Reviewer's report

Title: Intermittent fasting combined with calorie restriction is effective for weight loss and cardio-protection in obese women

Version: 1 Date: 19 September 2012

Reviewer: Scott Harding

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Title: Intermittent fasting combined with calorie restriction is effective for weight loss and cardio-protection in obese women

Summary: The authors describe a human nutrition intervention study which uses intermittent fasting and caloric restriction in obese women in the Chicago area. The intervention compared the use of liquid meal replacement versus solid food based caloric reduction. Overall the authors demonstrated that the use of liquid meal replacement controlled caloric intake to a higher degree, weight loss was greater and CVD risk factors tended to be favorably modified to greater extent in the IF-L group. The manuscript is succinct and very well written. The study design, aims and hypothesis were clearly outlined and the research questions tackles a novel aspect if human weight loss interventions. The results and discussion are clear and concise and adequately explain the findings in the context of the current literature in the area. There are no major concerns with the manuscript but several minor comments and questions regarding the interpretation of the data are outlined below.

Discretionary Comments:

It would be helpful to have some numerical values in the results and discussion regarding the % reduction of small LDL particles based on treatment.

Are there any other possible physiological reasons for the liquid diet to be more effective? Comment on how the further 7% reduction in total cals (or 31% difference of intakes between the dietary interventions) translated into 58% higher weight loss.

While not significant in this study, are that authors aware of the effect of liquid replacement diet on FFM loss during either caloric restriction or equivalent-caloric replacement? Please comment.

Could the author discuss the relevance of the IF in the context of the weight loss observed in this study? Understanding that absolute quantitation is not possible, what proportion of the weight loss observed do the authors attribute to the CR versus the IF. Are there other studies which address this point, if so please discuss in the context of your data.

Minor Comment:
Line 337 sum = summary?

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.