Healthy Eating in Schools Guidance 2020

Supplementary information and advice on energy and key nutrients

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Introduction

All food and drink served in Schools in Scotland must comply with the Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2020 which were introduced in April 2021 and replaced the Nutritional Requirements for Food and Drink in Schools (Scotland) 2008.

Heathy Eating in Schools 2020 (HES 2020) is the accompanying statutory guidance which supports implementation of those Regulations.

This supplementary guidance complements HES 2020 by providing information about the energy and key nutrients which form the basis for provision of school food and drink and, in particular, the nutrient standards set out in the 2020 Regulations which apply to school meals.

Energy

Why do we need it?

Everyone needs energy in the form of calories to function. We need it to get out of bed in the morning and to do all the things we do every day.

Children and young people need energy to grow and develop and to help them keep active.

We even use energy when we are sleeping.

Sources

There are three nutrients in food that supply us with energy – fat, carbohydrate and protein. Alcohol also provides us with energy.

When we eat foods containing these nutrients, they are broken down to release the energy we need to keep our bodies healthy.

We should get most of the energy that we need from foods containing carbohydrate such as bread, pasta, potatoes, rice and breakfast cereals.

Our bodies also get energy from foods containing fat.

Generally, protein is only used as a source of energy when the stores of carbohydrate and fat in the body are used up.

The amount of energy that a food contains is measured in units called kilocalories (calories) or kilojoules.

Fat contains a lot more calories than protein or carbohydrate. For example, potatoes deep fried in oil will provide more calories than a portion of boiled potatoes.

Additional information

If we eat more energy than our bodies need, it is stored as fat and we will put on weight.

Fats

What are the different types of fats?

Saturated fat, which is typically solid at room temperature, and **Unsaturated fat**. There are two types of unsaturated fats:

- **Monounsaturated fats -** This type of fat is typically liquid at room temperature but may become solid when chilled.
- **Polyunsaturated fats -** This type of fat is typically liquid at room temperature and when chilled.

Two types of polyunsaturated fats that are very important are long chain omega 3 fatty acids and omega 6 fatty acids.

Our bodies cannot make these polyunsaturated fats so we must get them from food.

However, most of us get enough omega 6 fatty acids but not enough long chain omega 3 fatty acids.

Which fats should we limit or avoid?

As part of a healthy diet, it is not only important to cut down on the amount of total fat eaten, but also to reduce saturated fats by replacing these with unsaturated fats where possible (e.g. polyunsaturated and monounsaturated fats), which are a healthier alternative.

Too much saturated fat can increase the amount of cholesterol in the blood which increases the risk of heart disease.

Which fats are better for us than others?

Monounsaturated and polyunsaturated fats can have a positive effect on health.

However, all types of fat contain calories so they should be eaten in small amounts.

The omega 3 fatty acids that provide most health benefits are the long chain omega 3 fatty acids found in oily fish. These acids are a very important part of our diet as they help to protect us against heart disease.

Sources

Most foods contain a combination of different fats.

Examples of foods high in saturated fat:

- animal sources such as meat products, meat pies, sausages, hard cheese, butter and lard, cream and crème fraîche.

- other foods high in saturated fat include cakes, biscuits, and foods containing coconut oil, coconut cream and palm oil.

Examples of foods high in long chain omega 3 fatty acids:

- oily fish such as fresh or frozen mackerel, salmon, kippers, white bait, pilchards, sardines, trout and herring are a great source of long chain omega 3 fatty acids.
- fresh or canned tuna is not classed as an oily fish.

Protein

Why do we need it?

Protein is a nutrient that is found in almost every part of our body such as hair, skin, muscle and blood.

Infants, children and teenagers need protein to help them grow and repair body tissues.

Almost all reactions that are necessary for the normal functioning of our body are dependent on protein.

It can also be used as a source of energy.

The amount of protein we need depends on our age, size and growth stage.

Sources

Protein is found in both animal and plant sources:

- animal sources include meat, poultry, eggs, fish, milk and cheese.
- plant sources include nuts and seeds; pulses such as peas, beans and lentils; soya products and cereal products such as bread and rice.

Additional information

Our bodies tend to be able to use protein from animal sources more efficiently than protein found in plant sources.

Eating a well-balanced diet based on grains, pulses, seeds and nuts will ensure that a mixture of protein is consumed in vegan or vegetarian diets.

Carbohydrates

Why do we need to eat more starchy carbohydrates and fibre?

Starch and fibre are carbohydrates.

Starchy foods are a very important part of a healthy balanced diet. We should get most of our energy from starchy foods and they should make up about a third of the food we eat.

Foods rich in fibre are more bulky, so they help us to feel full, which means we are less likely to eat too much.

As starch and fibre are found in lots of different foods, they can bring a variety of other nutrients to our diet.

Sources of starch and fibre

Starch and fibre are found in a variety of food.

Starch is found in plant sources such as bread, rice, pasta, noodles, potatoes, yams, plantains and chapattis.

Fibre is also found in foods that come from plants. Good sources include wholegrain bread, brown rice, pasta, oats, beans, peas, lentils, grains, seeds, fruit and vegetables.

We should, where possible, eat wholegrain versions of foods, such as high fibre/wholemeal bread, wholemeal pasta and brown rice as they are a great source of fibre, a nutrient that most of us do not eat enough of.

Free Sugars

Why eat less free sugars?

Sugar is a carbohydrate that is found in lots of foods. It can be classified into different types:

Free Sugars

Free sugars include all sugars added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups and unsweetened fruit juices. Under this definition, lactose (the sugar in milk) when naturally present in milk and milk products and the sugars contained within the cellular structure of foods are excluded.

We should limit the consumption of food that contains free sugars, as they imbalance the diet, can cause tooth decay and displace other more important vitamins and minerals.

Intrinsic and milk sugars

Intrinsic sugars are those that are present naturally within the cellular structure of food. These sugars are found in foods such as whole fruit and vegetables.

Milk sugars (lactose) are those found naturally in milk and milk products.

Foods containing intrinsic and milk sugars do not need to be avoided. These foods can also provide many other nutrients such as calcium, vitamin A, vitamin C and zinc.

Total Sugar

Total sugar includes all sugars:

- the sugars in milk (lactose) or integrally present in the cells of food such as fruit and vegetables;
- all sugar found in dried, stewed or canned fruit; and
- all sugars added to foods by the manufacturer, cook or consumers, plus sugars naturally present in honey, syrups and unsweetened fruit and vegetable juices.

Labelling of sugar

Sugars can be labelled on the ingredient list on foods in a number of different ways.

If sugar is mentioned near the top of the ingredient list, the product is likely to be high in sugar.

Terms for ingredients which contain free sugars are as follows:

- **Fruit and vegetable products**: concentrate, juice, paste, powder, purée.
- **Extracts**: malt extract.
- **Sugar in the name**: beet sugar, brown sugar, cane sugar, caramelised sugar, coconut palm sugar, coconut sugar, date sugar, demerara sugar, icing sugar, invert sugar, jam sugar, molasses sugar, organic sugar, preserving sugar, raw cane sugar, raw sugar.
- **Syrup, treacle and honey**: agave syrup, carob fruit syrup, corn syrup, date syrup, glucose-fructose syrup, glucose syrup, golden syrup, high-fructose corn syrup, honey, inverted sugar syrup, maple syrup, molasses, rice malt syrup, treacle.
- **Nectar:** agave nectar, coconut blossom nectar, date nectar, fruit nectar.
- **Other:** crystalline sucrose, dextrose, fructose, glucose, glucose-fructose, isoglucose, maltose, sucrose.
- **Milk derivatives as added ingredients**: galactose, hydrolysed lactose, lactose, whey powder.

It should also be noted that foods that state that they contain ‘no added sugar’ might still contain free sugars in the form of fruit purees or fruit juice concentrate.

Vitamin A

Why do we need it?

Vitamin A is a very important vitamin that has lots of important functions.

It has a vital role in growth and healthy vision.

It helps keep us healthy by fighting infections.

Sources

Vitamin A is found in both animal and plant foods.

The vitamin A found in animal sources is called **retinol** while the vitamin A found in plant sources is known as **carotene**.

Retinol is found in cheese, eggs, oily fish (such as mackerel), milk, fortified margarine and yoghurt.

Carotene is found in colourful fruit and vegetables such as carrots, sweet potatoes, mango, melon and apricots (dried or fresh) tomatoes and red peppers, as well as green leafy vegetables e.g. spinach, watercress and broccoli.

Additional information

The vitamin A found in animal sources is more efficiently absorbed by the body than the form found in plant sources.

Many foods that contain vitamin A are also a source of many other valuable vitamins and minerals such as vitamin C, iron and zinc.

For example peppers, broccoli, tomatoes and spinach are also sources of vitamin C.

Vitamin C

Why do we need it?

Vitamin C helps us to absorb iron from food.

It is important in forming collagen, a protein that gives structure to our bones, muscle and blood vessels.

It is essential for the healing of wounds.

It also plays an important role in our immune system.

Vitamin C is also an antioxidant. This means that it can help prevent damage to our cells and keep them healthy.

Sources

Vitamin C is found in a wide variety of fruit and vegetables.

Good sources include spring greens, potatoes, peppers, broccoli, cabbage, Brussels sprouts, raspberries, blackcurrants, strawberries, melon, kiwi fruit and citrus fruits e.g. oranges.

Additional information

Not only are fruit and vegetables a source of vitamin C, they also provide lots of other nutrients such as vitamin A, iron and folate.

For example Brussels sprouts, cabbage, broccoli, oranges and tomatoes are also sources of folate.

Iron

Why do we need it?

Iron is an essential mineral which has lots of functions some of which include:

- transporting oxygen around our body.
- helping our bodies to produce energy from the food we eat.
- playing a role in our immune system.

