

**ESPS Peer-review Report****Name of Journal:** World Journal of Gastroenterology**ESPS Manuscript NO:** 8493**Title:** GUT-LIVER AXIS AND PROBIOTICS: THEIR ROLES IN NAFLD**Reviewer code:** 00159298**Science editor:** Su-Xin Gou**Date sent for review:** 2013-12-29 15:32**Date reviewed:** 2014-01-08 01:13

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input checked="" type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Rejection
<input checked="" type="checkbox"/> Grade D (Fair)		BPG Search:	
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

**COMMENTS TO AUTHORS**

The authors failed to discuss thoroughly the issue of probiotic delivery and mucosal transport. This holds of great relevance when considering the newest technological proposals in the field of metabolic syndrome-related issues. Overall, this work adds little to other reviews on the subject.

# ESPS Peer-review Report

**Name of Journal:** World Journal of Gastroenterology

**ESPS Manuscript NO:** 8493

**Title:** GUT-LIVER AXIS AND PROBIOTICS: THEIR ROLES IN NAFLD

**Reviewer code:** 00061686

**Science editor:** Su-Xin Gou

**Date sent for review:** 2013-12-29 15:32

**Date reviewed:** 2014-01-21 21:48

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B (Very good)	<input type="checkbox"/> Grade B: minor language polishing	<input type="checkbox"/> Existed	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C (Good)	<input type="checkbox"/> Grade C: a great deal of language polishing	<input type="checkbox"/> No records	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)		BPG Search:	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Major revision
		<input type="checkbox"/> No records	

## COMMENTS TO AUTHORS

The review entitled: "Gut-liver axis and probiotics: their role in NAFLD" by Giulia Paolella et al. describes the knowledge on the effect(s) of probiotics for the modulation/regulation of gut microbiota to treat the non-alcoholic fatty liver disease. Authors analyzed the data obtained in animal model studies and in pediatric and adult human studies. Major comment A review is not simply the sum of all articles published but must be written to assemble various publications in order to provide a clear analyze of causes of the disease, the benefits of probiotics, and to summarize the ideas, hypothesis and prospective. These are entirely lacking in this review. Comments 1. The manuscript contains many inclusion boxes: "Commentaire" showing that the submitted document is not the final version but probably an "intermediate" version. This is not very professional. 2. Title, modify as: "Gut-liver axis and probiotics: their role in non-alcoholic fatty liver disease (NAFLD)" 3. The part of the review Pages 1 to 6 is extremely difficult to read and not easily understandable since too fractionated in sub-sub-sub paragraphs. Please reorganize in a comprehensive fashion. 4. The section "Intestinal barrier" is not very well written and contains too many approximations and omissions. Entirely revise. 5. Authors surprisingly give old or inappropriate references concerning the tight junctions. The reference 10 is particularly inappropriate: Farquhar MG, Palade GE. Junctional complexes in various epithelia. J Cell Biol. 1963;17:375-412; Balda MS, González-Mariscal L, Contreras RG, et al. Assembly and sealing of tight junctions: possible participation of G-proteins, phospholipase C, protein kinase C and calmodulin. J Membr Biol. 1991;122:193-202; Fasano A. Zonulin and its regulation of intestinal barrier function: the biological door to inflammation, autoimmunity, and cancer. Physiol Rev 2011;91:151-75 Replace by Turner JR. 2009. Intestinal

mucosal barrier function in health and disease. *Nat. Rev. Immunol.* 9:799-80 and Marchiando AM, Graham WV, Turner JR. 2010. Epithelial barriers in homeostasis and disease. *Annu. Rev. Pathol.* 5:119-144. 6. In line 124 insert the reference: Lievin-Le Moal V, Servin AL. 2006. The front line of enteric host defense against unwelcome intrusion of harmful microorganisms: mucins, antimicrobial peptides, and microbiota. *Clin. Microbiol. Rev.* 19:315-337. 7. The description of tight junction in Lines 128-134 is not complete. Revise. 8. Line 134, delete "PKC has also been implicated in a sensing pathway (TLR2)." 9. Replace reference 12 by Kumar H, Kawai T, Akira S. 2011. Pathogen recognition by the innate immune system. *Int Rev Immunol* 30:16-34 and Kinnebrew MA, Pamer EG. 2012. Innate immune signaling in defense against intestinal microbes. *Immunol Rev* 245:113-131. 10. Replace reference 13 by Bevins CL, Salzman NH. 2011. Paneth cells, antimicrobial peptides and maintenance of intestinal homeostasis. *Nat Rev Microbiol* 9:356-368. 11. Line 152, replace reference 4 by Littman DR, Pamer EG. 2011. Role of the commensal microbiota in normal and pathogenic host immune responses. *Cell Host Microbe* 10:311-323 12. For dysbiosis, include Littman DR, Pamer EG. 2011. Role of the commensal microbiota in normal and pathogenic host immune responses. *Cell Host Microbe* 10:311-323 and Stecher B, Maier L, Hardt WD. 2013. 'Blooming' in the gut: how dysbiosis might contribute to pathogen evolution. *Nat. Rev. Microbiol.* 11:277-284. 13. In paragraphs line 155-160 and 161-166 include reference : Lievin-Le Moal V, Servin AL. 2006. The front line of enteric host defense against unwelcome intrusion of harmful microorganisms: mucins, antimicrobial peptides, and microbiota. *Clin. Microbiol. Rev.* 19:315-337 14. Since the Review focuses on the modulation of intestinal microbiota by probiotics it is surprising and very disappointing that authors shortened the description of intestinal microbiota as: "The commensal gut microbiot