

FRUIT JUICE

Fruit juice is made from the flesh of fresh fruit or even the whole fruit itself. It comes in the many flavours that nature provides and contains valuable nutrients that contribute to a healthy diet.

Fruit juice is a completely natural product. Sugars, sweeteners, preservatives, flavourings or colourings cannot be added. This is regulated by legislation in the form of The Fruit Juices & Nectars Regulations¹.

Fruit juice contains varying amounts of vitamins and minerals. Not only that, a 150ml serving counts as one of your 5 A Day.

Orange juice is the UK's most popular fruit juice. As a result, it is the focus of most juice studies.

The definition of fruit juice extends to cover vegetable juice. Carrot juice, for example, has a particularly high content of β -carotene, which is a leading source of vitamin A².

Smoothies



A smoothie typically contains crushed fruit and vegetables, purées and juice. These combine to produce a premium, diverse product that is usually thicker than a typical fruit juice.

There is no legal definition for 'smoothie'. A smoothie labelled as 'fruit juice' cannot contain any other added ingredients and is subject to the same regulations as fruit juice.



Fruit juice does not increase the risk of obesity



Fruit juice has a low glycaemic index rating



Fruit juice contains antioxidants that help support your immune system



A 150ml serving of orange juice contains about 60kcal

Types of fruit juice

Freshly squeezed

Juice is extracted from the fruit and used for immediate consumption.

From concentrate

Juice is extracted from the fruit and the water content is reduced. The concentrated juice in bulk can be frozen, chilled or aseptically packed and transported via various routes to the country of use. There, it can be reconstituted by re-adding water and packaged for retail sale.

Not from concentrate

Juice is extracted from the fruit and then lightly pasteurised and frozen, chilled or aseptically transported to the country where it will be packaged for consumers.



A 150ml serving of fruit juice counts as one of your 5 A Day



Fruit juice contains a wealth of vitamins and minerals in varying amounts



Fruit juice does not increase the risk of type 2 diabetes

Health benefits ▼

The UK's 5 A Day campaign is based on advice from the World Health Organization (WHO). The WHO recommends eating a minimum of 400g of fruit and vegetables every day in order to lower the risk of serious health problems³.

The current national average for meeting the 5 A Day target in the UK is worryingly short of the mark. It stands at under two portions for children aged between five and 15, and under three portions for adults⁴.

A 150ml serving of fruit juice counts as one of your 5 A Day⁵. Fruit juice is a highly convenient and cost effective way of reaching this crucially-important, WHO-advocated daily target.

Antioxidants ▼

There are a number of bioactive substances prevalent in fruit juice. Bioavailability is the degree to which food nutrients are available for absorption and utilisation in the body. Bioactive substances found in fruit juice include carotenoids – antioxidants that can protect you from disease and enhance your immune system.

In citrus fruit, most carotenoids are found in the skin⁶. As a result, manufacturing processes allow for a greater amount of carotenoids to pass into the fruit juice that is produced, along with all the other benefits the drink delivers.

Immune function ▼

More consumers than ever before are on a mission to protect themselves and improve their health. Google Trends reveals that searches for 'immune function' or variants of that term soared in Spring 2020 as the COVID-19 pandemic raged⁷.

Quite simply, the function of the immune system is to detect and destroy invaders, such as a virus or bacteria. Anything you can do to help support your immune system is beneficial. A healthy diet is one such way. Normal immune function is supported by regularly consuming a range of vitamins and minerals. These nutrients can be found in fruit juice in varying amounts.

Vitamin C ▼

Most fruit juice qualifies as a rich source of vitamin C. Vitamin C supports the proper functioning of the immune system. A 150ml serving of orange juice provides approximately 100% of the daily reference intake (RI) of vitamin C⁸.

Folate ▼

Folate is a B vitamin which is used by the body to maintain and repair blood vessels. Adequate folate intake is especially important during periods of rapid growth such as pregnancy, infancy and adolescence.

A 150ml serving of orange juice provides 16% of the daily RI of folate. Studies have shown that the folate in orange juice can be easily absorbed by the body, helping to unlock its benefits⁹.

Potassium ▼

Around 33% of UK adults live with high blood pressure¹⁰. A diet rich in potassium can help control blood pressure and may reduce the risk of cardiovascular disease, particularly stroke¹¹. Potassium is found in varying quantities in certain types of fruit juice, such as orange juice, pineapple juice and tomato juice¹².

Balanced diet ▼

In the UK, obesity is estimated to affect around one in every four adults and around one in every five children aged 10 to 11¹³. Research has shown that consumers who drink a 150ml serving of fruit juice on a daily basis have a lower body weight, lower body mass index and a smaller waist circumference than those who do not drink the recommended portion of fruit juice every day¹⁴.

There is full nutrition labelling on all fruit juice packaging. This includes a calorie count. Did you know that a 150ml serving of orange juice contains about 60kcal? That equates to approximately 3% of a woman's daily RI of 2,000 kcal, and 2.4% of a man's daily RI of 2,500 kcal¹⁵.

Sugars in fruit juice ▼

Consumers are often confused about the effect of fruit juice on blood sugar. Contrary to a common misconception, fruit juice does not produce a significant rise in blood glucose. The fact is that fructose-containing foods (such as a fruit and fruit juice) tend to have a relatively low glycaemic response.

The glycaemic index (GI) is the number associated with the carbohydrates in a particular type of food. The GI indicates the impact of these carbohydrates on a person's blood sugar level. It operates on a scale of 1 to 100.

