

## Energy and macronutrient intakes in older urban and rural Iranian adults

### ABSTRACT

Adequacy of energy and macronutrient intakes is important for disease prevention, health maintenance and nutrition program development in older adults. The present study was designed to evaluate and compare the adequacy of energy and macronutrient intakes of elderly living in rural and urban areas in the north-west of Iran. A total of 432 older adults (332 urban and 100 rural) were selected through stratified, multistage probability cluster sampling. Dietetic information was obtained through three-day 24-hour dietary recall interviews. A small proportion of the subjects (4% rural and 0.6% urban) were underweight while approximately half was either overweight or obese. Aged subjects from the urban had a significantly higher mean body mass index (BMI) ( $t=3.46$ ,  $p<0.05$ ) than their rural counterparts. There was also significant greater proportion of elderly subjects who were overweight or obese ( $\chi^2=14.42$ ,  $p<0.05$ ). Older adults from the rural had significant more daily energy ( $t=3.49$ ,  $p<0.05$ ), carbohydrates ( $t=2.96$ ,  $p<0.05$ ) and fat intakes ( $t=3.15$ ,  $p<0.05$ ) than their urban counterparts. Generally, average daily intake of energy was lower than the Recommended Dietary Allowance (RDA) in developing countries. High contribution of carbohydrates and low contribution of proteins to total calory intake were observed in the daily diet of the elderly. There is a need to offer health and nutrition awareness programs for the elderly and their families by health care providers.

**Keyword:** Aged; Nutrition; Macronutrient intake and energy intake; Iran