Sources

The iron found in animal sources is called haem iron and is found in:

- red meat
- fish
- poultry

The iron found in plant sources is called non-haem iron and is found in:

- beans
- nuts
- dried fruit (e.g. dried apricots)
- whole grains
- fortified breakfast cereals
- soybean flour
- most dark green leafy vegetables (such as watercress and curly kale).

Additional information

Iron found in animal sources can be absorbed by the body more easily than iron found in plant sources.

Vitamin C can help our bodies to absorb iron, especially the iron found in plant sources. For example, eating fruit with fortified breakfast cereal or eating vegetables with beans, nuts and rice can help our bodies absorb iron from these plant sources.

Some foods that contain iron are also good sources of vitamin C such as broccoli and spring greens.

Zinc

Why do we need it?

Zinc is an essential mineral that is found in almost every cell of our bodies. It has many important functions including:

- helps make new cells and enzymes
- helps us process the carbohydrate, fat and protein in the food we eat
- helps with the healing of wounds

Sources

Good sources include poultry, meat, shellfish, milk and dairy foods, cereal products and bread. Wholemeal bread contains more zinc than white bread.

Additional information

Meat is rich in both zinc and iron.

Calcium

Why do we need it?

Calcium is an essential mineral.

We need it for the development of strong healthy bones and teeth. 99% of the calcium found in our body is found in these places.

It makes sure our blood clots normally.

It is also needed for regulating our heart beat.

Sources

The best sources of calcium are milk and dairy products.

Other sources include green leafy vegetables, soya beans, soya drinks with added calcium, tofu, nuts, bread and fish where the bones are also consumed such as sardines and pilchards.

Additional information

We need vitamin D to help our body absorb calcium. This vitamin is also known as the “sunshine vitamin” as the body can make it after exposure to sunshine.

It is important that children and teenagers get enough calcium as bone growth is almost complete by the early twenties.

Building a strong skeleton during these years will help to protect against osteoporosis in later life.

Osteoporosis is a disease in which our bones become fragile and weak and are therefore likely to break more easily.

Folate

Why do we need it?

Our bodies need folate, as it works together with vitamin B12 to make red blood cells.

It is needed for growth

It also helps to prevent birth defects such as spina bifida in babies.

Sources

Good sources of folate include spinach, cabbage, Brussels sprouts, broccoli, peas, oranges and melons.

Sometimes, when we look at food labels we see the term “folic acid”. Folic acid is the synthetic form of folate that is added to food. It is more easily absorbed by our bodies than folate. It can be found in fortified foods such as breakfast cereals and spreads.

Additional information

Foods containing folate are also a good source of vitamin C and vitamin A. For example all three vitamins are found in food such as oranges, tomatoes, spinach, broccoli and cabbage.

Salt

Why do we need to eat less salt?

Although we all need a little salt in our diet to help our body function, most of us eat too much.

Too much salt can damage our health. It can increase our blood pressure which increases our chances of developing heart disease or stroke.

Children under the age of eleven need less salt than adults.

Children and young people should not have too much salt as this could affect their health in the future.

Too much salt will give children a taste for salty food, and they will be more likely to continue eating too much salt when they grow up.

Sources

About 61%[1] of the salt in the UK diet is found in processed foods.

Bread, for example, which is a staple food that children should be encouraged to eat, contributes significantly to salt intakes. So we should check the nutrition labels of different varieties and choose those with the lowest salt content.

Some types of food/recipes that can be high in salt include:

- baked beans
- breakfast cereals
- cooking and pasta sauces
- crisps
- pizza
- ready meals
- soup
- sandwiches
- sausages
- tomato ketchup, mayonnaise and other sauces

Other foods high in salt include:

- bacon
- cheese
- salted and dry roasted nuts
- smoked meat and fish
- anchovies

[1] Salt targets 2017 progress report: A report on the food industry's progress towards meeting the 2017 salt targets (publishing.service.gov.uk)

- gravy granules
- stock cubes
- soy sauce
- pickles
- prawns

Additional information

Salt is also known as sodium chloride. It is the sodium in salt that can be bad for your health.

Both terms can appear on nutritional information on food labels.

To convert grams of salt into grams of sodium you need to divide the salt figure by 2.5. To then covert the grams of sodium into milligrams you need to then multiply by 1000.

Public Health England has set UK wide voluntary salt reduction targets to encourage the food industry to reduce the amount of salt in a wide range of products by 2024.

References

Heathy Eating in Schools (Scotland) Guidance 2020[2]

Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2020[3]

Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008[4]

Public Health England, Salt targets 2017: Second progress report: A report on the food industry's progress towards meeting the 2017 salt targets: September 2020[5]

Public Health England, Salt reduction targets for 2024, September 2020[6]

[2] Healthy eating in schools: guidance 2020 - gov.scot (www.gov.scot)
[3] The Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2020 (legislation.gov.uk)
[4] The Nutritional Requirements for Food and Drink in Schools (Scotland) Regulations 2008 (legislation.gov.uk)
[5] Salt targets 2017: second progress report - GOV.UK (www.gov.uk)
[6] Salt reduction: targets for 2024 - GOV.UK (www.gov.uk)

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