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Are coeliacs following a gluten-free diet or a low-gluten diet?

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The treatment for coeliac disease (CD) is to maintain a strict lifetime gluten-free diet (GFD). The GFD should be based on fresh foods that are naturally gluten free such as milk, meat, fish, eggs, fruits, vegetables, legumes and gluten-free cereals (corn, rice, millet, sorghum, etc.). The consumption of manufactured foodstuffs involves potential risks, since according to the Regulation made by the European Commission (Regulation (EC) No. 41/2009) concerning the composition and labelling of foodstuffs suitable for people intolerant to gluten, a product may bear the term 'gluten free', if the gluten content does not exceed 20 mg/kg in the food. However, coeliac patients assume 'zero gluten' if the product bears the term 'gluten free' or appears in the gluten-free food directory provided by the coeliac association. Following low-gluten diets can promote the persistence of symptoms, impede the antibodies getting normal values and the onset of autoimmune diseases. Patients with antibodies and/or persistent symptoms despite following a GFD, were referred to the Dietetics Service of the Madrid Coeliac Association (DSMCA) by physicians, in order to conduct a review of the diet and confirm if the GFD was correct or not. Coeliac patients or their parents responded to a survey that collected all data of the foodstuffs, drinks and drugs consumed during a week. Subsequently, the DSMCA checked whether the diet was correct or if the patient consumed gluten, voluntarily or not. In order to determine the degree of compliance with the diet, the DSMCA studied: (1) Whether the foodstuffs consumed by the patient appeared in the gluten-free food directory. (2) If the special gluten-free foodstuffs consumed were certified by the Spanish quality mark 'Controlado por FACE', whereby the foodstuff may contain no more than 10 mg gluten/kg. (3) If the patient chose the foodstuffs based on reading the label. (4) If the patient did transgressions and how often. (5) If the consumption of manufactured foodstuffs was excessive or appropriate. (6) If the consumption of naturally gluten-free foods was adequate or low. (7) If the diet was considered nutritionally adequate. (8) How often coeliacs made their meals away from home and where (schools, restaurants, etc.). During the last 6 years, the DSMCA revised the diet of 302 coeliac patients in whom CD was confirmed by intestinal biopsy (99 men, 203 women, 227 children and 75 adults). The most frequent reason for the revision of the diet was the persistence of positive antibodies antigliadin and/or anti-transglutaminase and/or antiendomysial, the increase of the antibodies since the last revision by the clinician, the persistence of low iron, and finally, the presence of persistent symptoms, especially digestive. In almost all cases it was found that patients consumed incorrect foodstuffs: (1) Special foodstuffs for coeliacs without any warranty or certification. (2) Foodstuffs for normal consumption made from corn or rice, which were not specially produced, prepared and/or processed to meet the special dietary needs of coeliacs. (3) Organic/biological foodstuffs made from corn or rice, not specific for coeliacs. (4) Baby food made from corn or rice, not specific for coeliacs. (5) Foodstuffs that by reading the label seemed not to contain gluten. (6) Foodstuffs that had been removed from the gluten-free food directory, for changing its composition. (7) Foodstuffs that contain gluten, but was unknown to the patient. In all these cases, the DSMCA recommended a much stricter GFD, reducing the consumption of manufactured foodstuffs, and elimination of the incorrect foodstuffs from the diet. When making these changes, clinical and serological improvement was detected in a time between 3 and 12 months. It was also found that some adults followed an incorrect GFD when they ate outside. In all the diet reviews of children who ate in school daily, the diet at school was correct, however, gluten was consumed at home. It is necessary to improve the nutritional education of the general population to promote healthy eating habits and thus be able to select appropriate food for all the family (coeliacs or not).