

## **Oil usage by Greek migrants in Melbourne: validating dietary survey questions**

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Intake of olive oil and other vegetable oils may partly account for the low incidence of coronary heart disease and a number of other chronic diseases in some populations. It is thus important to be able to quantitate oil intake in dietary surveys. Fifty six Greek-born men and women aged 48-65 years old, who had lived in Melbourne for the last 15-30 years, took part in a study to validate results being collected in a large epidemiological study. The subjects answered six questions about the types and uses of fats and oils used in their household, including a multi-choice question estimating the amounts of olive and/or vegetable oil/blend used. This question is being used in the Melbourne Collaborative Cohort Study (MCCS) by the Anti-Cancer Council of Victoria (ACCV) which is investigating the influence of diet and lifestyle on the incidence of a number of chronic diseases in Australian born men and women and Greek and Italian born migrants. The validity of answers to this question regarding monthly household oil usage was evaluated by comparison with the subsequent quantitative measurement of oil(s) used in a month.

Most subjects used a combination of olive oil and vegetable oil/blend in their household: the mean measured household usage was 4.1 L/month, with a range of 0.75 to 8.05 L/month. The mean intake of olive oil was 2.2 L/month. The answers to the question where the subjects were required to tick a marked category range of oil intake were similar to the measured intake. From the measured quantities of olive oil and vegetable oil/blends used and knowledge of the number of individuals per household, the mean individual intake in grams per day was considered to be 22 g/day of olive oil and 13 g/day of vegetable oil/blend. The olive oil was used mainly as a dressing for salads and cooked vegetables, whereas vegetable oil/blend was used for frying.

Comparison with an identical question asked of the same sample of subjects in 1987, revealed that there has been a statistically significant ( $P < 0.05$ ) increase in the mean household and individual intake of olive oil, but an apparent decrease in the intake of vegetable oil/blend although the later was not significant.

The question used in the study, and being used in the MCCS study, appears to be a reasonable survey tool for estimating household oil intake in a population study with a large percentage of Greek-born subjects.