

How to have a Balanced Diet

A balanced diet provides all of the nutrients our bodies need, by the consumption of an appropriate amount of elements that contain energy. It has no nutritional or calorific imbalances that might lead to inappropriate body weight (being under- or overweight) or to general health problems.

A person's nutritional and energy requirements depend on their age: a healthy adolescent does not have the same needs as a sedentary elderly person, a pregnant woman or a professional sportsperson.

Our diet must be varied and the food we eat on an everyday basis must contain as wide a variety of foods as possible, to guarantee our intake of nutrients so that we do not develop deficiencies.

It is important to remember that there is no one food that provides all of the nutrients that our bodies need. We must make sure that our diet contains products from different sources and food groups:

- ✓ vegetables
- ✓ pulses
- ✓ meat
- ✓ fish
- ✓ olive oil
- ✓ cereals
- ✓ dairy products
- ✓ fruit
- ✓ nuts
- ✓ etc.



In a balanced diet, any vitamins, minerals or protein that might be lacking in one food will be provided by another, which means we are guaranteed the balance of nutrients we require.

What is food?

Food is any natural or processed compound that contains a minimum of one **nutritional substance**. Food can come from animal or plant sources and can have

different textures (solid, liquid, etc.). Food is classified into groups according to its nutritional characteristics.

What are nutrients?

Nutrients are the **proteins**, the **carbohydrates**, the **fats** or **lipids**, the **vitamins** and the **minerals** contained in food.

Once food has been eaten, it passes along the digestive tract and goes through different physical and chemical processes that transfer the nutrients contained in the food into the circulatory system, that is, the blood.

Food groups and main nutrients

FOOD GROUPS	MAIN NUTRIENTS
Milk and other dairy products	Protein and calcium
Meat, fish and eggs	Protein
Bread and starchy foods	Complex carbohydrates and fibre
Green and other vegetables	Fibre, vitamins and minerals
Fruit	Simple carbohydrates, vitamins, minerals and fibre
Oils and fats	Lipids

What is a balanced diet based on?

A balanced diet is based on three basic principles:

- 1. Meeting the body's calorie or energy requirements**
- 2. Meeting nutritional requirements**
- 3. Eating a varied diet**, which means eating foods from all the groups.

1. Calorie or energy requirements

In order to carry out our daily activities, we need a continual supply of energy that is provided by the different foods.

The energy or calorific value of a food corresponds to the amount of energy obtained once the food is oxidised or metabolised.

The average values of the different nutrients in terms of calories are:

Carbohydrates	4 kilocalories per gram
Protein	4 kilocalories per gram
Fats	9 kilocalories per gram

Alcohol (although considering it as a nutrient is arguable) contains 7 kilocalories per gram

Carbohydrates can be **simple**, such as glucose or sucrose (white sugar), or **complex**, like starch.

Protein can be of **animal origin** (meat, eggs or fish) or **plant origin** (green and other vegetables or pulses). Vegetable protein is not as nutritionally complete as animal protein, which is considered of high biological value.

Fats can be **saturated** or **unsaturated**. In general, saturated fats exist in a high percentage of foods such as meat, pastries, etc. and when too much of this type of fat is eaten, the risk of certain illnesses, particularly cardiovascular illnesses, is increased. Unsaturated fats are healthier, particularly olive oil.

A person's **individual energy requirements** depend on their **physical make-up**, their **age**, their **sex** and, most importantly, the **amount of physical activity they do**. This is the only factor we can change in order to modify our **energy expenditure**.

Energy requirements can vary between 2,600 and 3,000 kilocalories each day, or even more in the case of an adolescent who is very physically active.

2. Nutritional requirements

Nutrients are elements contained in food that are **necessary for maintaining life and health**. **Nutrients are necessary in specific percentages, as they each have different physiological functions:**

Carbohydrates 50-60%

Fat 30-35%

Protein10-15%

These proportions vary between two values because, according to individual characteristics, requirements can vary from one person to the next. For example, the quantity of protein required each day is greater in adolescents than in adults, while people who are very active need a higher proportion of carbohydrates than people who are sedentary.

3. A varied diet

When we say that a healthy diet has to be varied, this means that it has to include foods from all the different food groups, based on the frequency shown in the food pyramid.



A varied diet provides a wide range of nutrients

To ensure we are obtaining nutritional balance, it is very important not to skip meals and to make sure we distribute the energy and the foods we eat properly among the different meals. The recommended distribution is:

- **25% for breakfast (this can be eaten in two parts, one on getting up and one mid-morning)**
- **35% for lunch**
- **15% as an afternoon snack**
- **25% for dinner**

Breakfast is a fundamental meal as it improves physical and mental performance throughout the morning at school or work. In this respect and taking into account the recommended 25%, it is often advisable to have a mid-morning snack so that there is not such a long gap between breakfast and lunch. For example, a piece of fruit and some yoghurt is a good way to start the day, followed by a sandwich with fruit juice or a white coffee mid-morning.

