitable for anyone who is watching their cholesterol. It is very high in B₁₂ which is needed for healthy blood and a healthy immune system as well as helping to reduce tiredness and fatigue. Cod is rich in iodine which is needed for a healthy metabolism and to keep the thyroid healthy. Cod is also very rich in selenium, an antioxidant that is needed for healthy sperm as well as healthy skin, hair and nails. Finally, Cod is a great source of potassium which helps to keep blood pressure at healthy levels.

HADDOCK

Key Nutrients: Protein, Vitamin B₁₂, Vitamin B₆, Potassium, Iodine, Selenium, Low Fat, Low Saturated Fat.

Haddock is an excellent source of protein and is low in fat and saturated fat so it is suitable for anyone who is watching their cholesterol. Haddock is very high in B₁₂ which is needed for healthy blood and is also a good source of B₆ which helps fight tiredness and fatigue as well as keeping the immune system healthy. Haddock is a great source of potassium which is needed to help keep blood pressure healthy. Haddock is also rich in iodine which is needed for healthy growth in children and healthy skin. Finally, haddock is a great source of selenium and antioxidant that is also needed for healthy skin, hair and nails.

PLAICE

Key Nutrients: Protein, Vitamin B₁, Vitamin B₁₂, Iodine, Selenium, Phosphorus

Plaice is an excellent source of protein and is low in fat and saturated fat so it is suitable for anyone who is watching their cholesterol. Protein is needed to build healthy muscles as well as for healthy growth and development in children. Plaice is a good source of vitamin B₁ (thiamine) which helps to keep your heart and nervous system healthy and helps your body to release energy from food. Plaice is also rich in vitamin B₁₂ which helps your body to make healthy blood and fight tiredness and fatigue. Plaice is a source of iodine which is needed for healthy metabolism as well as for healthy growth and development in children. Plaice is also rich in selenium which is needed for healthy sperm as well as for healthy skin, hair and nails. Finally, Plaice is a good source of phosphorus which is needed for healthy bones.

WHITING

Key Nutrients: Protein, Vitamin B₂ (Riboflavin), Potassium, Phosphorus, Iodine, Selenium,

Whiting is an excellent source of protein and is low in fat and saturated fat so it is suitable for anyone who is watching their cholesterol. Protein is needed for healthy muscles and for healthy growth in children. Whiting is also a good source of Vitamin B₂ (riboflavin) which is needed for healthy skin, healthy and normal metabolism. Whiting is a good source of potassium which is needed to help keep blood pressure healthy as well as phosphorus which is needed for healthy bones. Whiting is also a good source of iodine and selenium.

SEA BASS

Key Nutrients: Protein, Low Fat, Low Saturated Fat, Vitamin B₆, Vitamin D, Phosphorus.

Sea bass is rich in protein and low in fat and saturated fat. It is also a source of Vitamin B₆, which helps to reduce tiredness and fatigue. Sea bass is a source of Vitamin D which is needed to help the body absorb calcium and phosphorus, needed for healthy bones.

LEMON SOLE

Key Nutrients: Protein, Vitamin B₁₂, Vitamin B₃ (Niacin), Phosphorus, Iodine.

Lemon Sole is an excellent source of protein and is low in fat and saturated fat so it is suitable for anyone who is watching their cholesterol. It is an excellent source of B₁₂ which is needed for healthy blood and B₃ (niacin) which is needed for healthy skin and to help fight fatigue. Lemon Sole is a good source of phosphorus which is needed for healthy bones and iodine which is needed for a healthy metabolism.

Oil-Rich Fish

SALMON

Key Nutrients: Protein, Omega-3 DHA and EPA, Vitamin B₁₂, Vitamin B₁ (Thiamin), Vitamin B₃ (Niacin), Vitamin B₆, Vitamin B₅ (Pantothenate), Vitamin D, Vitamin E, Potassium, Phosphorus, Selenium, Iodine.

Salmon is one of the most nutrient-rich foods you can eat. Not only is it a fantastic source of protein, it is a powerhouse of B vitamins and minerals including selenium, iodine, phosphorus and potassium. Salmon is also one of the few foods with large amounts of vitamin D – one 100g serving of salmon contains the full RDA for vitamin D. Salmon is also an oil-rich fish which means it is an excellent source of the omega-3 fats EPA and DHA. EPA and DHA help to keep your heart healthy, help to maintain healthy blood pressure and help to keep blood triglyceride levels at normal levels. Triglyceride is a type of fat found in your blood – similar to cholesterol.

