

What are Superfoods?

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SUMMARY

Superfoods have emerged as a new alternative to combine the extraordinary benefits of functional characteristics with their individual exotic and natural properties as a result of rising consumer awareness of healthy lifestyles and well-being. Contrary to their superior qualities in terms of health or even medicine, which are founded on their histories of historical use, the idea of superfoods is still not fully understood. More focus has been placed on certain food types known as "superfoods," which make bold claims about their abundance in beneficial nutrients and bioactive chemicals as well as their capacity to treat disease, support the human immune system, and enhance overall health. However, a better understanding of their potential and mechanisms need to be done in order to regulate their sale, distribution, packaging and labelling.

INTRODUCTION

There is no official definition for the phrase "superfood," which means that there is no scientific, legal, or regulatory definition put forth by food safety rules. Foods that may offer nutrients in large quantities, are crucial for diets, and support the body's normal functioning are referred to by this colloquially (AESAN, 2019). Superfoods, as defined by Wolfe (2009), are a particular group of naturally occurring or moderately processed foods that are high in nutrients and feature a dozen or more special qualities. They are foods that, per research, have the power to boost physical vitality and may be a wise choice for boosting immunological function and overall wellness. Polyunsaturated fatty acids (omega-3, omega-6), vitamins, minerals, probiotic microorganisms, antioxidants, essential amino acids, polysaccharides, and different enzymes are the most significant bioactive components of superfoods that have been shown to be beneficial to the human body.

Main Body

As people become wealthier, diets in both developing and developed countries have changed in recent decades, with a rise in the consumption of meat, dairy, refined grains, fruit, and vegetables (Godfray *et al.*, 2018). Due to these developments, non-communicable diseases like type II diabetes, coronary heart disease, cancer, and obesity are now more common (Pan *et al.*, 2012). The hunt for healthy diets has increased demand for functional foods with many advantages, including "superfoods," as a "smart method" to improve our diets in response to the rise in the incidence of diet-related disorders. Numerous studies indicate that superfoods are a fantastic way to enhance general health by enhancing the immune system, increasing the production of serotonin and other hormones, and encouraging the efficient functioning of the human body's organic processes (Proestos, 2018).

Superfoods contain a variety of advantageous components that the human body uses to enhance overall health and treat a range of ailments. Because they contain so many healthy ingredients, superfoods are good for the body even when ingested in little amounts. Some of the most significant superfoods, including kefir, maca, acai, goji, hippophae, maize, blueberries, royal jelly, spirulina, ginger, donkey milk, and pomegranate, have emerged as being particularly significant for human health.

Table 1: Compounds and Health benefits of some superfoods

Food Products	Compounds	Health Benefits
Donkey milk	--	Increase IgG response Strengthening immune system Antimicrobial activity, and proatherogenic activity
Pomegranate	Phenolic compounds, punicalagin, anthocyanins and ellagitannins	Antioxidant activity, reduced risk of CVD and hypertension and improved endothelial function

Ginger root	Polyphenols, inorganic compounds, polyphenols, zinc, potassium and vit C	Prevention of CVD, improved digestion, Antimicrobial and anti-inflammatory activity
Goji berries	Polysaccharides, phenolic and polyphenolic compounds, beta-sitosterol, zeaxanthin	Prevention of diabetes, stomach cancer and CVD, improved vision, reduction of inflammation
Acai berries	Anthocyanins, ω -3 and ω -6 fatty acid, anthocyanins and Vit A, B1, C and E	Protection against cancer cells, anti-inflammatory, strengthening of immune system
Maize	High fiber and amino acid content, MUFA, soluble protein, provitamin A and Vit E	Antidepressant, strengthening of immune system and vision, regulation of blood sugar levels, improved lipid profile,
Spirulina	Low carbohydrates, antioxidants, γ -linolenic acid, β -carotene, vit E, selenium and polyphenols	Effects blood glucose level and pulmonary function, enhancement of immune system, antiviral, antimicrobial and antioxidant activity
Tea	Polyphenols, catechins, thioflavins, theanine	Improved memory and learning skills, reducing risk of cancer, arthritis and neurological diseases, cardio protective effect

However, the benefits of these products are not supported by scientific research, despite what the advertising claims. The list of superfoods continues to expand unchecked year after year (Proestos, 2018), since health claims are frequently weakly backed by scientific evidence, particularly not by controlled human intervention trials (van den Driessche *et al.*, 2018). Additionally, some authors have referred to them as "food fraud" because to the lack of standardised standards for classifying foods as "super" and the indiscriminate marketing that has occurred (Curll *et al.*, 2016). These statements support the need for tougher laws and a food fraud policy to control superfoods misleading health claims (Smith, 2019).

CONCLUSION

Consumer's perceptions and choices are influenced by a variety of sustainability-related variables. Diverse factors are at play that affects superfood lover's intake choices. The belief that eating superfoods in general or a particular food would provide health benefits and a sense of comfort is one of the best and most reliable predictors. Higher socioeconomic groups make more health-conscious food choices than lower ones, which causes disparities in dietary intake. Consumption, however, is strongly influenced by financial, educational, and cultural factors. Environmental factors like minimal processing of food, environmental friendly packaging, use of local, natural and organic ingredients which have lowest carbon footprint. Economics of such superfoods are also to be considered where price of foods should match with the income of different sections of household. Identification and proper definition of superfoods is very important for their categorization and inclusion in diet for achieving the desired health benefits. Extensive research needs to be done regarding the consumer perception and acceptance of superfoods among common masses.

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