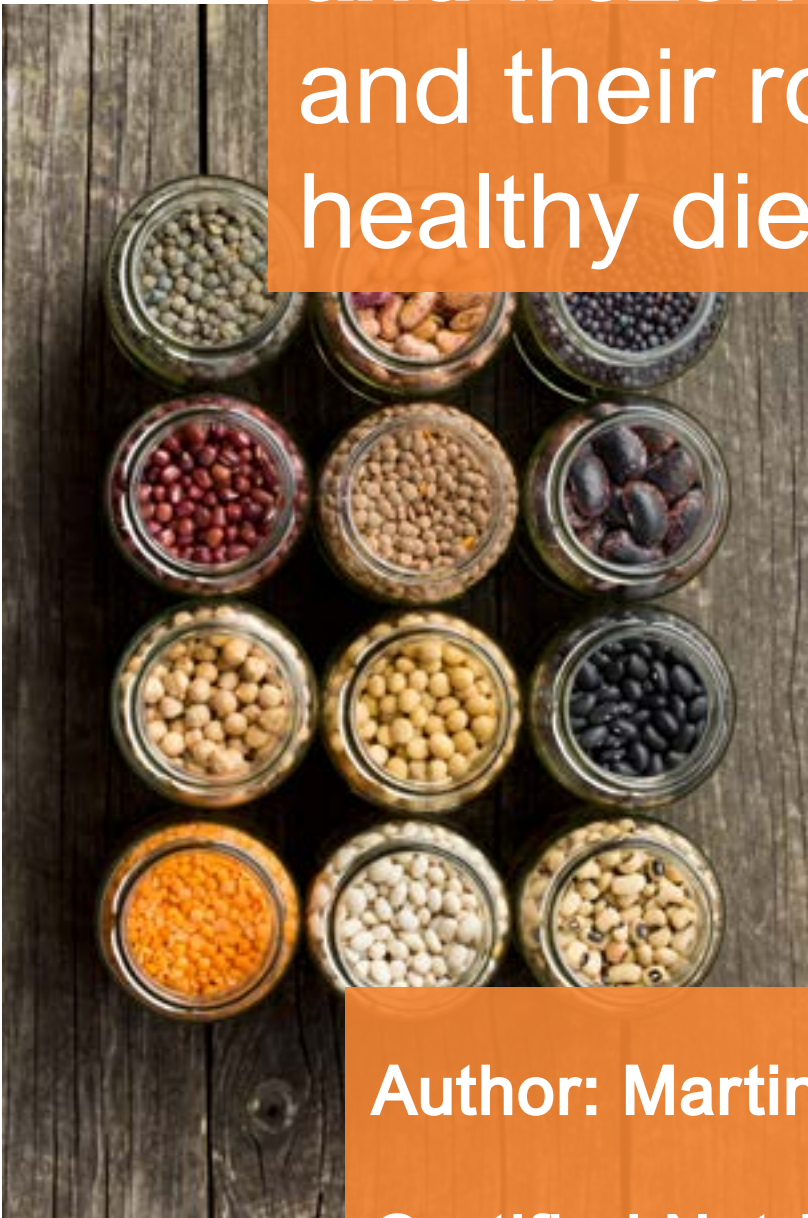



Legumes
as food of the future:
properties of **canned
and frozen legumes**
and their role in a
healthy diet.

