

## ORIGINAL COMMUNICATION

# Healthy diet in primary care: views of general practitioners and nurses from Europe

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**Background:** Most of the national colleges of general practitioners (GPs) do not have their own dietary/nutritional tools, and GPs and nurses do not have the time, knowledge, or skills to advise their patients about desirable dietary practices.

**Objective:** To assess the usefulness of a simple and practical guide on healthy diet to be used by European GPs and nurses.

**Design:** A postal survey was mailed to 171 GPs and nurses from 12 European countries to obtain information about the usefulness of a guide on healthy diet developed by EUROPREV.

**Results:** The perception of health professionals is that the main source of information on healthy diet for the population was the media. In all, 95% of GPs and nurses reported that the guide was useful; 93, 95, and 82% reported that the concepts were concise, easy to understand, and realistic, respectively. Also, 77% reported that the type of counselling recommended was feasible and could be applied, 94% reported that the implementation measures proposed could be effective and 88% reported that the Traditional Mediterranean Diet Pyramid is useful, but some concerns about the content were mentioned.

**Conclusions:** GPs and nurses from Europe think that a practical guide on healthy diet developed by EUROPREV could be used to advise patients in primary care, although the Traditional Mediterranean Diet Pyramid should be modified.

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### Introduction

The European Network for Prevention and Health Promotion in Family Medicine and General Practice (EUROPREV) is a

network of European national colleges of general practice/family medicine (presently representing 22 countries). It was established in 1997 and is affiliated to the European Society

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of General Practice/Family Medicine (World Organization of Family Doctors—Europe), with the general aim of promoting evidence-based prevention in general practice. Two of the network's specific objectives are to define the role of the primary care doctor in health promotion and prevention, and to promote and encourage multicenter research and educational programs in prevention and health promotion throughout Europe. Disease prevention and health promotion are important tasks in the daily practice of all general practitioners (GPs). Nevertheless, it has been shown that more than half of GPs think that carrying out prevention and health-promotion activities are difficult (Brotons *et al*, 2005).

From a previous survey (Brotons *et al*, 2003), we found that most of the national colleges do not have their own dietary/nutritional tools; however, they usually use recommendations developed by other institutions and provide the patients with specially written information. Also, our results indicated that practice nurses play an important role in advising patients about desirable dietary practices. However, when GPs and nurses do not have the time or the skills to advise their patients, it is not easy to refer them to a professional qualified in nutrition for more detailed dietary counselling because referral to dietitians is usually not covered by medical insurance in most European countries. This fact is important because previous studies have shown that, in 16% of presenting episodes of illness, nutritional guidelines must be considered as an essential part of treatment (Van Weel, 1997). The major diseases in which diet plays a role include coronary heart disease, some types of cancer, stroke, hypertension, obesity, osteoporosis, and non-insulin-dependent diabetes mellitus. Led by some of the members of the EUROPREV network, a guide on healthy diet was developed (access to full version of the guide can be found at [www.europrev.org](http://www.europrev.org)). This guide includes the following parts: (1) introduction and concept of balanced diet, (2) counselling and cooking, and (3) implementation.

The objective of this study undertaken by EUROPREV network was first, to assess the general aspects about healthy diet, and, second, to assess the usefulness of a simple and practical guide on healthy diet to be used by European GPs and nurses.

## Subjects and methods

The survey was carried out by mail from September to December 2004, using a prepaid addressed envelope. A pretested questionnaire was developed, which included the following parts: (1) demographic and professional data (six questions); (2) professional data (four questions); (3) general questions on healthy diet (five questions); (4) items concerning the EUROPREV guide on healthy diet (eight questions). (One of the questions of this last part was concerning the usefulness of the Traditional Healthy Mediterranean Diet Pyramid that was included in the guide. For

this reason, permission was obtained from Oldways Preservation Trust ([www.oldwayspt.org](http://www.oldwayspt.org)), a nonprofit food organization, that, jointly with the Harvard School of Public Health, have developed different healthy eating pyramids; and (5) two open questions concerning new ideas and suggestions, and other barriers. The questionnaire was translated and adapted from English into the different national languages (although the guide was only written in English), being piloted by five GPs in each country, and sent (jointly with the guide) to a sample of GPs and nurses, which was selected by EUROPREV national delegates from each country participating in the study.

