

## Low Fat Myth

- Low fat yoghurts are indeed low in fat, because skimmed milk is used in production.
- However, if yoghurt has zero fat then it would have the consistency of a thin liquid.
- To overcome this non-fat milk powder is added to thicken it, which increases [lactose - (carbohydrate - sugar)].
- People often eat a big portion of yoghurt (with other sweet/carb foods) in the view that it is low fat; so will end up eating a lot of carbohydrate.
- Too many carbohydrates in the diet / portion of food, causes a steep rise in blood sugar (glucose).
- In an attempt to create homeostasis - to balance the increase in blood sugar - the body will use up what glucose it can, but will turn the remainder to fat (energy storage), as is often the case.
- Fat is satiating, so full-fat yoghurt will actually keep you fuller for longer.
- Full-fat dairy contains fat-soluble vitamins A, D, E and K which all have a multitude of health benefits, which are all removed from fat-free yoghurts.

## Plant Based (Dairy Free) Yoghurts

- A variety of plant-milk yoghurts appeared in the 2000s.
- These include soya, hemp, rice milks and using nuts, such as almond and coconut milks.
- These products are suitable for vegans, as well as consumers who prefer plant milks or are unable to tolerate dairy products

## Health Benefits of Probiotic Yoghurt

- As with milk it provides calcium, phosphorous, magnesium and protein, which are essential for healthy bone growth and development, and may reduce high blood pressure.
- See Probiotics.

## Health Risks (Cow's Milk)

- Modern raising methods involve some potentially harmful inputs that pass on to the milk.
- Most cows are given antibiotics and a genetically modified form of bovine growth hormone (rbGH) that can increase levels of the insulin-growth factor 1 - associated to several cancers.
- The casein in most milk is genetically altered, creating a much higher likelihood of inflammation, autoimmune disease, and even type 1-diabetes.
- Damaging sweeteners [high fructose corn syrup (HFCS) and aspartame] are commonly used in flavoured products, and yoghurt is no exception despite its image as a health food.

## The Bottom Line:

Probiotic yoghurt definitely has some great health benefits - they are full of beneficial nutrients that support health. However, it is a lottery whether they contain the probiotics your body needs, or whether they are in significant amounts that support their therapeutic benefits. Choosing the best yoghurt can be difficult. If you feel that you can't live without it you should always choose a yoghurt that is organic, plain, full fat, probiotic, and the most naturally produced with a short shelf life. It is important to do some research to see what is best! Dairy free yoghurts are good options. If you think you need treatment from probiotics then you would probably benefit from a proper laboratory tested supplement and ensure you are eating the prebiotics to support their growth.



# FOOD *in* FOCUS

## YOGHURT

## WELCOME

Each month our nutritionist  
**Gary Baverstock**  
provides some basic science  
and unbiased information, to  
help demystify certain  
popular foods in our diet.

## Yoghurt

- Yoghurt is a food produced by the bacterial fermentation of milk.
- The bacteria used to make yoghurt are known as “yoghurt cultures”.
- Fermentation of lactose by these bacteria produces lactic acid (promoting acetaldehyde production), which acts on the milk protein to give its texture and characteristic tang.
- Dairy yoghurt is produced using a culture of *Lactobacillus bulgaricus* and *Streptococcus thermophilus* bacteria.
- In addition, other lactobacilli and bifidobacteria are also sometimes added during or after culturing yoghurt.
- Milk from cows (casein) is mainly used, but milk from buffalo, goats, ewes, camels and yaks can also be used to produce yoghurt in various parts of the world.
- Yoghurt can be made from different types of milk, including skimmed, semi-skimmed, whole, evaporated or powdered forms.
- Some countries require yoghurt to contain a certain amount of colony-forming units of microorganisms.
- Vegetable gums are also used to make yoghurts in thick gels like in Greek yoghurt, which is why this is difficult to recreate at home.

## Production

- In Western culture, the milk is first heated to about 85 °C to denature (protein breakdown into amino acids) so that they coagulate and set together rather than to form curds.
- In parts of India and Bangladesh, curds are a desired component, so the milk is boiled and allowed to cool to about 45 °C (113 °F), the bacterial culture is added, and the temperature of 45 °C is maintained for 4 to 7 hours to allow fermentation.

## Nutritional Value

- Yoghurt is nutritionally rich in protein, calcium, B2, B6, B12.
- It has nutritional benefits beyond those of milk, namely due to its probiotics.
- Lactose-intolerant individuals may tolerate yoghurt better than other dairy products due to the conversion of lactose to the sugars glucose and galactose, and the fermentation of lactose to lactic acid carried out by the bacteria present in the yoghurt.
- Yoghurt contains varying amounts of fat. For example, some cows'-milk yoghurts contain no fat; others of low fat content have 2% fat, whole-milk yoghurt may have 4% fat; some yoghurts sold as “Greek-style” may have about 11% fat.

## Nutritional Values of selected plain yoghurts

Yoghurt Type	Calories (Kcals)	Protein	Carbohydrates	Carbs (Sugars)	Fats	Saturated Fat
Greek Yoghurt	145	4.5g	6.6g	6.6g	11g	7.0g
Plain Yoghurt	61	3.0g	5g	5g	3.0g	2.0g
Low Fat Yoghurt	63	5.25g	7.04g	7.04g	1.55g	1.0g

Based on 100g Values – Source: [nutritiondata.com](http://nutritiondata.com)

## Varieties

- Set-style Yoghurt is poured into containers then incubated without any further stirring and has a characteristic thick texture, and is excellent for enjoying plain or using in recipes.
- Swiss-style or Stirred Yoghurt is incubated in a large vat, cooled and then stirred for a creamy texture, often with fruit or other flavourings added.
- Greek-style Yoghurt is either made from milk that has had some of the water removed or by straining whey from plain yogurt to make it thicker and creamier, and holds up better when heated than regular yogurt, making it perfect for cooking.
- Live yoghurts, which contain harmless bacteria that are added to the milk and are still present and alive.
- Probiotic (bio) yoghurts contain live microorganisms, made using *bifidobacterium bifidum* (bifidobacteria) and/or *lactobacillus acidophilus* and has a milder, creamier flavour.

## Probiotics

- Probiotics are microorganisms that are believed to provide health benefits.
- The term is currently used to name ingested microorganisms associated with beneficial effects to humans and animals.
- Commonly claimed benefits of probiotics include:
  - The decrease of potentially pathogenic gastrointestinal microorganisms.
  - The strengthening of the immune system, the improvement of the skin's function.
  - The reduction of gastrointestinal discomfort, the improvement of bowel regularity, the decrease in gut pathogens and the reduction of flatulence and bloating.
  - The maintenance of intestinal microbiota in subjects receiving antibiotic treatment.
  - Prevent and treat vaginal yeast infections and urinary tract infections
  - Helpful in Irritable Bowel Syndrome.
  - Supporting immunity – preventing or reducing the severity of colds and flu.
- However, probiotics are regulated as foods, and don't undergo the rigorous testing and approval process that medicines do.
- We don't know whether a probiotic yoghurt, supplement or tablet contains what is stated on the label, and whether the amount of “good” bacteria in it is enough to have a beneficial effect.
- It's also worth noting that the different probiotic strains have completely different effects on the body, so do not assume that the beneficial effects seen with one strain are the same as other similar strains.
- Prebiotics are a source of food for probiotics and essential to grow, multiply and survive in the gut.
  - Prebiotics sources include: Berries, Asparagus, Garlic, Oats, Chicory, Greens, Onions, Legumes, Flaxseed, Tomatoes & Artichokes.