

Onions: More Than Just a Flavourful Ingredient

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Onions, often referred to as the “backbone of flavour” in many culinary traditions, are a versatile and essential ingredient in kitchens around the world. Beyond their role in adding taste and aroma to dishes, onions have long been appreciated for their numerous health benefits. These flavourful bulbs are rich in vitamins, minerals, antioxidants and other bioactive compounds that make them a valuable addition to a balanced diet. This article explores the nutritional profile of onions, their health-promoting properties and how they can be a valuable addition to a balanced diet.

The nutritional profile of onions

Onions come in various colours and types, including yellow, red and white, each with slightly different nutrient compositions. However, all onions share a common nutritional profile characterized by low calories, minimal fat and a wealth of essential nutrients.

Low in calories and fat: One cup (approximately 160 grams) of chopped (red) onions contains only about 64 calories and less than 1 gram of fat, making them a low-calorie and low-fat addition to meals.

Carbohydrates and fibre: Onions are a good source of carbohydrates, primarily in the form of natural sugars, including fructose and glucose. However, what makes onions stand out nutritionally is their fibre content. One cup of chopped onions provides approximately 3 grams of dietary fibre, which is essential for digestive health, regulating blood sugar levels and supporting weight management.

Vitamins: Onions are a notable source of several essential vitamins, including:

- i. **Vitamin C:** A potent antioxidant, vitamin C plays a crucial role in immune support, collagen synthesis, and overall skin health. One cup of chopped onions can provide about 12 per cent of the recommended daily intake of vitamin C.

- ii. **Vitamin B₆:** This vitamin is involved in various metabolic processes, including the production of neurotransmitters and red blood cells. Onions offer a moderate amount of vitamin B₆, contributing to overall health.

Minerals: Onions contain a variety of minerals, with potassium, folate, and manganese being the most prominent:

- i. **Potassium:** This mineral is essential for maintaining healthy blood pressure and regulating fluid balance in the body.
- ii. **Folate (Vitamin B₉):** Onions are a good source of folate, an important nutrient for DNA synthesis and cell growth. Adequate folate intake is especially crucial for pregnant women to prevent neural tube defects in their infants.
- iii. **Manganese:** Manganese is involved in various enzymatic reactions in the body and plays a role in bone formation and antioxidant defence.

Antioxidants: Onions are rich in antioxidants, particularly quercetin, which is a flavonoid with numerous health benefits. Quercetin helps protect cells from oxidative damage, reduces inflammation and supports cardiovascular health. The outer layers of onions, especially in red and purple varieties, tend to have higher quercetin concentrations.

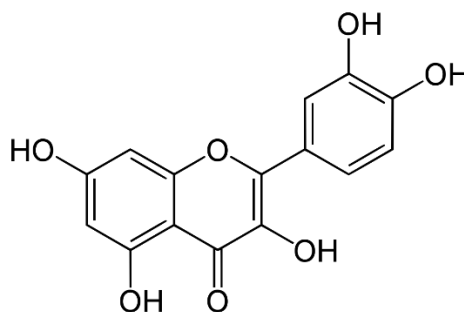


Fig. 1: Chemical structure of quercetin

Health benefits of onions

The consumption of onions has been associated with a range of health benefits, supported by scientific research:

- a) **Heart health:** Onions have demonstrated heart-protective properties due to their rich quercetin content and ability to improve various cardiovascular risk factors. Studies have shown that regular onion consumption in moderate (<200 g per week) or large amounts (>600 g per week) may help lower blood pressure, reduce LDL cholesterol levels and tendency to form blood clots, and improve overall heart health. It is known to benefit in the prevention and treatment of atherosclerosis and coronary heart disease. Numerous tests of onion extract *in vitro* have shown that they can inhibit the aggregation of human blood platelets responsible for arterial blocking.
- b) **Antioxidant and anti-inflammatory effects:** Quercetin, along with other antioxidants in onions, can fight oxidative stress and inflammation in the body. These properties have been linked to a reduced risk of chronic diseases, including certain types of cancer and neurodegenerative conditions.
- c) **Immune support:** The vitamin C in onions is essential for a healthy immune system. It helps the body produce and maintain white blood cells, which are critical in the defence against various infections.
- d) **Digestive health:** The dietary fibre in onions supports digestive health by promoting regular bowel movements and preventing constipation. It also acts as a prebiotic, nourishing the beneficial bacteria in the gut.
- e) **Blood sugar regulation:** Onions may have a positive impact on blood sugar control, making them a suitable dietary choice for individuals with diabetes or those at risk of developing the condition. Studies have shown that certain compounds in onions can help lower blood glucose levels.

Incorporating onions into your diet

Including onions in your diet is easy and can enhance the flavour and nutritional value of your meals. Here are some practical ways to incorporate onions into your daily eating habits:



Fig. 2: Raw onion salad



Fig. 3: Caramelised onions



Fig. 4: Roasted onions



Fig. 5: Onion pickle



Fig. 6: Onion soup



Fig. 7: Grilled onions



Fig. 8: Onion salsa

- i. **Raw in salads:** Thinly sliced raw onions can be added to salads for a crunchy and flavourful element.
- ii. **Sautéed or caramelised:** Sautéed or caramelised onions can be used as a base for various dishes, such as soups, sauces and stir-fries.
- iii. **Roasted:** Roasting onions brings out their natural sweetness and can be a delicious side dish on its own or as part of a roasted vegetable medley.
- iv. **Pickled:** Pickled onions make a tangy condiment for sandwiches and burgers.
- v. **Soups and stews:** Chopped onions are a common ingredient in soups and stews, adding depth and flavour to these dishes.
- vi. **Grilled:** Grilled onions can be a delightful addition to burgers, sandwiches, or as a side dish.

vii. Home Made Salsas: Onions are a key ingredient in many salsas and can be customised to suit your taste preferences.

It is, however, important to note that onions have a strong and distinct flavour, and the choice of onion variety (yellow, red, or white) can impact the overall taste of a dish. Mostly, the Indians prefer red and pungent types, while in Japan, Europe and America, yellow-coloured varieties are preferred.

Conclusion

Onions, with their unique flavour and numerous nutritional benefits, are a valuable addition to a balanced diet. Their low calorie and fat content,

combined with a rich supply of vitamins, minerals, fibre and antioxidants, make them an excellent choice for promoting overall health and well-being. Scientific research supports the positive effects of onions on heart health, antioxidant defence, immune support, digestive health and blood sugar regulation. Incorporating onions into your diet can be easily accomplished through a variety of cooking methods, whether they are sautéed, roasted, grilled, or enjoyed raw in salads and salsas. By making onions a regular part of your meals, you not only enhance the flavour of your dishes but also take a step toward better health.

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