

## **Reviewer's report**

**Title:** Impact of caloric and dietary restriction regimens on markers of health and longevity in humans and animals: A summary of available findings

**Version:** 1 **Date:** 26 July 2011

**Reviewer:** David G Le Couteur

### **Reviewer's report:**

This is a well written review of caloric restriction and health benefits. It compares various types of dietary restriction and also somewhat obliquely, but interestingly, the religious fasting rituals. There are no major issues with the review but the authors may wish to consider the following points

1. under protein restriction, possibly cite Simpsons work on geometric framework, protein and longevity
2. consider discussion of CR-mimetics eg rapamycin and resveratrol - because these are alternative ways of achieving same therapeutic goals as dietary manipulation
3. consider discussion of cell pathways involved eg TOR, Ins/IGF, sirt and AMPK
4. in the section on religious fasts - is there any data on buddhist monks who usually only eat in the morning, a sort of half ADF
5. a table comparing the longevity effects of each of the interventions would be very useful

**Level of interest:** An article of outstanding merit and interest in its field

**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 I have no competing interests