Reviewer's report

Title: Determining how best to support overweight adults to adhere to effective lifestyle change: Protocol for the SWIFT study

Version: 2 Date: 3 April 2015

Reviewer: Clemens Drenowatz

Reviewer's report:

The manuscript presents a study protocol for a very important and interesting research question. The overall study plan seems very well developed but the major concern is the dysbalance between dietary- and exercise-related interventions for weight loss and weight management.

Please see below for additional specific comments:

Major Revisions:

The role of physical activity (PA)/exercise should be considered more thoroughly in the introduction as there is considerable research on the benefits of exercise/PA, particularly regarding weight loss maintenance.

It should be addressed that fat loss, rather than weight loss, provides key health benefits. While the assessment of body composition (measurement of fat mass and lean mass) may not be feasible on a regular basis for individuals in self-monitoring, a stronger emphasis on the role of body composition on health should be put in the manuscript.

There is not really a selection on the exercise intervention as participants can only opt in to the HIIT. HIIT is also in accordance with current exercise guidelines (i.e. 75 min of vigorous PA).

How will participants be encouraged to achieve 30 minutes of MVPA? Will they be provided with several choices based on their current lifestyle and activity levels. As mentioned previously HIIT can be one choice for meeting current guidelines.

Please provide a reference for the meta-analysis regarding the evidence for little difference in outcomes from different treatments. The authors may want to specify which outcome they are referring to. It should also be considered that at this time there is only limited information on the effect of HIIT.

The discussion should address PA as well as a recent study has shown that MVPA is more consistently associated with body weight than is diet quality (Pate et al. MSSE, 2015).

Minor Essential Revisions

Abstract:
Evidence that higher levels of physical activity are associated with better weight maintenance is strong as well in addition to adherence to dietary interventions.

Methods:
Please specify whether there is a specific age range that will be targeted as age may be an important aspect in the reception and adherence to different protocols.
Please specify how long the intervention will last (6-12 months?) with an additional follow-up period to examine sustainability.

It would be helpful to clarify that the intervention lasts 12 months with a 24-months follow-up period in order to evaluate sustainability of lifestyle changes.

Please specify whether randomization will be stratified based on the selection of diet and exercise programs – this may affect adherence as well as selected outcomes rather than the type of strategy to promote the changes.

What about participants who have engaged in dietary or exercise intervention previously – can they opt for a similar intervention as one performed previously?

Please specify that participants will have to choose a dietary and exercise program prior to starting the program.
Please specify the clothing requirements for weight measurements on the outcome measure (i.e. surgical scrubs). Also provide a timeline of the measurements and how many visits at each time point will be required to complete all measurements.

Discretionary Revisions:
Please specify how the study will be advertised – flyers, radio, internet, TV, …

Access to the internet should be an inclusion criteria as this is one option for the intervention.

What is the rationale for a BMI cutpoint of 27 rather than 25? Is there an upper BMI limit for participation in the study – severely obese participants may have problems with HIIT, which would affect their exercise choice.

Are there any restrictions regarding baseline activity levels for study participation (i.e. sedentary participants only)?

Please specify that diet records and PA assessment are performed during the same week.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the
statistics.

**Declaration of competing interests:**

I declare that I have no competing interests