

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 7796

Title: A multispecies probiotic prevents gut barrier function in models mimicking the irritable bowel syndrome

Reviewer code: 00009062

Science editor: Wen, Ling-Ling

Date sent for review: 2013-11-30 21:23

Date reviewed: 2013-12-11 20:47

CLASSIFICATION	LANGUAGE EVALUATION	RECOMMENDATION	CONCLUSION
<input type="checkbox"/> Grade A (Excellent)	<input type="checkbox"/> Grade A: Priority Publishing	Google Search:	<input checked="" type="checkbox"/> Accept
<input checked="" 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 type="checkbox"/> Rejection
<input type="checkbox"/> Grade D (Fair)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input type="checkbox"/> Major revision

COMMENTS TO AUTHORS

Thanks for the interesting paper. Minor points: In the title I suggest ..."protects gut barrier function in experimental models"... In the Abstract and abbreviations: explain LPS p 7 line 13 adding p13 line 9, 11 Bonferroni p 15 line 14 delete one LT p 18 line 15 in a significant

ESPS Peer-review Report

Name of Journal: World Journal of Gastroenterology

ESPS Manuscript NO: 7796

Title: A multispecies probiotic prevents gut barrier function in models mimicking the irritable bowel syndrome

Reviewer code: 02530750

Science editor: Wen, Ling-Ling

Date sent for review: 2013-11-30 21:23

Date reviewed: 2014-01-02 02:07

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 checked="" 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)	<input type="checkbox"/> Grade D: rejected	<input type="checkbox"/> Existed	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E (Poor)		<input type="checkbox"/> No records	<input checked="" type="checkbox"/> Major revision

COMMENTS TO AUTHORS

Dear Editor,

many studies have suggested that probiotics are effective in the treatment of IBS. In humans several studies with probiotics are available. The role of probiotics in IBS in humans are already reviewed in many articles (1, 2). High quality study in humans are limited.

Nebot-Vivinus and coworkers present a study about the the effect of the multispecies probiotics Lactibiane Tolerance® (LT) on various models of epithelial barrier function both in vitro and in vivo.

Lactibiane Tolerance® (LT) is a bacterial composition of five different strains (Lactobacillus acidophilus, Lactobacillus plantarum, Lactobacillus salivarius and two strains of Bifidobacterium lactis). In their interesting study the author show that LT helps to prevent visceral hypersensitivity and to restore epithelial barrier disruptions. Additionally in their study LT down-regulated the response mediated through TLR-4 in vitro and in vivo. In the literature for some of the used strains in this study the effects have been already shown. The authors investigated a potential

complementary effect by combining different strains.

My comments:

Results section:

1.) **Section: Expression of the junction proteins ZO-1 and occludin was increased in T84 monolayers cultured with LT:** -> The authors should not repeat the Methods in the results section which are already presented in the Material and Methods section.

2.) **Section: LT inhibits the augmentation of permeability induced in T84 confluent monolayers by IBS colonic biopsy conditioned medium.**

... IBS patient intestinal mucosa is the site of micro-inflammation and it has previously been shown that soluble factors secreted by the intestinal mucosa of IBS patients increase the permeability of epithelial cell monolayers^[12]

-> Citations are not useful in the results section, in the results section the own results should be presented

Figure and legends

3.) Figure legends are very long. Methods, which are already described in the Material and Methods section are repeated

4.) The resolution of the figures are of low quality

1. Dai C, Zheng CQ, Jiang M, et al. Probiotics and irritable bowel syndrome. World journal of gastroenterology : WJG. 2013;19:5973-5980
2. Simren M, Barbara G, Flint HJ, et al. Intestinal microbiota in functional bowel disorders: a Rome foundation report. Gut. 2013;62:159-176