All collected questionnaires were sent back to the coordinating and data management center at the EUROPREV secretariat, ensuring a centralized data entry and analysis by one research technician specifically employed for this project. Statistical methods were limited to the computation of means and standard deviations for continuous variables, percentages for categorical variables, and comparisons for categorical variables using  $\chi^2$  at the 0.05 level of significance. All analyses were carried out using the SPSS for Windows 12.0.

## Results

In all, 12 European countries from the EUROPREV network participated in the postal survey (Austria, Estonia, Greece, Ireland, Italy, Malta, The Netherlands, Poland, Portugal, Slovenia, Spain, and Turkey), giving a total of 171 participants (120 GPs and 51 nurses). The mean age was 41.11 (s.d. 9.36, range 21–61), and 60.70% were females. The majority of GPs and nurses worked in urban areas and public centers. Other professional characteristics are shown in Table 1. Responses to general questions on healthy diet are shown in Table 2. It can be seen that the main source of information on healthy diet for the population was the media (radio, TV, magazines). Table 3 shows the responses to the questions asked about the EUROPREV guide on healthy diet. No differences were found between GPs and nurses regarding the responses to the questions about this guide. Responses to the last two open questions mostly reflected suggestions and changes on the Traditional Healthy Mediterranean Diet Pyramid. For instance, it was mentioned that the recommendation to eat meat once a month, or to eat four eggs a week, is not realistic. Other comments were concerning the difficulties to change early habits in the elderly population and the high cost of a healthy diet for deprived population. Also, it was commented that the evidence for effectiveness of dietary counselling is poor.

## Discussion

European networks such as EUROPREV have the facility to obtain and share useful information from the national colleges of GPs in order to collate the guides and tools used

**Table 1** Professional characteristics of general practitioners and nurses who participated in the EUROPREV survey (*n* = 171)

	n	(%)
<i>Area of practice</i>		
Urban area	87	(50)
Rural area	40	(22)
Both	44	(28)
<i>Site of practice</i>		
Primary Health Centre	131	(77)
Solo practice	32	(19)
Hospital	6	(3)
Other	2	(1)
<i>Centre containing practice</i>		
Public centre	110	(65)
Private centre	55	(33)
Other	4	(2)
<i>Postgraduate teaching activities</i>		
Yes	87	(51)
No	82	(48)

**Table 2** Responses to general questions on healthy diet (*n* = 171)

	n	%
<i>Main source of information on healthy diet for the population (more than one answer was accepted)</i>		
General practice/primary care	65	(38)
Media	130	(76)
Public institutions	48	(28)
Pharmacies	15	(9)
Other	10	(6)
<i>Patients are receiving good and effective information about healthy diet</i>		
Yes	34	(20)
Not enough	115	(68)
No	21	(12)
<i>Primary care professionals are prepared for giving counselling on healthy diet</i>		
Yes, very much	14	(8)
Yes, some of them	95	(56)
No, only a few	54	(31)
No	8	(5)
<i>GPs and nurses should promote the knowledge of nutrition</i>		
Yes	153	(93)
No	11	(6)
<i>Are there healthy diet brochures published by public institutions/national colleges</i>		
Yes	140	(82)
No	30	(17)

for prevention and health promotion in clinical practice. Our network also permits the running of specific research projects, such as this survey that we carried out, involving 171 GPs and nurses from 12 European countries. Although we studied European GPs and nurses, the results do not represent all countries of Europe, and therefore we would welcome feedback from additional GPs and nurses from other parts of Europe. It is difficult to compare our results with the ones obtained in other surveys because they had

