Reviewer's report

Title: Physiological and pharmacokinetic effects of oral 1,3-dimethylamylamine administration in men

Version: 6 Date: 9 July 2013

Reviewer: Paulo Paixão

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Major Compulsory Revisions

The authors reported in the introduction (lines 107-112) that 25 mg is the typical dosage on the dietary supplements containing DMMA. In the conclusions (line 302) the authors also say that 25 mg is the recommended dose. In the previous Revision, a question was made about the characterization of the recommended dose (Question 2). The authors reply was that "The exact doses of DMAA in Jack3d and Oxyelite Pro are not available, as the supplements have a proprietary blend." As such, there is no indication that 25mg is the recommended dose. In addition, there are no "recommendations" for DMMA in the literature. This type of characterization is not acceptable and should be removed.

The plasma DMMA analysis section was improved since the last revision. However, the chromatograms show a double peak on the DMMA and an additional peak for 2-aminoheptane. I believe that the latter is an internal standard, but that must be described in the method. In addition, the double peak was previously characterized as a mixture of diastereoisomers (see the reference 14). The authors have decided to treat these two diastereoisomers as one single entity, but that remains to be proved, and a thoroughly discussion on this must be included in the manuscript. Eventually, a new PK characterization on each individual diastereoisomers should be considered.

Minor Essential Revisions

line 268, the reference "anecdotal reports" must be removed.

line 305, the text "with mean peak values being <70ng·mL-1" must be corrected. The reported mean Cmax was 76.5 ng/ml

The ppb unity should be presented as ng/ml

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests