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Certain Aspects of Nutritional Security of People with Gluten-Related Disorders

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Abstract

As a consequence of the production of high-yielding cereal varieties per hectare and the considerable increase in gluten consumption, today, consequently, we face a rising epidemic of disorders related to gluten consumption: celiac disease, gluten allergy gluten sensitivity. Nutritional therapy is the only treatment for celiac disease unanimously accepted by the medical community. **The aim** of the study is to analyze the food and nutritional security of people with disorders related to gluten consumption from the perspective of assessing the nutritional deficiencies of people diagnosed with celiac disease or gluten intolerance, but also assessing the nutritional deficiencies of gluten-free products. **The study** on the assessment of nutritional deficiencies of people with disorders related to gluten consumption, but also the nutritional deficiencies of gluten-free products/diets were conducted on the PubMed search engine. 154 free full text papers published in the period 2010-2020 were analyzed, according to the keywords (gluten free, diet, deficiencies). Specialists in the field are unanimous in the opinion that increasing nutritional security and ensuring sustainability can be achieved by: diversifying gluten-free products; extension of legislation to strengthen gluten-free products; developing educational strategies focused on the relationship between nutrients, food and human health; informing the population and optimizing services in order to increase the quality of life and health. However, the design of GF products, both technologically and nutritionally, especially bakery/pastry, pasta is still a challenge, and research in this area, is current and required.

Keywords

Gluten Free Diet, Nutritional Deficiencies, Nutritional Security, Cereals, Food Education

1. Introduction

Globally, cereals hold the first place after the areas occupied by agricultural land. Thus, 55% of the world's agricultural land, or about 720 billion hectares, belongs to cereals. World cereal production now stands at 2762 million tons [1], of which only wheat accounts for 28%, rice and maize for 25%, and the rest for barley, oats, rye, sorghum and millet. The production of high-yield, disease-resistant cereal varieties per hectare, including semi-dwarf wheat, has led, respectively, to a considerable increase in gluten consumption, due to its properties for improving the organoleptic indices of the products. Consequently, today, we are facing a rising epidemic of gluten-related disorders (**Figure 1**) [2] [3].

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