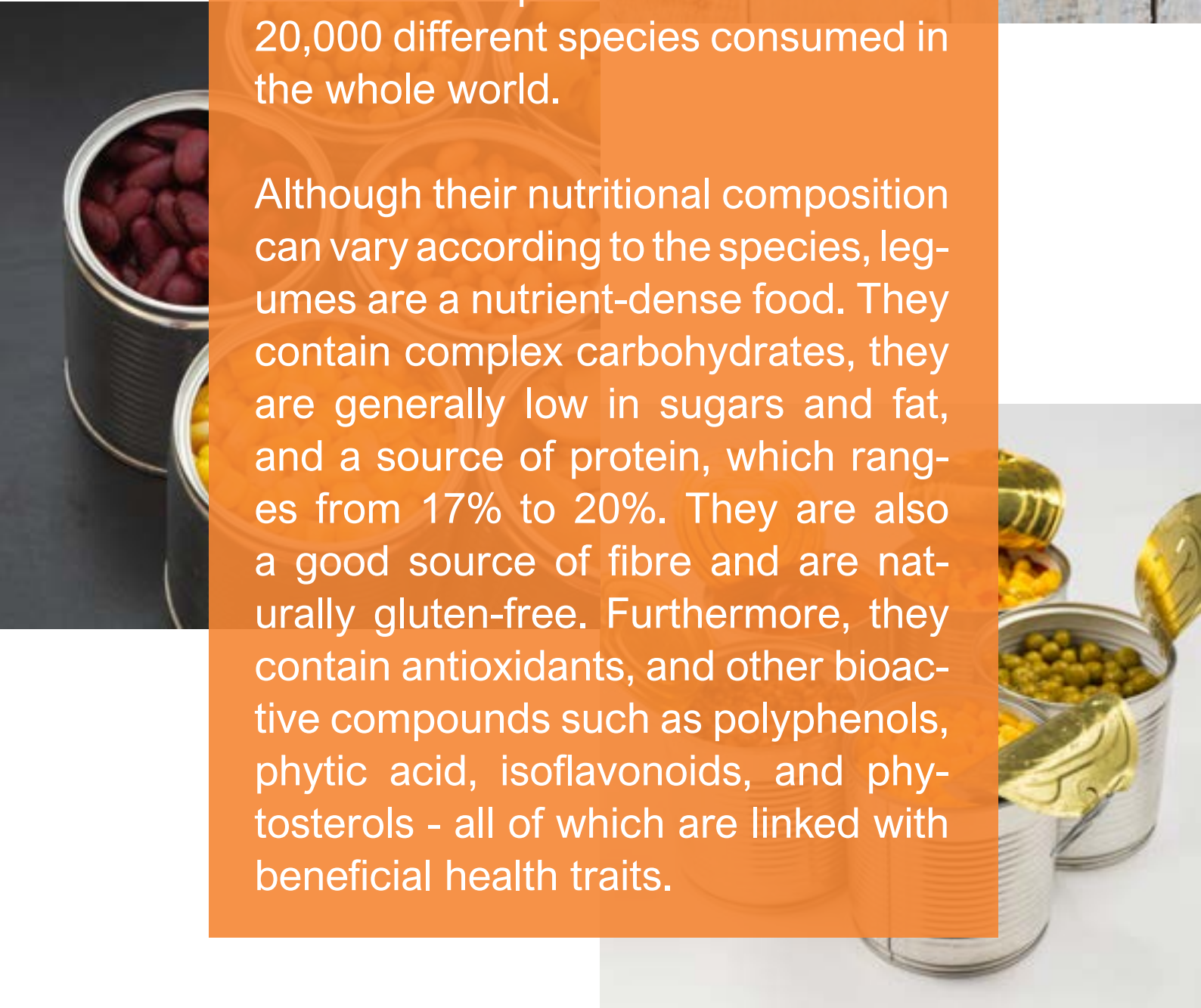


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Legumes are the edible seeds of plants belonging to the Fabaceae botanical family. The plant fruit is the pod that contains seeds of various sizes and shapes. There are around 20,000 different species consumed in the whole world.



Although their nutritional composition can vary according to the species, legumes are a nutrient-dense food. They contain complex carbohydrates, they are generally low in sugars and fat, and a source of protein, which ranges from 17% to 20%. They are also a good source of fibre and are naturally gluten-free. Furthermore, they contain antioxidants, and other bioactive compounds such as polyphenols, phytic acid, isoflavonoids, and phytosterols - all of which are linked with beneficial health traits.

Legumes can be eaten fresh, dry, frozen, and canned.

Dried legumes have long soaking times and they often take hours to cook. **Canned** and **frozen legumes** are therefore a great solution! They are ready to eat, affordable, convenient and can also help minimize food waste since canned and frozen legumes can be stored in the pantry for long periods of time allowing consumers to enjoy their nutritional value and taste all year round.



“Canned and frozen legumes are nutritious, affordable, convenient.”

CANNED LEGUMES

When it comes to **canned legumes**, consumers are spoilt for choice! **Canned chickpeas, peas, lentils, fava beans**, and many other beans of different color, shape and size can be easily found in every supermarket.

