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## The impact of a 5-day workshop in nutrition on European adults over 50 years old

## E. Philippou<sup>1</sup> and S. Pouloukas<sup>2</sup>

<sup>1</sup>Department of Life and Health Sciences, School of Sciences, University of Nicosia, Nicosia Cyprus, and <sup>2</sup>Department of Statistics, School of Sciences, University of Nicosia, Nicosia, Cyprus

Nutrition knowledge is an important factor in changing dietary behavior<sup>(1)</sup>. However, the public receives a plethora of often contradictory messages, sometimes resulting in confusion, apathy or increased anxiety<sup>(2)</sup>. As the European population is ageing, nutrition education of older adults aiming to better understand and apply nutritional recommendations is imperative. The aim of the present study was to assess the impact of a 5-day workshop titled 'Understanding Nutritional Recommendations' on the participants' dietary intake and habits. Twenty adults from EU countries aged  $\geq 50$  years old were funded to participate by the EU Life Long Learning Program.

The workshop took place at the University of Nicosia, Cyprus and included amongst other activities, lectures by dietitians on topics such as 'Healthy eating for adults over 50', 'How to eat in a restaurant' and 'Understanding Food Labels', a dietitian-led supermarket tour, food preparation by a chef, nutrition quizzes, demonstrations of portion sizes and sugar and salt content of foods as well as discussions between participants and professionals on dietary issues.

Seventeen adults from 10 different EU countries (M: 3, F: 17, mean age: 57.7 y (sp: 5.8), BMI: 29.3 kg/m² (sp: 4.8)), provided written informed consent to participate in the present investigation. On the first day and six weeks after the workshop, the participants completed an 88-item semi-quantitative food frequency questionnaire and a dietary habits questionnaire with questions on food labels, cooking methods, type of fat used in food preparation and dietary changes over the previous month.

The participants' dietary intake and their reported dietary changes are shown in Tables 1 and 2 respectively. There was a reduction in the percentage of participants who used animal fat for cooking after the workshop (butter: 47.1% vs. 11.8%, p = 0.014 and lard 35.3% vs. 5.9%, p = 0.025) but no change in the percentage using olive oil for cooking (82.4% vs. 94.1%, p = 0.317) or for their salad (88.2% vs. 100%, p = 0.157). The percentage of participants who reported checking the food label either every time or most times before buying or consuming a food significantly increased after the workshop for the following items: energy (11.8% vs. 47.0%, p = 0.014), fat (29.4% vs. 70.6%, p = 0.034), saturated fat (17.7% vs. 58.8%, p = 0.020) and list of ingredients (35.2% vs. 70.6%, p = 0.034), but did not change for sugar (23.5% vs. 58.8%, p = NS), salt/sodium (23.5% vs. 52.9%, p = NS) and nutrition claims (52.9% vs. 82.4%, p = NS).

In conclusion, a 5-day workshop in nutrition for European adults aged  $\geq$  50 years old resulted in changes in their dietary intake and habits six weeks after its completion. Further research on its longer term impact is warranted.

Table 1. Participants' dietary intake

	Before workshop		After workshop	
	Mean	SD	Mean	SD
Energy (kcal/day)	1980	867	1555*	675
% protein	15.4	3.2	15.9	2.6
% total fat	28.5	5.7	31.7	5.1
% saturated fat	10.0	1.7	9.9	2.7
% monounsaturated fat	11.4	3.5	14.5*	3.4
% carbohydrate	58.7	5.9	55.3	5.4
Dietary fibre (g/day)	21.2	9.8	18.2	9.3
Cholesterol (mg/day)	281	132	199*	79

Comparison of before and after workshop data by paired t-test. \*p<0.05.

Table 2. Participants' reported dietary changes

Dietary change during the past month	Before workshop %	After workshop %
'I ate less fat'	35.3	94.1*
'I changed the type of fat'	17.6	58.8*
'I ate more wholegrain foods'	23.5	47.1
'I ate more fruit and vegetables'	29.4	70.6*
'I ate less sugar'	23.5	70.6*
'I ate less salt'	11.8	35.3
'I drank less alcohol'	23.5	41.2
'I drank more water'	17.6	64.7*

Comparison of before and after workshop data by Wilcoxon signed ranked test. \*P < 0.05.

- 1. Worlsley A (2002) Asia Pac J Clin Nutr 11, S572-S585.
- 2. Kelly CNM & Stunner SA (2003) *Proc Nutr Soc* **62**, 583–589.