A healthy diet does not have to mean a boring or monotonous diet, or a diet based on special or expensive products like special diet products, "light" products or organic products. On the contrary, a **healthy diet** should be:

- ✓ **Varied, both in terms of foods and preparation techniques used**
- ✓ **Moderate:** the **quantity of portions** should be adapted to **the person's age and individual requirements** (neither insufficient nor excessive)
- ✓ **Balanced,** with a suitable proportion of the different foods, from both animal and plant sources
- ✓ **Satisfactory—the pleasure of eating well.** A healthy diet must be combined with the ability to enjoy one's food.

The Mediterranean diet is a nutritional model that brings together all of these characteristics and is therefore scientifically recognised as one of the healthiest ways of eating in the world.

Food groups

1. Fruit

Fruit and fruit juices **provide water, sugars, vitamins** (such as vitamin C) and **carotene, minerals** (such as potassium and selenium) and **fibre**.

Juices only provide vitamins and minerals and lack most of the fibre contained in whole fruits. Dried fruits (prunes, chestnuts, raisins, dates)



We should try to eat a minimum of 3 pieces of fruit each day, ideally fresh.

are characterised by their lower water content. It is important that we eat fruit that is high in vitamin C on a daily basis (citrus fruits, kiwis, strawberries, etc.).

2. Green and other vegetables

Green vegetables and other vegetables are an important source of **vitamins, minerals, fibre and antioxidants**, and it is therefore recommended that they be eaten on a daily basis. **The best way to ensure we make the most of all of the vitamins and minerals is to eat**



A minimum of 300-400 grams of green and other vegetables should be consumed each day, giving priority to seasonal varieties.

them raw, alone or in salads. Roasting or grilling are other tasty options. If they are boiled, the water can be used to make soups or purees, because many of the minerals are left behind in the cooking water. Steamed vegetables keep most of their nutrients.

**vitamins
minerals
antioxidants
fibre**

3. Milk and dairy products

Dairy products (milk, yoghurt, cream cheese, hard cheeses, cream etc.) are an important source of **high-quality protein, lactose, vitamins** (A, D, B₂ and B₁₂) and **calcium**, an extremely important mineral that is required for the formation of bones and teeth and to prevent osteoporosis.

**protein
vitamins
calcium**



We should consume 2 to 4 portions of dairy products each day.

Fresh yoghurt and other fermented milk products are included in the group of probiotic foods, which have certain beneficial effects such as strengthening the immune system (increasing defences), reducing the symptoms for people who have problems digesting lactose and protecting the intestines from harmful micro-organisms.

We should consume two to four portions of dairy products each day, according to our age and physiological situation (pregnancy, breastfeeding, etc.). Milk is a very good food at all stages of life, particularly during breastfeeding, growth and the menopause, as well as for elderly people. A school-age child who drinks half a litre of milk each day obtains 50% of the protein and over 80% of the calcium and vitamin B₂ she needs from this source. With the same amount, an adult meets 30% of his or her daily protein requirements and 100% of his or her calcium requirements.

Recommended calcium consumption:

Age	Daily consumption (mg)
Up to 6 months	210
6-12 months	270
1-5 years	500 - 800
6-10 years	800 - 1,300
11-24 years	1,300
25-70 years	1,000
Pregnancy and breastfeeding	1,000 - 1,300
Premenopausal women	1,000

Source: National Academy of Sciences, 2000

4. Meat and sausages

Meat is an important source of **protein with a high biological value, vitamin B₁₂, iron, potassium, phosphorus and zinc.**

Because of the high saturated fat content, it is very important to choose lean cuts of meat. Meat contains iron that can be absorbed easily by the body. Fatty sausages should only be consumed occasionally, as they contain large amounts of saturated fats, [cholesterol](#) and sodium, which can affect our cardiovascular system.



**protein
vitamin B₁₂
iron
potassium
phosphorus
zinc**

**3 or 4 portions a week
are adequate.
Lean cuts are best.
1 portion = 100 - 125 g**

5. Fish and shellfish

Fish is a good source of high-quality **protein**, **vitamin D** and **iodine**. **Oily fish** (tuna, herring, sardines, mackerel, salmon, eel, Atlantic bonito, etc.) are **very rich** in **omega 3 polyunsaturated fatty acids**, which are essential for good nutrition and which must be obtained from food as our body cannot produce them.

protein
vitamin D
iodine
omega 3



Recommended consumption: 3-4 portions per week.

Shellfish is a good source of vitamins (B₁, B₁₂) and minerals, such as phosphorus, potassium, iron, iodine, fluoride and zinc. In addition, it has a high protein content and is low in sodium, calories and saturated fats.

