Reviewer’s report

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

Version: 1 Date: 22 September 2012

Reviewer: Teri L. Hernandez

Reviewer’s report:

Klempel and colleagues have examined the effects of a combined liquid calorically restricted diet vs. a food-based calorically restricted diet with an incorporated intermittent fasting period. The 2 interventions were compared on the basis of weight, body composition and cardiovascular risk factors. The investigators should be commended on a job well done. These types of protocols are very difficult because they are labor intensive and require a high degree of commitment to help promote adherence on the part of the participants. Additionally, this manuscript is well-written.

Major Compulsory revisions: None

Minor Essential Revisions:

1. Please report the menopause status by group either in the text or in Table 2.
2. Please report fasting glucose and insulin levels and waist circumference in Table 1.
3. Methods: please report the macronutrient distribution of the liquid meals, as well as the self-reported macronutrient diet composition for both interventions.
4. Protocol adherence: Please report protocol adherence for the fasting day vs. the other 6 CR days.
5. Please acknowledge the limitations of the HippoFat software. Demerath and colleagues (ref 11) reported that the software underestimates VAT and overestimates SAT, particularly in larger individuals.
6. Figure 2: If the error bars represent SEM, then from looking at the graphs the variance makes me question if the differences are truly significant. Were the stats run on the deltas, or on the raw differences between week 10 and week 3? Please clarify this.

Discretionary Revisions:

1. It would be neat if the authors reported the actual weights at the various time points across the protocol (B, week 3, week 10). Perhaps the food protocol is effective, but weight loss takes longer to achieve?
2. Recommend using caution when calling the changes "cardioprotective." The data are short-term (which is acknowledged) and it is unclear how lasting any improvements might be. The trends are provocative, however.
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.