**Table 3** Specific responses to the guide on healthy diet (*n* = 171)

	n	%
<i>Participants responding 'yes'</i>		
Could this guide be useful	162	(95)
Concepts used in the guide are concise	159	(93)
Easy to understand	163	(95)
Realistic	125	(73)
The Traditional Diet Pyramid is useful	144	(88)
Implementation measures proposed in the guide could be effective	161	(94)
<i>Type of counselling recommended in the guide is feasible</i>		
No	10	(6)
A little	29	(17)
Some	90	(53)
Very much	40	(24)
<i>Content of the counselling itself can improve the healthy diet of your patients</i>		
No	4	(2)
A little	37	(22)
Some	77	(45)
Very much	53	(31)

different objectives and methods. A survey done in 107 GPs and 58 practice nurses in the United Kingdom (UK) to assess attitudes towards cardiovascular health promotion (Steptoe *et al*, 1999) found that the majority of GPs and practice nurses endorsed the statement that practice nurses are the most appropriate people to carry out health promotion. Also, in this survey, under half of the GPs and nurses felt that they were properly trained in lifestyle counselling, but nurses were more likely than GPs to consider that lifestyle counselling was efficacious. Another study also carried out in UK in 230 GPs to describe GPs' attitudes to and involvement in health promotion and lifestyle counselling (McAvoy *et al*, 1999) found that only 9% of GPs collected always information on diet and nutrition, 61% did it as indicated, 28% occasionally, and 2% rarely or never.

A recent international survey carried out in five countries (Australia, Canada, New Zealand, the UK, and the United States) concerning adult's experiences in primary care (Schoen *et al*, 2004) found an overall lack of emphasis on prevention. Only 28% of British patients reported receiving advice by their physicians on weight, nutrition, and exercise, compared to 33% in New Zealand, 38% in Australia, 45% in Canada, and 52% in the United States.

The existing literature examining the effect of dietary counselling for patients in primary care is complex. The latest review on behavioral counselling in primary care to promote a healthy diet by the US Preventive Services Task Force (USPSTF) (AHRQ, 2005) has shown that dietary counselling produced modest reductions in the consumption of dietary total and saturated fat and modest increases in the consumption of fruits and vegetables. Also, interventions that were more intensive, conducted in patients at risk for chronic disease, produced larger changes in dietary

behavior. In fact, the USPSTF concludes that the evidence is insufficient to recommend for or against routine behavioral counselling to promote a healthy diet in unselected patients in primary care settings, and also that there is good evidence that medium- to high-intensity counselling interventions can produce medium-to-large changes in the average daily intake of core components of a healthy diet (including saturated fat, fiber, fruit, and vegetables) among adult patients at increased risk for diet-related chronic diseases. Giving brief advice to achieve behavior change in primary care settings is common despite concerns about its effectiveness (Rollnick *et al*, 1993). These kinds of advices, such as dietary counselling, do not harm and costs are very small. On the other hand, adopting a healthy lifestyle is a difficult and complex challenge for people, especially when they are confronted with an increasingly automated environment, with competing priorities in people's lives and obstacles to change. Our results indicate that health professionals have the perception that the main source of information on healthy diet for the population is the media, which usually wants to instil a 'fast food' mentality. It is not a real surprise then that a simple advice on healthy diet may not be effective (Hillsdon *et al*, 2002) and, in fact, this was one of the concerns of our respondents. Nevertheless, it is also recognized that advice-giving by health professionals in primary care should be combined with more comprehensive activities in the community and ultimately with national policies.

Resources in primary care are limited, and in many countries in Europe each consultation lasts no more than 10 min. It is important to deliver potentially cost-effective preventive interventions such as brief advice and written materials (Mant, 1997). Therefore, guides on healthy diet such as this one developed by EUROPREV could be useful in our practices where heavy work load and lack of time are always the most important barriers perceived by health professionals working in primary care.

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