Sugar alcohols: An overview of manufacturing as nutritive sweeteners

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Sugar alcohols (Polyols), are currently used as a bulk sweetener in reduced calorie foods. It has been part of the human diet for thousands of years as it is present in fruits such as pears, melons and grapes, as well as foods such as mushrooms and fermentation –derived foods (wine, soy sauce and cheese). Sugars alcohol is believed to be good sugar substitute for people with diabetes plus they do not contribute to dental caries (cavities). The most common sugars alcohol available in the market is sorbitol, mannitol, xylitol and erythritol. Manufacturing, benefits and applications in food and drinks for these common sugars alcohol and others will be presented.

Biography

Osama Ibrahim is a highly experienced, principal research scientist with particular expertise in the field of microbiology, molecular biology, food safety, and bio-processing for both pharmaceutical and food ingredients. He is knowledgeable in microbial screening/culture improvement; molecular biology and fermentation research for antibiotics, enzymes, therapeutic proteins, organic acids and food flavors, biochemistry for metabolic pathways and enzymes kinetics, enzymes immobilization, bio-conversion, and analytical biochemistry. He was external research liaison for Kraft Foods with Universities for research projects related to molecular biology and microbial screening and holds three bioprocessing patents. In January 2005, he accepted an early retirement offer from Kraft Foods and in the same year he formed his own biotechnology company providing technical and marketing consultation for new start up biotechnology and food companies.

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