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Ready-to-Eat Therapeutic Foods and Severe Acute Malnutrition

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According to the World Health Organization, currently 13.6 million children under the age of five are affected by severe acute malnutrition, characterized by extreme thinness in relation to height and a weakened immune system. Children in this condition and without medical complications are treated with Ready-to-Eat Therapeutic Foods, considered the most effective treatment for severe acute malnutrition. The main ingredients in the formulation of these foods are powdered milk, peanut butter, vegetable oil, sugar, and a mix of vitamins and minerals. The potential of these foods lies in their low percentage of free water and high energy and nutritional density, as well as their ability to be stored for up to two years and used on-site within therapeutic programs. However, the high cost of powdered milk and the possibility of peanut butter contamination with aflatoxins have raised concerns about the production and distribution of this product, compromising its economic sustainability and food safety. Agri-food industries generate a large number of by-products that constitute a source of bioactive compounds with potential therapeutic applications, and their valorization leads to a circular economy in which industry and society benefit. Considering the above, food science and technology can contribute to studies of effective alternative formulations for multiple therapeutic uses, when necessary.

Keywords: Therapeutic foods; Severe acute malnutrition; By-products of the food industry.

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