Nutrition and general practice: an Australian perspective

Anthony Helman

ABSTRACT  Australia has a government-subsidized, private medical system in which general practitioners (GPs) form the core component of primary care. There are ~20 000 active GPs and 80% of the population consults a GP each year. A new vocational register of GPs has been set up that requires training in general practice, followed by formal continuing education. I briefly review sources of information about Australian GPs' practices and knowledge of and attitudes toward nutrition. About 15–17% of GPs say they have a special interest in nutrition (20% of female GPs and 13% of male GPs). The main conditions for which advice is given are heart disease, hyperlipidemia, obesity, and diabetes. The extent of nutrition counseling by GPs is considerably less than might be expected from the strength of their statements about the importance of nutrition and long-term health. Obstacles to nutrition counseling are lack of time, lack of confidence, and inadequate nutrition knowledge, the last documented by objective testing. GPs express interest in learning more about nutrition (which may be partly driven by consumer pressure) but there is still little coherent teaching on the subject, specifically tailored for GPs. When asked their preferences for nutrition education, GPs tend to prefer educational material (such as diet charts) to give to patients. Am J Clin Nutr 1997;65(suppl):1939S–42S.

KEY WORDS  Australian general practice, nutritional advice, general practitioner, counseling, heart disease, hyperlipidemia, obesity, diabetes, family physician, nutrition knowledge, nutrition education

BACKGROUND  Australia has a government-subsidized, private medical system in which general practitioners (GPs) form the core component of primary care. It is estimated that in any 12-mo period, 80% of the population consults a GP (1), of which there are ~20 000 in active practice (2). The GP therefore has a major role to play in implementing nutrition policy.

In the past few years, general practice in Australia has undergone major changes. Most GPs are on a vocational register, which requires them to undertake formal continuing education and participation in quality assurance. To enter this register, all GPs must now complete training currently offered only through the Royal Australian College of General Practitioners (RACGP). Another significant element in the organization of general practice is the Divisions of General Practice. These are grassroots groupings of GPs in each geographic region that are eligible for government funding for activities such as community prevention, continuing education, research, and employment of paramedical personnel, including dietitians (1).

AUSTRALIAN RESEARCH  Three types of research have contributed to our understanding of Australian GPs' practices and knowledge of and attitudes toward nutrition:

1) Academic studies (Table 1): these are typically characterized by representative samples, good response rates, and detailed information.

2) Commercial surveys (Table 2): focus groups and telephone surveys conducted by market researchers add to the qualitative understanding of the issues involved, but often have poor and undocumented response rates. They are likely to be atypical samples and may have a specific commercial focus. Annual surveys conducted by medical mailing list companies, which reach almost the entire medical practice population, are another valuable source of data.

3) Needs assessment for continuing medical education: Divisions of General Practice regularly survey the educational needs and preferences of GPs in their area.

In mailing list surveys in which doctors were asked to list their special interests from a large range of options, 15% of GPs declared a particular interest in nutrition (IMS Australia, unpublished data, 1995). This places GPs in the mid range of medical specialties, well below groups such as gastroenterologists (80% interested in nutrition), pediatricians (77%), and public health physicians (23%), but above internal medicine physicians (16%), palliative care specialists (7%), and cardiologists (3%) (IMS Australia, unpublished data, 1995). A higher proportion of female GPs (20%) than male GPs (13%) are interested in nutrition. Interest is also greater among more recent graduates (12), although those who graduated most recently show less interest than those who have been in practice for ≥10 y (IMS Australia, unpublished data, 1995). This may reflect the benefit of some practical experience with patients for realizing the importance of nutrition.

When asked about the circumstances in which they give nutrition advice, GPs self-reported that they give such advice in 15% of consultations (6). Most nutrition advice is initiated by the GP and is disease-specific rather than being general information on healthy eating (Table 3) (6). Several studies showed that the main conditions for which advice is commonly given are heart disease, hyperlipidemia, obesity, and diabetes. Many

1 From the Royal Australian College of General Practitioners, Edgecliff, New South Wales, Australia.
2 Address reprint requests to A Helman, Royal Australian College of General Practitioners, PO Box 681. Edgecliff NSW 2027, Australia.
E-mail: helman@ozemail.com.au.


