



SDI Review Form 1.6

PART 1:

Journal Name:	MS: 2012 BJPR 2172
Manuscript Number:	British Journal of Pharmaceutical Research
Title of the Manuscript:	Combined oral arginine and monosodium glutamate exposure induces adverse response on the prostate and testis of rats.

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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		
<u>Minor</u> REVISION comments	Pag. 2. Parag. 1. Lines 2 and 10: write L-arginine instead of l-arginine.	The amino acids arginine and glutamate exert important physiological functions probably due to their unique roles in the synthesis of important bioactive substances, notably nitric oxide. In particular, L-arginine (ARG) plays multiple physiological functions in animals [4,5,6]. These include, attenuation of the stress response [7,8,9], immune function enhancement [10,11], protein synthesis regulation [12]), and promotion of wound healing [13]. However, it was shown that arginine mediated these physiological functions via its important metabolites, notably nitric oxide [14,15,16,17]. Thus, the unique role of glutamate (GLU) in activating nitric oxide synthase enzyme (via calcium-calmodulin complex formation) [18]) suggests that it may enhance ARG-induced effect related to nitric oxide synthesis. This may explain the increasing use of L-arginine and glutamate in diets and drugs.



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<u>Optional/General</u> comments	<p>In this study the authors investigated the potential effect of L-arginine, glutamate and monosodium glutamate alone or combined for 4 consecutive weeks on the functional capacity of the prostate and testis of rats. Their results indicate adverse effect on the prostate function and the testis histology of the rats when substances are combined, this seen by mean of changes in prostatic acid phosphatase activity and histomorphological studies in the testis. Caution is suggested in the simultaneous ingestion of arginine and monosodium glutamate in animals.</p>	