Fruit juice has a low GI rating. The GI of a 150ml serving of orange juice is 50 – 52. Any food under 55 is classified as having a low GI rating.

Type 2 diabetes ▼

As confirmed in 2015 by the UK's Scientific Advisory Committee on Nutrition, fruit juice has a neutral effect on overall blood glucose control and does not increase the risk of type 2 diabetes¹⁶.

A number of meta-analyses conducted since then have drawn similar conclusions. The most recent of these was published in 2020. It confirmed that drinking fruit juice on a regular basis had no impact on the risk of type 2 diabetes or obesity¹⁷.

Dental health ▼

The most important factor in maintaining good dental health is appropriate oral hygiene. This means brushing your teeth twice a day with fluoride toothpaste and visiting the dentist regularly.

The British Dental Association advises that fruit juice should always be consumed as part of a meal occasion or within 30 minutes of eating a meal¹⁸. You should leave at least 15 minutes between consuming fruit juice and brushing your teeth.

Studies have shown that consuming a daily 150ml serving of fruit juice is:

- Not associated with tooth erosion or dental caries in children and adolescents¹⁹
- Not associated with early childhood caries²⁰

For small children, the British Dental Association's advice is to use a straw to drink fruit juice²¹. The NHS advises not to put fruit juice in baby bottles or soothers and to avoid giving fruit juice to babies aged six months or under²².



British Fruit Juice Association

bfja.org

info@bfja.org

The British Fruit Juice Association (BFJA) is a trade organisation founded by the erstwhile Ministry of Food in 1941 to ensure adequate supplies of high-quality fruit juice.

The organisation now consists of juice importers, contract packers, transport and storage professionals, blenders, fruit and vegetable processors, category managers, distributors and juice creators.

The BFJA represents businesses working in the juice industry that are large, small and anything in-between, including a number of start-ups. It has approximately 60 members and works closely with its partner organisations, the British Soft Drinks Association and the European Fruit Juice Association (AIJN). The BFJA is also a member of the International Fruit and Vegetable Juice Association (IFU).



British Soft Drinks Association

[britishsoftdrinks.com/
Fruit-Juices](http://britishsoftdrinks.com/Fruit-Juices)

bsda@britishsoftdrinks.com

The British Soft Drinks Association (BSDA) represents UK producers of soft drinks, including fruit juice and still and dilutable drinks. Membership includes the majority of Britain's soft drinks manufacturers as well as franchisors, importers and suppliers to the industry.

As the collective voice of the UK soft drinks sector, the BSDA provides a common industry view on the legal, technical and social issues concerning soft drinks, including fruit juice. The BSDA represents the interests of the UK soft drinks industry at a UK and European level.

The BSDA was formed in 1987 as a result of the amalgamation of several industry organisations including the Soft Drinks and Fruit Juice Association. It is a member of both the IFU and the AIJN.

Links

- BSDA technical guidance for fruit juice is available online²³.
- More evidence-based information on the role of fruit juice in diet and health is also available online²⁴.

Endnotes

- <https://www.legislation.gov.uk/uksi/2013/2775/introduction/made>
- <https://pubmed.ncbi.nlm.nih.gov/16210712/>
- <https://www.who.int/dietphysicalactivity/fruit/en/>
- <http://healthsurvey.hscic.gov.uk/data-visualisation/data-visualisation/explore-the-trends/fruit-vegetables.aspx>
- <https://www.nhs.uk/live-well/eat-well/5-a-day-what-counts/>
- <https://fruitjuicematters.uk/en/nutrition-and-bio-availability/nutritional-benefits-of-100-fruit-juice>
- <https://trends.google.com/trends/explore?date=today%205-y&geo=GB&q=immune%20function>
- <https://ods.od.nih.gov/factsheets/VitaminC-Consumer/>
- Franke AA et al. (2005) Bioavailability and antioxidant effects of orange juice components in humans. *J Agric Food Chem* 53: 5170-8.
- <https://www.nhs.uk/conditions/high-blood-pressure-hypertension/>
- https://www.who.int/elena/titles/guidance_summaries/potassium_intake/en/
- <https://fruitjuicematters.uk/en/nutrition-and-bio-availability/nutritional-benefits-of-100-fruit-juice>
- <https://www.nhs.uk/conditions/obesity/>
- <https://www.britishsoftdrinks.com/Technical-Publications/fruit-juice-drinkers-have-a-lower-bmi-and-waist-circumference-than-non-consumers>
- <https://www.nhs.uk/common-health-questions/food-and-diet/what-should-my-daily-intake-of-calories-be/>
- www.gov.uk/government/publications/sacn-carbohydrates-and-health-report
- https://air.unimi.it/retrieve/handle/2434/798386/1655547/DElia2020_Article_100FruitJuiceIntakeAndCardiova-1.pdf
- <https://bda.org/sugar>
- <https://pubmed.ncbi.nlm.nih.gov/31355175/>
- <https://pubmed.ncbi.nlm.nih.gov/25429039/>
- <https://www.dentalhealth.org/News/100-fruit-juice-best-for-teeth>
- <https://www.nhs.uk/live-well/healthy-body/kids-teeth-sweets-fizzy-drinks-faqs/>
- https://www.britishsoftdrinks.com/write/MediaUploads/Publications/BSDA_-_FRUIT_JUICE_GUIDANCE_May_2016.pdf
- <https://fruitjuicesciencecentre.eu/en>