6. Eggs

Eggs are a very nutritional food, providing high-quality **protein**, **vitamins** (A, D and B₁₂) and **minerals** (phosphorus and selenium). Eggs also contain nutrients that are essential during growth and at times of special physiological circumstances such as pregnancy, breastfeeding and old age. The consumption of eggs should be alternated with eating meat and fish, foods that have similar nutritional qualities.

protein
vitamins
phosphorus
selenium



Eating 3 or 4 eggs per week is a good alternative to meat or fish.

7. Pulses



It is advisable to consume at least 2 to 4 portions of pulses per week (1 portion = 60 - 80 g raw or 150 - 200 g cooked)

carbohydrates
fibre
vitamins
minerals
protein

Haricot beans, peas, chickpeas, broad beans and lentils provide us with **carbohydrates, fibre, vitamins, minerals** and **protein**. If pulses are combined with cereals, the protein obtained is of higher quality, as the combination of the two foods increases the protein value.

8. Cereals

Cereals should make up the basis of our diet, as they are an important source of energy. Foods containing cereals are bread, pasta, rice and breakfast cereals.



Wholemeal foods (pasta, rice, bread, flour) have a higher **fibre, vitamin** and **mineral** content than **refined** foods.

Potatoes and other root vegetables are usually included in this group, although due to their higher glycaemic index and the fact that they are cooked before eating, they are usually classified in a separate group.

Recommended consumption:

- **Bread**, preferably wholemeal, as it is rich in **fibre, vitamins (B₁ and B₆)** and **magnesium**. Daily consumption is recommended.
- **Pasta and rice, 2-3 times per week**
- **Cereals and cereal-based products, between 4 and 6 portions per day, preferable wholemeal.**

Opt for homemade pastries and cakes rather than industrially produced varieties, as the latter contain more saturated and trans fats.

9. Nuts

The main characteristic of nuts is the high energy content and the significant amounts of **unsaturated fatty acids (omega 3 and omega 6) and [fibre](#)**.

Nuts are a source of **protein** and **plant oils**.

The fat contained in almonds, hazelnuts, cashews, pistachio nuts and walnuts is for the most part unsaturated.



25 g daily (shelled)

10. Sugars, sweets and sugary drinks



reduce our consumption of products that are high in simple sugars and that we only consume sugary foods **occasionally**.

Quick-release sugars such as table sugar and honey are characterised by the high levels of energy they provide and by the fact that they make food and drinks taste pleasant. This is a superfluous food group that we do not need to consume. Intake of these sugars should be moderate as consuming too much of them can lead to weight gain and tooth decay. It is therefore recommended that we

11. Oils and fats

monounsaturated
fats
antioxidants



The consumption of virgin olive oil is particularly recommended

Fats are essential to our health, because they are used in the composition of cell membranes and nuclei. However, **fats and oils must be consumed in moderation** due to their high **calorie content**. Plant oils, particularly virgin olive oil, are the healthiest type. These fats are preferable to animal fats.

Olive oil is rich in monounsaturated fats and antioxidants. It is recommended both for cooking and dressing due to its beneficial properties for the cardiovascular system, as it has a positive effect on [cholesterol](#) levels in the blood. We must also remember that the consumption of fat is

fundamental for the correct working of our body, provided that our diet includes them in appropriate quantity and of suitable quality.

CHANGES TO THE NORMAL SITUATION: restricted diets



restrictive
diets

There is a limit to being slim

Unnecessary reductions in or restrictions to the diet which are uncontrolled and purely for reasons of appearance can—and do—lead to significant nutritional imbalances.

All those changes to the diet that involve qualitative variations (a reduction in variety) or quantitative variations (a reduction in quantity) require supervision by a professional nutritional specialist. Restrictive diets are usually imbalanced and incomplete.

It should be remembered that deficiencies are not always immediately evident and can even be medically undetectable in the early stages. Depending on the nutrient that is

lacking, this can affect the nutritional state and therefore the health of the individual.

Any changes that involve qualitative and/or quantitative modifications in the diet must be made under the control of a professional who is expert in nutritional matters.

There is a limit to being slim. Obesity is a condition that can pose specific dangers to the health, but that does not mean that the slimmer a person is, the better their health. A healthy weight is between specific values and neither excessive thinness nor obesity is within the optimum parameters for health. The concept of a **healthy weight** is quantified by the **body mass index (BMI)**, which is accepted by the international scientific community as a good way of establishing normal body weight levels.

How can the appropriate nutritional state and body weight be established for each person?

There is a parameter known as the **body mass index (BMI)** that, by means of a simple mathematical calculation, enables the classification and the evaluation of the weight of people aged over 18.