Canning and freezing preserve the nutritional value of legumes!
A few examples?

Canned chickpeas are high in protein, source of fibre and copper, and high in manganese.

Among canned beans, **canned kidney beans** are high in protein, and source of fibre, while **canned lima beans** are also source of folate and **canned white beans** are source of iron and potassium. Last but not least, **canned black beans** are source of potassium and folate.

Canned lentils are high in protein and source of iron and copper.

Canned legumes can contain salt nevertheless, draining and rinsing them lowers their sodium content

considerably. Nowadays, many brands also produce **canned legumes** with no added salt!



Canned legumes are versatile and perfect for every taste and recipe. They preserve the taste of fresh beans, they are affordable and convenient with a shelf-life of years. Once opened, they can be kept in the fridge covered by their liquid, for a few days.

FROZEN LEGUMES

Frozen peas are the most common, but do not forget other legumes such as **frozen beans, frozen edamame, and frozen fava beans!** The product is collected and frozen immediately to preserve its freshness (shelled **frozen legumes** is the most common type, but some of them such as **frozen edamame** can also be found unshelled and are gaining popularity).

Let us talk about the
little green ones!

PEAS

Frozen and canned peas are very frequently used as a side dish for meat and fish. Despite being often considered a vegetable, they are actually a legume. Peas pods are picked, shelled, divided by size, washed and blanched, to maintain their green color. Then they are frozen or canned so that they can preserve the taste of fresh peas.

Frozen and canned peas are sweet and tender, with a bright attractive color, and that makes them very appreciated by children.

Preserved peas are fat-free, saturated fat free, source of fibre, high in vitamin A (b-carotene). Being high in protein, they are perfect to be included in vegetarian and vegan diets. A serving of peas (150g) provides 8 g of protein! Recently, scientific literature showed the high digestive and metabolic bioavailability of pea protein. Being lower in fibre than other legumes, they can be more tolerable than other legumes for many people. Despite their sweet taste, they are low in sugar.



“Frozen legumes are collected and frozen immediately to preserve their freshness.”

Legumes consumption is positively associated with favourable health outcomes



Many scientific studies highlight the health benefits of legumes.

Frequent legume consumption (four or more times weekly compared with less than once a week) has been associated with 22% and 11% lower risk of coronary heart disease and cardiovascular disease, respectively. They also favor the control of body weight, probably because of their fibre content which can increase satiety. They are also inversely associated with all-cause mortality.

The majority of the food-based dietary guidelines across Europe emphasize legumes consumption. The recommended frequency of consumption is at least 1 to 3 times per week. The portion size is around 100g of cooked legumes, but may vary widely according to the country (classification of legumes into food groups

also varies).

As an affordable and sustainable source of protein, legumes have been a diet staple for many people around the world for a long time. Traditional dishes with legumes can be found in almost every culinary tradition.

Legumes are a staple of the Mediterranean diet, which includes at least three servings a week of legumes and are also recommended by the World Cancer Research Fund as part of a healthy diet.



SUSTAINABILITY

Legumes are among the food products with lower greenhouse gases emission, releasing around 1 Kg CO₂eq/kg of product.

They can grow in various climate conditions in the EU. In the past few years, the urgency to look for alternatives to animal-based food has brought legumes into the spotlight, playing a central role in facing the challenges to food security posed by climate change.

Among the aims of the EU Farm to Fork Strategy is increasing the consumption of healthy foods, and encouraging the shift towards a more plant-based diet. Legumes can play an important role



in achieving these objectives.

Legumes have also been included in the Future 50 food report by Knorr and WWF. The Eat Lancet Commission Planetary Health Diet recommends consuming around 150g of cooked legumes a day.

The processed fruit and vegetables sector will be key in Europe's transition toward plant-based diets.

Frozen and canned legumes are perfect for quick, affordable, and nutritious meals, for instance in salads, stews, curry, to prepare hummus, or even in a dessert. They are perfect to add flavour, texture, and important nutrients in your daily diet. They can be consumed by everyone, at every age, they are always ready and they do not require any cooking skills, or preparation time, overcoming time-related constraints such as long soaking or cooking time.

**Possibilities are endless
try them out!**

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