Smoked salmon has all of the benefits of fresh salmon but does contain high levels of salt.

MACKEREL

Key Nutrients: Protein, Omega-3 DHA and EPA, Vitamin B₁₂, Vitamin D, Phosphorus, Vitamin B₂ (Riboflavin), Vitamin B₆, Iodine, Selenium.

Mackerel is one of the richest sources of the omega-3 fats EPA and DHA. DHA is essential for brain and eye development in babies and helps baby's normal brain and eye development when eaten by their mother during pregnancy. Babies up to 12 months benefit from DHA as it helps normal eye development. EPA and DHA are also needed for a healthy heart and they help to keep blood pressure levels healthy. Mackerel is an excellent source of Vitamin D which helps us to absorb calcium and is needed for healthy bones and teeth.

RAINBOW TROUT

Key Nutrients: Protein, Protein, Omega-3 DHA and EPA, Vitamin B₁ (Thiamin), Vitamin B₆, Vitamin B₁₂, Vitamin D, Potassium, Selenium

Rainbow trout is very rich in Vitamin D, boasting over double the RDA for this vitamin in just one serving. Rainbow trout is also rich in B vitamins including Vitamin B₆ which helps to reduce tiredness and fatigue and Vitamin B₁ which is needed for a healthy nervous system. It is also rich in the heart-healthy omega-3s EPA and DHA. Rainbow trout is also a good source of potassium, needed for healthy blood pressure and selenium, needed for healthy skin, hair and nails.

Shellfish

MUSSELS

Key Nutrients: Protein, Low Fat, Low Saturated Fat, source of Omega-3s, Vitamin B₂ (Riboflavin), Vitamin B12, Phosphorus, Potassium, Iron, Zinc, Iodine, Selenium.

Apart from being an excellent source of protein, mussels are rich in iron – mussels have more iron than beef! Mussels are also a great source of zinc which is needed for healthy skin, hair and nails as well as for healthy reproduction. They are also a source of the omega-3s EPA and DHA which are needed for healthy brain development in babies and for a healthy heart. Mussels are rich in iodine which helps to keep the thyroid working well and selenium, a powerful antioxidant. People often think that shellfish are high in cholesterol but a 100g serving of mussels has less than 1/5 of the cholesterol found in one egg.

PRAWNS

Key Nutrients: Protein, Low Fat, Low Saturated Fat, Vitamin E, Vitamin B₁₂, Phosphorus, Zinc, Iodine, Selenium.

Prawns are low in fat and saturated fat as well as being a good source of protein, zinc and selenium. Prawns contain about 195mg of cholesterol per 100g – 1 egg has about 250mg of cholesterol. Prawns are also a great source of Vitamin E, an antioxidant and phosphorus, needed for healthy bones.

CRAB

Key Nutrients: Protein, Vitamin B₂ (Riboflavin), Omega-3s, Zinc, Selenium.

Crab is an excellent source of protein which is needed for healthy muscles as well as for growth and development in children. It is a source of the omega-3s EPA and DHA which are needed for healthy brain development in babies and for a healthy heart. Crab is also rich in zinc and selenium, both of which are essential for healthy reproduction. Crab is a great source of Vitamin B₂ (riboflavin) which helps to keep skin, hair and nails healthy.

LOBSTER

Key Nutrients: Protein, Low Fat, Low Saturated Fat, Vitamin B₁₂, Phosphorus, Zinc, Selenium, Iodine.

Lobster is a great source of protein and is low in fat and saturated fat. A 100g serving of lobster has half the cholesterol of one egg. Lobster is also rich in phosphorus, needed for healthy bones as well as selenium and zinc, needed for healthy reproduction. Lobster is a great source of iodine which is important for healthy growth in children as well as for healthy skin, hair and nails.

OYSTERS

Key Nutrients: Protein, Low Fat, Low Saturated Fat, Vitamin B₁₂, Calcium, Iron, Zinc, Iodine, Selenium.

Oysters are rich in protein and naturally low in fat and saturated fat. They are also one of the best foods to eat to boost minerals in your diet. Oysters are a source of calcium and are extremely rich in iron, zinc, iodine and selenium. Oysters have more iron than beef, 3 times your recommended daily amount of selenium and 5 times your recommended daily amount of zinc.



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FURTHER INFORMATION

The information contained in this note is for guidance purposes only. If your company is designing new packaging or labels we recommend you contact the **Food Safety Authority of Ireland (FSAI)** www.fsai.ie in advance to ensure that the information is fully compliant with all relevant labelling regulations.

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