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## 5. LABORATORY MARKERS IN THE DIAGNOSIS OF HEREDITARY GLUTEN INTOLERANCE

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**Introduction.** Gluten intolerance (celiac disease) is a genetic autoimmune disease with a prevalence of approximately 1% of the population in which the consumption of gluten-containing foods causes damage to the small intestine.

**Aim of study.** The purpose of this study was to review the literature in order to outline the laboratory diagnostic algorithm for hereditary gluten intolerance and to establish the frequency of the alleles of the HLA-DQA1 and HLA-DQB1 genes in the population of Moldova.

**Methods and materials.** A bibliographic study of the scientific literature in Pubmed and Google Scholar databases, and also the analysis of the medical records of the patients tested in a private laboratory accredited according to ISO 15189 in the Republic of Moldova.

**Results.** After finishing this study, we predict that we will have described the diagnostic algorithm for celiac disease, with a description of each step and the role of each laboratory marker in determining the susceptibility for hereditary gluten intolerance. Another result that we will obtain from this study will be the frequency of the alleles of the HLA-DQA1 and HLA-DQB1 genes in the population of the Republic of Moldova, as well as their correlation with other specific laboratory indices in the diagnosis of celiac disease.

**Conclusion.** The diagnosis of hereditary gluten intolerance generally involves a combination of methods, such as: genealogical analysis, serological investigations for the detection of antibodies specific to celiac disease, biopsies and genetic testing to determine the presence or absence of DQ2/DQ8 heterodimers. A correct diagnosis and adequate management can significantly improve the quality of life for people with celiac disease.

