Baishideng Publishing Group Co., Limited
Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

ESPS Peer-review Report
Name of Journal: World Journal of Gastroenterology
ESPS Manuscript NO: 7943
Title: Effects of high-fat diet in the development of colorectal cancer in an animal model
Reviewer code: 01588973
Science editor: Qi, Yuan
Date sent for review: 2013-12-08 15:50
Date reviewed: 2014-01-16 05:24

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

COMMENTS TO AUTHORS

In their manuscript ?Effect of high-fat diet in the development of colorectal cancer in an animal model" the authors deal with the important issue of the effect of dietary habits on the development of cancer. In the recent years obesity has become an important problem in developed countries leading to serious health problems already in more and more younger individuals. At the same time incidence of colorectal cancers in today's societies is also increasing. The high-fat diet is leading to obesity and it is believed that this process can be one of the factors attributing to the development of colorectal cancer. The authors compare the effect of high- and low-fat diet on the development of precursors of colorectal cancer. The study is well designed and the paper logically constructed and well written, although slight stylistic changes and language correction would increase the clarity of text (for ex. first sentence in Materials and methods section /Animals and chemicals/; last sentence on page 10 /Results/, p.12 – third sentence of the second paragraph, etc.) Two last sentences on page 13 – are these conclusions drawn from experiment conducted by the authors or from other studies – if so, a reference is needed – in the present form it is unclear. Figure 1A should be numbered 1 and placed in the Materials and methods section in Experimental procedure subsection. Figure 1B should be renumbered as Fig 3 and consequently 3 as 4 and so on. First two paragraphs of the discussion should be significantly shortened since they contain information present in previous sections, for example introduction.

Baishideng Publishing Group Co., Limited
Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

ESPS Peer-review Report
Name of Journal: World Journal of Gastroenterology
ESPS Manuscript NO: 7943
Title: Effects of high-fat diet in the development of colorectal cancer in an animal model
Reviewer code: 00535896
Science editor: Qi, Yuan
Date sent for review: 2013-12-08 15:50
Date reviewed: 2014-01-25 01:27

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

COMMENTS TO AUTHORS

The current article presents interesting experimental data concerning the development of CRC-adenomas accelerated by HFD. The role of obesity or HFD in the progression of the adenoma-carcinoma sequence is complex and has not been thoroughly explored but this study is a further step in trying to understand the mechanisms. 1.) It is not shown as implicated by the title the development of colorectal cancer, as it is said by the authors in the Conclusion "…study demonstrated that HFD consumption could promote the formation of the colonic adenomas through inflammation, metabolic abnormalities as well as increased cell cycle progression in a DMH induced tumor model.."
The title needs a revision. 2.) The problem of this paper is that the INTRODUCTION part as well as the DISCUSSION part is designed to explain methods of developing cancer, but the study shows the increased generation of adenomas. Data from recent studies have suggested that obesity is a risk factor for developing colorectal adenoma not carcinomas in humans. Of course there is the "adenoma-carcinoma sequence" but the problem is that not all adenomatous polyps do progress to cancer. 3.) The strength of this study is that it is an experimental design as mentioned by the authors but therefore it is only an animal model. This paper only describes the effects in wistar rats. In humans the effect of obesity in developing CRC or adenomas seems also to depend on several factors like the position of the fat (subcutaneous/ visceral), the BMI, weight e.g. Therefore population-based observational studies as mentioned by the authors are necessary to see that there are effects besides the adenoma-carcinoma sequence and therefore not all adenomatous polyps do progress to cancer. 4.) It is important to mention that many studies have related obesity to colorectal adenoma in humans. Results evaluating the relation between obesity and colorectal neoplasia are

not conclusive. In 2013 Choe EK et al (World Journal of Gastroenterology) in their analysis say that it appears that visceral obesity is a risk factor for colorectal adenoma formation but does not have an additional effect on its further progress to colorectal carcinoma. In their research they say that visceral obesity is an independent risk factor for colorectal adenoma but not a risk factor for early CRC. It might not influence the adenoma-early carcinoma sequence, but it does influence the normal-adenoma sequence. 5.) In the INTRODUCTION part the DMH- model is mentioned and partially explained in the DISCUSSION part. There is a need of exact explanation of this model in the METHODS part. 6.) The paper itself and the study design are well constructed. Some correction of language is needed. 7.) The criticisms under point 1.)-4.) should be respected for the construction of the INTRODUCTION part as well as the DISCUSSION part. The DISCUSSION part should be shortened and be more precise. There should be a clear separation between adenomas and cancer.

Baishideng Publishing Group Co., Limited
Flat C, 23/F., Lucky Plaza,
315-321 Lockhart Road,
Wan Chai, Hong Kong, China

ESPS Peer-review Report
Name of Journal: World Journal of Gastroenterology
ESPS Manuscript NO: 7943
Title: Effects of high-fat diet in the development of colorectal cancer in an animal model
Reviewer code: 00506552
Science editor: Qi, Yuan
Date sent for review: 2013-12-08 15:50
Date reviewed: 2014-02-10 16:51

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

COMMENTS TO AUTHORS

Authors of this manuscript demonstrated that 1,2-Dimethylhydrazine(DMH)-induced rat can form colonic adenoma, the precursors of colorectal cancer, by high-fat diet. They demonstrated that the number of colonic adenoma, body weight, and liver and epididymal fat weight are increased by high-fat diet. They also showed that serum insulin, leptin, TNF-α, IGF-1, and triglycerides, PCNA, COX-2, cyclin D1, β-catenin, and NF-κB proteins are increased. Since it had been generally accepted that high fat diets are related to colorectal cancer, adipokines levels, and inflammation, I could not catch which is a new finding by this study. Nonetheless, to be worth to show HFD relatedness to colorectal cancer by animal model, I feel that more experiments, rewriting of manuscript, and a serious editing are required: more results to show the inflammation, metabolic abnormalities, and increased cell cycle progression. It is better to reorganize the result presentations. In the text, explanation for Fig. 1B comes when authors explain Fig. 3. In Fig. 2, author shows body weight change, fatty liver, liver weigh, epididymal fat, numbers of adenoma. Rationale to present this way?? Isn't it logical to show Fig. 1B and 2C in same Figure? Since authors said that liver is fatty liver in Fig. 2B, I strongly urge to stain liver cells with Oil Red O to stain lipid droplet in the cells. Fig. 3, there are no rectangle marks. Fig. 4 needs more explanations. IL-6, and IP-10 (CXCL10) need to be included For Western blot and immunofluorescence staining results, it would be better to include tumor and non-tumor tissues among ND (tumor and non-tumor tissues) and HFD (tumor and non-tumor tissues). For results reorganization, suggestions Inflammation data: ELISA, immunohistochemistry, Western blot Adipokine data: ELISA, (immunohistochemistry), Western blot Cell proliferation data: ELISA, immunohistochemistry, Western blot All of letters in graph and Figs are very difficult to recognize. It is better to change to bigger font. Many sentences in Discussion are

better to move to Introduction and/or Results. So many English errors; eg., it must be 'field' instead of filled in Fig. 3 legend and so on. To show bracket, make one space to come in bracket.