Reviewer’s report

Title: Fish protein supplementation in older nursing home residents: a randomised, double-blind, pilot study

Version: 0 Date: 10 Dec 2018

Reviewer: Peter Crome

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Report on Paper PAFS-D-18-00215

The authors report on the results of a pilot RCT of a fish protein supplementary diet in nursing home patients. They postulate that fish protein supplementation may beneficially influence age-related muscle loss. The protein supplement was successfully administered to those taking part in the study but recruitment was a major issue. Biological results are presented.

The paper is presented in a form suitable for publication and the English is of a satisfactory standard requiring only a minimum of sub-editing e.g. line 28 "is" changed to "are". The paper is on the lengthy side and I wonder whether all the content is necessary e.g. details of how the fish protein is processed.

Specific comments:

Abstract:

Line 36: Mention how participants were screened for nutritional risk and ADL.

Line 43: There are other benefits for using multiple sites other than just recruitment.

Introduction

The biological rational for the study is presented and experimental results in rats have been summarized.

Methods

Line 96. The study is described as randomized but then allocation was stratified by the project manager. Please explain.

Line 98. How many were recruited using the sarcopenia criteria and how many following the change in admission criteria?
Line 108. Were these the original criteria? This statement is not compatible with "all elderly nursing home residents (line 102).

Line 132. Did fish protein influence the taste of the drink? Were subjects asked whether they believed they had the fish protein or the placebo? Although the subjects may have been blind to the intervention, the staff was not. Did you consider a placebo powder? Did the fish powder all come from the same batch?

Line 146. Explain purse seiner please. Is this a standard method of fish protein manufacture used for other purposes?

Line 188. What is meant by medically sound?

Line 196. Mention MNA and Barthel in abstract.

Line 228. Is this paragraph necessary? Was there a primary outcome.

Line 234. I would conclude this sentence after two experimental groups.

Results

Line 255. How was intake measured?

Line 255. Primary outcome should be presented first and then secondary outcomes.

Discussion

This should be reviewed with the aim of reducing the length. Much of the paragraph at line 302 is a repeat of what has been stated earlier.

Is the discussion about the potential benefits of fish protein relevant here?

I liked the section at line 344.

Do you not also need to consider how benefit in cognitively impaired people may be assessed?

By excluding such patients you may limit generalization of results.

Table 2. As there were no differences between groups why not just say so in text and omit this table?

There should be a full Consort chart starting with number of nursing home residents as this is how you eventually conducted the study (according to text).
Level of interest
Please indicate how interesting you found the manuscript:

An article whose findings are important to those with closely related research interests

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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