

## Concurrent Session 12: Nutrition for the elderly

### Energy and nutrient intake within residential aged-care facilities: results from a selection of Melbourne facilities

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**Background** – The elderly living in residential aged-care facilities are particularly at risk of nutritional inadequacies due to their overall health status, state of dependency and general lack of control over food provision.

**Objective** – To measure energy and nutrient intakes in aged-care facilities and evaluate against dietary recommendations.

**Design** – A three-day weighed food record, incorporating all main meals and snacks, was performed on 83 participants ranging in age from 65 to 94 years in five Melbourne residential aged-care facilities. Dietary intake data were analysed using FoodWorks 3.01. Mean energy and nutrient intakes were compared to nutrient reference values (NRV).

**Outcomes** – Estimated energy requirements (EER) were met (M126% EER  $\pm$  41% {all data is  $\pm$  SD}); F122% EER  $\pm$  27%). Estimated average requirements (EAR) for protein were also met (M109%  $\pm$  56%; F140%  $\pm$  36%). Carbohydrate intake for males was 50% of energy  $\pm$  7% and 48% for females  $\pm$  5%. Sugars made up a larger proportion of carbohydrate intake (M28%  $\pm$  9%; F25%  $\pm$  6%). Intake of fat for males was 34% of energy  $\pm$  7% and 36% for females  $\pm$  5%. Saturated fat intake was high (M17%  $\pm$  5%; F16%  $\pm$  2%). Fibre intake was low (M56% adequate intake (AI)  $\pm$  28%; F66% AI  $\pm$  24%). Participants failed to meet the EAR for calcium (M94%  $\pm$  50%; F88%  $\pm$  41%) and magnesium (M77%  $\pm$  26%; F94%  $\pm$  27%). Intake of potassium was below the AI (M79%  $\pm$  29%; F96%  $\pm$  24%). Males failed to meet the EAR for zinc (77%  $\pm$  27%). Sodium intake for males and females was exceptionally high (M308% AI  $\pm$  92%; F247% AI  $\pm$  77%).

**Conclusion** – Results of this study can be used to guide education programs for food service staff to ensure the nutritional requirements of residents are met in the future.