Three Day Dietary Recalls is Equivalent to Five Day Dietary Recalls in Evaluating Caloric Intake and Macronutrients in Person with Spinal Cord Injury

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Three Day Dietary Recalls is Equivalent to 5-Day Dietary Recalls in Evaluating Caloric Intake and Macronutrients in Person with Spinal Cord Injury

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PURPOSE

The purpose of this pilot work is to examine whether three days are equivalent to five days of dietary recalls and whether it is more efficient than one day of dietary recall in evaluating

- caloric intake
- percentages of macronutrients

METHODS

- Three participants (47 ± 3 years) with complete SCI with injury level C6- T4 enrolled as a part of federally funded 1 to determine the effects of exercise and testosterone replacements. Participants underwent the following measurements:
  - Dual energy x-ray Absorptiometry to determine their body composition (%Fat mass and %Fat-free mass)
  - Basal Metabolic Rate (BMR) was measured using indirect calorimetry to determine their resting energy expenditure

- Dietary Recalls
  - Participants were asked to turn in a 5-day dietary recalls for caloric intake and macronutrients. Participants were instructed to maintain their body composition (%Fat mass and %Fat-free mass)
- Statistical Analyses
  - All values are presented as mean ± SD. One way ANOVA was used to test the difference in caloric intake and %macronutrients among 5-days, 3-days and 1-day dietary recalls.

RESULTS

- a-Caloric Intake
  - The average of total energy intake (Kcal/day) for 5, 3 and 1 day dietary recalls in 3 participants with SCI
  - Figure 3

- b- %Carbohydrate
  - The average of %carbohydrate for 5, 3 and 1 day dietary recalls in 3 participants with SCI. 45% is the recommended guidelines for %carbohydrate.
  - Figure 4

- c- %Fat
  - The average of %fat and %protein for 5, 3 and 1 day dietary recalls in 3 participants with SCI. 25% is the recommended guidelines for %fat and %protein.
  - Figure 5

SUMMARY / CONCLUSIONS

- Our preliminary results suggest the 3-days of dietary recalls are adequate to quantify caloric intake and macronutrients in persons with SCI compared to 5-days.
- 1 day of dietary recall; although was not statistically different from 3 or 5-days. The pattern was not similar.
- Despite feedbacks, our participants still did not meet the recommended guidelines for %fat and %protein in their caloric intakes.

REFERENCES


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