1939S
other conditions attract nutritional advice, but much less commonly (6, 9, 10). These findings are consistent with research in New Zealand (13) and reflect the relative importance of these diseases in national mortality (14, 15). In some cases, GPs are clearly missing potential cases of nutritional disorder; in one unpublished study of Australian GPs, the GPs reported diagnosing an average of only 1.2 cases of pediatric iron deficiency in the preceding 12 mo (A Helman, unpublished data, 1995), despite the fact that the condition has a prevalence of 2–20% in various Australian pediatric age and population groups (16, 17).

Several studies surveyed nutritional attitudes of Australasian GPs (3, 6, 9, 12). When asked their view on the importance of nutrition to health or medical practice, most responses were positive. For example, 76% agreed that “diet has a significant impact on long-term health” and 96% that the GP can be “influential in getting the patient to change their diets” (4). However, there seems to be a “halo effect,” in that these positive attitudes are not always consistent with behavior. For example, 63% of GPs agreed that “faulty nutrition is the major cause of disease in adult Australians” (A Helman, unpublished data, 1988), a strong statement, belief in which might be expected to lead to higher rates of nutritional counseling than have so far been reported.

Perhaps part of the reason for this inconsistency lies in the obstacles to nutrition counseling reported by Australian GPs, chief among which were lack of time, lack of confidence, and inadequate nutrition knowledge (Table 4) (4, 9). These obstacles are not unique to nutrition but have been reported to apply to many preventive activities (1). In focus groups, GPs also mentioned their frustration with the apparent frequency with which nutrition orthodoxy appears to change on important issues, for example, the role of fat in heart disease (9). It is reasonable to suppose that confidence in ability to give nutritional advice might be linked to objective level of nutrition knowledge. Surprisingly, at least two studies failed to find any such relation, something that is perhaps reason for concern (9; A Helman, unpublished data, 1988).

However, GPs’ perception that they lack nutrition knowledge appears to be well founded. When tested for nutritional knowledge, rural GPs scored poorly (9). In an interprofessional comparative survey, GP nutritional knowledge scores were low compared with those of dietitians and even naturopathic students; medical students’ scores were even lower (Table 5) (A Helman, unpublished data, 1990). Studies of GPs’ nutritional beliefs show that they tend to be consistent with official dietary guidelines, but at the same time lean toward alternative viewpoints in certain areas, such as the possible dangers of food additives and the role of vitamin supplements (3, 12, 18).

### EDUCATIONAL ISSUES

There is no doubt that interest in nutrition among GPs is strong and growing and that GPS recognize a lack of adequate knowledge of this subject and are keen to learn about it (9, 19). In educational needs assessment surveys undertaken by Divisions of General Practice, for example, nutrition consistently appears as a priority for GPs (19). This interest is being driven in part by consumer pressure to meet patients’ interests and in part by recognition of the clinical importance of nutrition (10). The great paradox in GP nutrition education at the present time is that, despite this level of interest, there is still little coherent teaching on the subject, particularly teaching specifically tailored to GPs. The RACGP training program has until recently not had any core general practice curriculum and

### TABLE 2
Commercial surveys on nutrition in general practice

<table>
<thead>
<tr>
<th>Source and year of study</th>
<th>Number of GPs</th>
<th>Response rate</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>All smokers, 1995</td>
<td>121,838</td>
<td>52%</td>
<td>Vitamin prescribing</td>
</tr>
<tr>
<td>Australian Dairy Corp., 1995</td>
<td>100</td>
<td>~15 GPs</td>
<td>Weight management</td>
</tr>
<tr>
<td>Meat Research Corp., 1995</td>
<td>96</td>
<td>~15 GPs</td>
<td>Dietary assessment tool for GPs</td>
</tr>
<tr>
<td>Mailing list companies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMS Australia, unpublished data</td>
<td>20,737</td>
<td>99%</td>
<td>Accuracy of weight management advice</td>
</tr>
<tr>
<td>AMPCO, unpublished data, 1995</td>
<td>19,922</td>
<td>99%</td>
<td>Attitudes, knowledge, and practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>New Zealand GPs’ information needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comparison with dietitians and naturopaths</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rural GPs and other health professionals</td>
</tr>
</tbody>
</table>

