

What are superfoods and how healthy are they really?

Superfoods often suggest special health benefits, but there is hardly any scientific evidence for their benefits.

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Explainer videos

The media contribution was created by Helen Monica Regina as part of her degree in Food Quality and Safety (M.Sc.) at the University of Bayreuth for the Ernährungsradar project and is published online in the E-Tutor section. The video consists of her own film and image material. The video was animated with the help of Microsoft PowerPoint 365. Images purchased from shutterstock.com were also used. Subtitles for the video are available in German and English and can be switched on and off via the YouTube settings.

Transcript of the explainer video

We have all heard of the term 'Superfoods', where did it all begin? The term 'Superfood' was coined by the food advertising industry in the United States of America during early 20th century around World War I. Banana was the first known food to be marketed as a 'superfood'. This term became more meaningful to consumers when the American Medical Association recommended the consumption of bananas to reduce risks of celiac disease and diabetes. As a consequence, the banana diet craze happened.

What is interesting about the venture of the term 'superfoods' is the fact that a definition did not exist back then and doesn't exist now. Let's look at some of the hypes and trends around superfoods and what's the real truth behind them.

'Superfoods' are rich in micronutrients like vitamin B12, trace elements like selenium, plant secondary metabolites, antioxidants etc.

A balanced diet sounds pretty similar because it is proven to provide all necessary micronutrients and trace elements. It provides it in a much more stable form than a 'superfood', because 'superfoods' are in powders, oil, or concentrated forms. Although 'superfoods' may be rich in micronutrients, they are subject to degradation over a prolonged storage period at fluctuating temperatures. Hence, it is better to consume them whole as a part of a diet rather than in a pure form.

'Superfoods' are plant-based food supplements.

The term 'food supplements' has been defined by the European Food Safety Authority (EFSA=, however, the term 'superfoods' lacks a clear scientific or legal definition. And yes, food supplements include herbal extracts which are vegan and could help in meeting one's nutritional requirements. However, they do not have to be marketed as 'superfoods' as this term does not provide any useful nutritional information.

'Superfoods' are exotic. Acai bowls can help aid weight loss.

The use of the term 'superfoods' for imported and exotic foods makes it evident that this is purely a marketing term. Shifting consumer preference to exotic imported products could only lead to unsustainable food consumption, a loss of biodiversity as native alternatives may lose their demand. There is no scientific evidence that acai bowls actually aid weight loss.

Coconut oil is a 'superfood' so add a tablespoon of coconut oil to every meal.

The amount of 'superfoods' consumed can differ greatly from one individual to another due to the lack of a legal intake value. This may lead to health concerns and a good example is coconut oil. Scientific evidence strongly suggests that coconut oil contains many calories and high amounts of saturated fats. The American Heart Association recommends reducing the consumption of coconut oil as it was found to increase harmful LDL cholesterol levels.

'Superfoods' are rich in bioactive compounds.

The term 'bioactive compound' like 'superfoods' also lacks a clear unanimous definition. Human studies subject to a diet comprising or dominated by 'superfoods' showing disease prevention has not yet been investigated so far.

Novel foods are 'superfoods' and vice versa.

These terms are misinterpreted as synonyms for marketing purposes. Back to definitions: Do we have a definition for novel foods? Yes! how about superfoods? No!

In conclusion, there are numerous hypes and trends around the marketing term 'superfoods'.

'Superfoods' are simply foods in countries from where they originate from.

Organizations like the EFSA and German Nutrition Society neither have a definition for the term 'superfood' nor have a list of 'superfoods'. Hence, 'superfoods' are unregulated, which means that any food can be marketed as a 'superfood'.

Scientifically, there is a lack of pathway studies for example, the oxidative stress pathway, inflammatory pathways to support the health benefit and disease prevention claims of 'superfoods'.

Human studies on how 'superfoods' can be comparable to a balanced diet are also lacking.

So, what's the way forward? Eating a balanced diet and leading a healthy lifestyle generates a healthy diet pattern which supports disease prevention and provides health benefits in the long run.

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