The **body mass index (BMI)** is calculated by applying the following formula:

$$\text{Weight (kg) / height}^2 \text{ (m)}$$

This calculation is only applicable to adults. For under-18s, tables that are specially adapted to the bodily variations that take place during growth should be consulted.

Appropriate BMI values, according to WHO figures published in 1997, are shown in the table below:

BMI	Classification of BMI
< 18.5	Underweight
18.5-24.9	Ideal weight
25-29.9	Overweight
30-34.9	Grade 1 obesity
35-39.9	Grade 2 obesity
> 40	Grade 3 obesity

Classification of body mass index (BMI) for adults, according to the WHO criteria

It should be remembered that the weight of a person aged 22 with a BMI of 24.3 is just as healthy as the weight of someone of the same age and height with a value of 21.

Both of these people fulfil the criteria for a healthy weight as they both fall within the normal range (18.5-25). This **scientific parameter** is often very far removed from the concept of **ideal weight** that is imposed by the fashion world, regardless of questions of **health** and a **good nutritional state**.

What are the risks of restrictive and atypical diets?

As mentioned above, all kinds of dietary restrictions involve—by their very nature—nutritional depletion. It is only possible to ensure that a reduction of the amounts eaten is compatible with correct nutritional balance under medical supervision. However, this type of diet should only be followed in the case of a real need to lose weight; that is, for health reasons, not purely for reasons of appearance. This is the major problem of the current fashion for being thin or very thin. Social pressure to obtain a “fashionable” body leads many people to embark on **hypocaloric diets**, without the slightest knowledge of the subject, although they may have been able to carry out plenty of research in seemingly scientific publications. These publications—many of which are aimed at young people or which contain advice referring to “healthy living”—make partial and impersonal suggestions concerning aspects of the diet. The content of such magazines is not always incorrect as such, but speculating on body weight without specialist professional advice and supervision is clearly a health risk. Even dietary information in good reports or articles, which clearly cannot take into account the specific circumstances of the individual and which is therefore not applicable to everyone, cannot substitute expert criteria and supervision.

As well as the dangers to the health resulting from a restricted diet (a reduction in nutrients and energy), often the loss and regaining of weight can lead to problems with weight regulation and can encourage weight gain to levels above the original level, marking the start of long-term excess weight, which is obviously the opposite of the original intention. In addition, it should be remembered that the vast majority of [eating disorders \(ED\)](#) such as anorexia or bulimia nervosa begin with dietary restrictions aimed at losing a certain percentage of the body weight.

Diets and dietary regimes, when combined with other personal, family, social or cultural factors, can over time encourage one of these ED to emerge, particularly in those cases where the dietary restriction was not prescribed or controlled by a professional in the field, as mentioned above.

Lastly, it should be remembered that slimming diets can be presented to the public in many different ways. They are often given very varied names with the aim of creating an impact on the target, in order to attract their attention and then to encourage the

target to follow what is usually presented as a new and revolutionary type of diet. There are many examples of these and it would be impossible to list all of the diets that the slimming market “offers”. For this reason, all types of diet that do not meet appropriate nutritional needs can be included in the wider group of atypical diets. People following these diets should do so with the advice of specialised professionals (doctors, nurses, pharmacists, dieticians, etc.). Before young people make the decision to change their eating habits, they should also consult people close to them who they trust, such as their parents or other family members, teachers, etc. as, although they may not be experts on this subject, their opinion is bound to be very valuable when it comes to making a decision.

Recommendations concerning body weight and the daily diet

- Weight loss of between 5 and 10% is usually enough to improve parameters such as **blood pressure, cholesterol** and **glycaemia**.
- Repeated attempts at weight loss often lead to failure and are ultimately a guarantee of becoming **overweight**.
- The concept of a **healthy weight** has little to do with the criteria of fashion, which promote excessively thin figures that are far removed from physiological and natural requirements.

Guidelines for a balanced diet

Fruit, green and other vegetables	At least 5 portions per day
Bread and other cereals, potatoes and pulses	At least 1 portion with each meal
Milk and dairy products	No less than 3-4 portions per day
Meat, fish and eggs	1-2 portions per day, ideally divided equally
Fats	Moderate consumption, with preference given to olive oil
Sugar and sweets	Limited consumption
Drinks	Water should be the main drink. Only adults may drink alcohol, in moderation
Salt	Limited consumption
<u>Physical activity</u>	At least a 20-minute walk a day

Related documents:

[The Mediterranean diet](#)

[High-fibre foods–the health benefits](#)

[A healthy lifestyle, the best recipe for controlling blood pressure](#)

[Eating disorders](#)

[Physical activity–essential for good health](#)

[Excess weight and obesity–prevention from childhood](#)

[Physical activity pyramid](#)

[Healthy eating pyramid](#)