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PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 88607

Title: Efficacy of Probiotics supplementation in amelioration of Celiac Disease symptoms

and Enhancement of Immune system

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 03075520

Position: Peer Reviewer

Academic degree: MD, MSc

Professional title: Chief Doctor, Professor

Reviewer's Country/Territory: China

Author's Country/Territory: Egypt

Manuscript submission date: 2023-10-01

Reviewer chosen by: Yu-Lu Chen

Reviewer accepted review: 2023-10-12 10:12

Reviewer performed review: 2023-10-22 10:39

Review time: 10 Days

	[] Grade A: Excellent [Y] Grade B: Very good [] Grade C:
Scientific quality	Good
	[] Grade D: Fair [] Grade E: Do not publish
Novelty of this manuscript	[] Grade A: Excellent [Y] Grade B: Good [] Grade C: Fair [] Grade D: No novelty
Creativity or innovation of	[] Grade A: Excellent [Y] Grade B: Good [] Grade C: Fair
this manuscript	[] Grade D: No creativity or innovation



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Scientific significance of the conclusion in this manuscript	[] Grade A: Excellent [Y] Grade B: Good [] Grade C: Fair [] Grade D: No scientific significance
Language quality	[Y] Grade A: Priority publishing [] Grade B: Minor language polishing [] Grade C: A great deal of language polishing [] Grade D: Rejection
Conclusion	[Y] Accept (High priority) [] Accept (General priority) [] Minor revision [] Major revision [] Rejection
Re-review	[Y] Yes [] No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No

SPECIFIC COMMENTS TO AUTHORS

Reviewers' comments Manuscript ID:88607-05670 Title:Efficacy of Probiotics supplementation in amelioration of Celiac Disease symptoms and Enhancement of Immune system Comments: **Patients** with celiac disease (CD) have a mucosal layer that is unable to regulate the gut microbiota, leaving the host vulnerable to dangerous infections and antigens. When compared to healthy people, this dysbiosis is marked by a decrease in intra- and intergeneric biodiversity, which demonstrates an imbalance between helpful bacteria and possibly harmful or proinflammatory species. The early gut microbiota is influenced by the genotype of newborns with the HLA-DQ2 haplotypes, and this may modify how gluten is handled in the intestinal lumen, polarize innate or adaptive immune responses, and result in glutensensitive enteropathy. The outcome of gluten digestion can vary depending on the composition of the intestinal gut bacteria and the partial conversion of gluten into peptides larger than ten amino acids in the small intestines, which can be immunogenic. In the small intestine, 114 different bacterial strains belonging to 32 different species have 27 of them exhibiting peptidolytic activity. Thus, the individual



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risk of developing a gluten-related illness is further influenced by microbial composition and gluten degrading capacity. The conclusion that lactobacilli and Bifidobacterium spp. may be used as a probiotic supplement in CD patients is based on their shared possession of the most extensive proteolytic and peptidolytic activity thought to be involved in the breakdown of gluten among all potential bacterial genera present in the gut microbiota. In children with CD autoimmunity, daily oral dose of Lactobacillus. plantarum HEAL9 and Lactobacillus. paracasei 8700:2 was found to modify the peripheral immune response. Bifidobacterium. breve strains have demonstrated a beneficial effect on reducing pro-inflammatory cytokine TNF- production in CD children on gluten-free diets. It is a topic of interest to the researchers in the related areas, I think the Editorial may be considered for publication.. My detailed comments are as follows: 1.In this Editorial, Efficacy of Probiotics supplementation in amelioration of Celiac Disease symptoms and Enhancement Immune system was emphasized. 2.The Editorial highlights the relationship of celiac disease (CD) with hereditary predisposition to gluten, he hypothesis that alterations in the gut microbiome's structure and functioning. The gut microbiota strengthens the mechanisms that maintain tolerance under physiological condition. This topic of the Editorial is closely combined with clinical, the topic is novel, the references are very new, the writing is smooth, and the Because of advantages above, I think the Editorial may be logic is strong. considered for publication.