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Journal Name:	International Journal of Biochemistry Research & Review
Manuscript Number:	2013_IJBcRR_6262
Title of the Manuscript:	Effects of Orlistat and herbal mixture extract on renal function and oxidative stress biomarkers in a rat model of high fat diet
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	Although the manuscript provide some data with regards to the effect of the herbal mixture on obesity but is rejected (with repairable deficiencies and may be reconsidered). In this manuscript, the objective of the study is not clearly stated (both in the abstract as well in the introduction).	Pumpkin oil may reduce low density lipoprotein (LDL) (bad) cholesterol. The oil may also lower systolic and diastolic blood pressures due to its high concentration of phytoestrogens. Body weight and body weight gain were significantly lower in rats fed the high-fat diet with 1% of PSE than in those fed the high fat diet alone. The rats treated with PSE showed reduced triacylglycerol content in the liver. The inhibitory activity of PSE on the lipid metabolic enzymes and the increase in fecal fat excretion suggests that PSE might be useful as a treatment to reduce the dietary fat absorption. The observed reduction in intracellular lipolytic activity of cultured 3T3-L1 adipocytes may reduce the levels of circulating free fatty acids and the reduction of the adipocyte lipolysis. In abstract, This study was designed to assess the potency of herbal mixture extracts of pumpkin seed oil and peanuts shell against Orlistat in male albino rats administrated high fat diet. In introduction. This study investigates effect of an obesity-associated risk factor on renal oxidative stress, its mechanism of action and biomarkers associated with the effect of Orlistat and herbal mixture on it by the measurement of cholesterol, triglyceride, HDL, LDL, Urea, creatinine, uric acid, food consumption, weight weight, body mass index, SOD, MDA and GSH in all four groups of experiments, determine the effect of HFD on these parameters and effect of treatments on it. Treatment with herbal mix showed that decrease in renal function tests and improvement of kidney function. Some research had demonstrated that pumpkin seed oil (PSO) could remarkably reduce bladder pressure, increase bladder compliance and reduce urethral pressure. It was found that peanut shell extract had a strong renal protective effect against glycerol-induced acute renal



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	In the introduction, the importance of using pumpkin oil with nutshell Extract in this study has not been explained. In the methodology, it has been mentioned as herbal mixture purchased from local market. It is not clearly stated whether the authors administered the extract individually or mix it and gave it as single administration and under what basis the dose selection done and when the period of drug/herbal mixture administration starts. In this study a group with administration of pumpkin oil and nutshell extract alone without HFD not been included which is important to understand the safety of the herbal mixture . In the methodology, it has been mentioned that perirenal, mesentric and epididymal adipose tissues were collected but the purpose of collection and data were not provided. In the result sections, the author has mentioned as high significant and the significant level whether it is $p < 0.05, 0.01$ or 0.001 not been mentioned. For example "The oral treatment of high fat diet with Orlistat exerted a high significant decrease in serum cholesterol and a significant decrease in serum triglyceride as compared to high fat diet rats." In the tables, the authors have used the symbol a,b,c,d whether the significant level is $p < 0.05, 0.01$ or 0.001 and from Table 1-4 what groups compared is not clear. In figure 1 also the significant level was not mentioned.	failure (ARF). Pretreatment with extract peanut shell (EPS) in acute renal failure (ARF) rats caused blood urea nitrogen (BUN) and creatinine (Cre) levels significantly lower. Herbal mix is mixture from (pumpkin seed oil and peanut shell extract) two extract were injected together. PSO is a liquid was given by oral gavage with dose 5mg/kg bw/day but PSE was prepared by soaking 100 g of dry nutshell in 500 ml ethyl alcohol 95% with daily shaking for 5 days and kept in a refrigerator. Ethanol was evaporated using a rotatory evaporator apparatus which was attached with vacuum pump then the extract was used 2 mg/kg bw/day. Both herbal were mixed together (1:1). The treatment started at 16-22week from experiment after induction period for obesity. The group of herbal mix rats started the treatment and gave them of herbal mix after the rats became obese then this group started take the mix as treatment of obesity with continue eating high fat diet to show the effect of herbal mix on obesity and decrease the weight. The purpose of this was to clarify the emergence of the dense layers of fats that surrounding the kidney and may be observed in histology of kidney. I removed it Orlistat exerted a high significant decrease ($p < 0.001$) in serum cholesterol and a significant decrease ($p < 0.05$) in serum triglyceride as compared to high fat diet rats. I illustrated it in results. I used a,b,c,d as symbols to illustrate is find significant in parameters between groups or no Groups are 1-normal rats, 2-high fat diet rats, 3- HFD with
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	Rephrasing of Table title is required. For example, Table 1 title "Effect of control and HFD on feed intake" can be rephrased as "Means of food intake in control and HFD- induced rats." Overall english correction is required in the manuscript. Number of references can be reduced and to follow the journal format.	treatment with Orlistat and 4- HFD with treatment with herbal mix. We study the effect of these groups on different parameters. a,b,c,d any of this letters is the same on two different parameters this is non-significant but the letters are different on different parameters this is significant level. For example: 330.0 ± 5.401^{bc} and 312.5 ± 6.614^{bc} this is no significant but 266.3 ± 2.394^a and 308.0 ± 6.311^{bc} this is significant. figure 1 ($p < 0.001$). Would be changed. Would be corrected Ok
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		