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Abstract

Assessment of Adherence to the Mediterranean Diet and Physical Activity Levels in a Group of Italian Celiac Disease Patients †

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Abstract: Background and objectives: The only treatment for celiac disease is a gluten-free diet, but this restriction can lead to nutrient imbalances and a reliance on processed gluten-free products that contain high levels of unhealthy ingredients. A lack of knowledge about naturally gluten-free foods poses challenges for celiac patients. Proper nutrition, based on the principles of the Mediterranean diet, along with regular physical activity, are of fundamental importance to improve overall well-being. This study aims to assess adherence to the Mediterranean diet and physical activity levels in adult celiac patients. Methods: This was an observational study carried out on 40 adult celiac patients following a gluten-free diet for at least one year. The level of physical activity was assessed through the International Physical Activity Questionnaire (IPAQ) (short version). The adherence to the Mediterranean diet (MD) was evaluated through the "Medi-Lite" questionnaire. Results: The outcomes unveiled difficulties concerning dietary patterns and adherence to the MD. The mean score for adherence to the MD was 9.3 ± 2.8, on a scale of 0 to 18, where 0 represents the lowest adherence and 18 the highest. When analysing individual food components, it was found that fruit and vegetable consumption was suboptimal for most, and half of the population lacked sufficient cereal servings per day. The inadequate consumption of legumes, fish, and dairy products was observed, while an excessive intake of meat and cured meats was noted. Furthermore, the analysis of the IPAQ indicated that roughly three-quarters of the population were inactive or minimally active. Discussion: The results show that celiac patients tend to prefer protein foods for safety but have difficulties assessing protein source frequency. Inadequate dairy consumption is common, possibly due to secondary lactose intolerance from reduced lactase production caused by damaged villi. However, with abundant lactose-free products available, increasing milk and dairy consumption is important to prevent deficiencies in calcium, phosphorus, and vitamin D. The findings highlight the challenges celiac individuals face in adhering to a gluten-free diet and making appropriate food choices, leading to inadequate eating habits and nutritional deficiencies. Thus, there is a need for targeted nutritional education interventions to provide precise guidance on safe eating while meeting nutritional requirements for overall well-being, emphasizing the importance of physical activity.

Keywords: celiac disease; gluten-free diet; Mediterranean diet; physical activity; well-being

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