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SUPERALIMENTOS: EL PODER DE LA NATURALEZA EN TU PLATO

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EDITORIAL

SUPERFOODS: THE POWER OF NATURE ON YOUR PLATE

The term 'superfood' is frequently used in scientific literature to describe foods that are both visually appealing and rich in energy (Jagdale et al., 2021). The UN's 2030 Agenda for Sustainable Development highlights the importance of utilizing regional crops as a key strategy to improve nutrition and sustainability, particularly in malnourished regions. In recent years, superfoods—also referred to as functional foods—have gained increasing attention (Gupta & Mishra, 2020). These are traditional foods rich in essential nutrients such as proteins, fiber, and vitamins, or bioactive compounds that offer notable health benefits and may help reduce the risk of chronic diseases (Daugherty, 2011; Tacer-Caba, 2019).

According to data collected in August 2018, a search for the term "superfoods" yielded 191 results, including research articles, book chapters, and review papers. In comparison, the term "superfruits" produced 85 results in the ScienceDirect database (Gupta & Mishra, 2020). However, for the period between 2019 and 2025, the number of results has significantly increased to 1,163.

Similarly, the term "functional foods" yielded 210,226 results in the Wiley database and 382,852 results in ScienceDirect for the period 1998–2017. More recent data from 2019 to 2025 indicate a further rise, with 460,415 results recorded in ScienceDirect.

These findings suggest a notable divergence in the scholarly adoption and conceptual framing of the term "superfood" compared to "functional food" (Gupta & Mishra, 2020).

Superfoods, especially superfruits, are often exotic fruits that remain relatively unknown on a global scale. These foods are widely recognized for their numerous health benefits, including potent antioxidant properties and a rich content of bioactive compounds such as anthocyanins, flavonoids, and phenolics. Additionally, they may contribute to the prevention and management of conditions such as cardiovascular diseases and diabetes mellitus. Their potential health effects are typically assessed using specific biomarkers, including blood pressure, body mass index, waist circumference, fasting glucose levels, and plasma triacylglycerol concentrations (Gupta & Mishra, 2020).

Superfoods can be categorized into at least three main groups:

1. Superfruits – Fruits that are particularly rich in essential nutrients.
2. Supergrains – A category of superfoods consisting of specific grains and cereals with high nutritional value.
3. Generic Superfoods – Foods that do not fall into the first two categories but exhibit exceptional nutritional properties.

Scientific Interest and Potential Health Benefits

The growing interest in superfoods stems from their superior nutritional composition compared to conventional foods. Due to their unique bioactive profiles, these foods may play a crucial role in addressing dietary deficiencies. Superfoods are recognized for their potential to:

- Provide essential nutrients that are often scarce in standard diets.
- Positively influence physiological functions, thereby promoting overall health and preventing metabolic imbalances.
- Reduce the risk of certain diseases, thanks to their high concentrations of bioactive compounds.

Notable Superfoods and Their Bioactive Properties

Superfoods encompass a diverse range of plant-based and natural products, including:

- Berry and drupe fruits, such as blueberries, pomegranates, goji berries, and açaí berries (dark-purple fruits from a South American palm species), are known for their potent antioxidant activity.
- Nutrient-dense root vegetables, such as beetroots and maca (a Peruvian root that thrives at high altitudes and is processed into a powder with adaptogenic properties, aiding in stress resistance and combating chronic fatigue).
- Culinary roots with bioactive potential, such as ginger and turmeric, are widely recognized for their anti-inflammatory and antioxidant effects.
- Bee-derived products, including not only honey (with Manuka honey being particularly valued for its antibacterial properties) but also royal jelly, which exhibits antimicrobial activity.
- Cocoa, an exceptionally rich source of flavonoids with cardiovascular and neuroprotective benefits.
- Nutrient-dense algae and plant extracts, such as spirulina, moringa, and specialized varieties of green tea, including Matcha, Gyokuro, and Sencha, all of which are abundant in catechins with antioxidative properties.
- Seeds with high nutritional density, particularly chia seeds and hemp seeds, which provide essential fatty acids and proteins.
- High-protein grains, such as oats and quinoa, which also contain essential minerals.
- Leafy green vegetables, including kale and spinach, are known for their rich content of vitamins, minerals, and phytonutrients.

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The Nutritional Benefits of Superfoods

The exceptional nutritional properties of superfoods, characterized by high concentrations of micronutrients, vitamins, minerals, and antioxidants, offer significant physiological benefits. Unlike macronutrients, which are widely available across various food sources, micronutrients must be obtained through a well-balanced and diverse diet to support optimal metabolic functions (Fernández-Ríos, 2022).

Among these, antioxidants play a crucial role in neutralizing excess free radicals, thereby mitigating oxidative stress. An overabundance of free radicals can accelerate cellular aging and contribute to tissue damage. Consuming antioxidant-rich foods, such as blueberries and other berry fruits, may help reduce the risk of oxidative stress-related conditions, ranging from premature skin aging and hair loss to more severe disorders like osteoporosis (Bouayed & Bohn, 2010; Diplock, 1998).

Evolution of the Superfood Concept

This classification remains dynamic and subject to modifications as scientific research continues to identify new ingredients with remarkable nutritional and functional properties. Some of these emerging superfoods, though currently underutilized or commercially obscure, may gain recognition for their potential health benefits in the near future (Jagdale et al., 2021).

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