1 GP, general practitioner; AMPCO, Australasian Medical Publishing Company.

### TABLE 3
Characteristics of general practitioner dietary consultation

<table>
<thead>
<tr>
<th>Who raises the subject? (% of time)</th>
<th>Patient</th>
<th>General practitioner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31</td>
<td>69</td>
</tr>
<tr>
<td>What sort of advice? (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General healthy diet</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Disease-specific advice</td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

1 From reference 6.
TABLE 4
Self-reported obstacles to giving more nutrition advice

<table>
<thead>
<tr>
<th>Percent of GPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
</tr>
<tr>
<td>Lack of confidence</td>
</tr>
<tr>
<td>Lack of knowledge</td>
</tr>
<tr>
<td>Patients' attitudes</td>
</tr>
<tr>
<td>Financial obstacles</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

1 From reference 4. GP, general practitioner.

There certainly no policy on teaching nutrition. Established GPs have even less structure to their continuing medical education. Educational events are run by a wide variety of providers (including pharmaceutical companies), each following their own agenda. Although there may be nutrition content within these educational programs, nutrition topics in their own right are not often seen.

When asked about their preferences for nutrition education, GPs expressed interest in a wide variety of learning formats, including seminars and distance education (7, 9). But priority tends to be given to educational material (such as diet charts) to give to patients. In a study of New Zealand GPs, pamphlets and patient information kits were the two most preferred educational options (7). Although this may show GPs' nutritional interest, it might also reflect a preference to not have to deal with the patient's diet in any detail themselves.

NEW INITIATIVES

There have been several promising recent initiatives in relation to nutrition in Australian general practice. At the undergraduate level, several universities have made academic nutrition appointments specifically to work with medical students, with a positive effect on nutrition interest among both students and GPs in the surrounding area (20). New medical courses based on postgraduate entry and case-based teaching are being introduced in some medical schools, providing fresh openings for nutrition teaching. In GP training, the RACGP has started to define a core curriculum for general practice registrars and it is anticipated that there will be a nutrition input into this process. For established GPs, the RACGP is developing a practice assessment option (under the quality assurance program required of all vocationally registered GPs) in which GPs identify and assess nutritionally at-risk patients within their own practice. Accompanied by a case-based teaching video, this option will be offered in conjunction with a 2-d course currently being designed to teach GPs the basic elements of clinical nutrition in general practice. Additionally, a medical publication widely read by GPs now runs a regular nutrition column.

The RACGP recently consulted a Nutrition Advisory Group for advice on matters of nutrition policy. This group will also seek to take a proactive stance in defining the GP nutrition curriculum, working with other providers to encourage delivery of more GP nutrition education, and seeking input into outside committees and panels that are formulating public health nutrition policy likely to involve GP participation. The Australian Iron Status Advisory Panel is a good example of such a public health oriented body that focuses its public health strategy on GP nutrition education and which has three GP members on the panel (21). Another recent example is the Nutrition Screening Initiative, in which the RACGP worked with community and specialist groups to implement a program to enhance GPs' awareness of nutrition screening, particularly in the elderly (22).

FUTURE DIRECTIONS

The discrepancy between the level of GP interest and the lack of nutrition education resources has already been highlighted. What is needed above all is not just a greater quantity of material but resources that are part of a coherent, coordinated vision on what constitutes good general practice nutrition. This requires first a clear understanding of the scope of nutrition in general practice (12). Unfortunately, GPs tend to think of nutrition initially mainly in terms of cardiovascular, obesity, and diabetic diseases, conditions in which compliance and beneficial long-term outcomes may not be so easy to achieve. A broader understanding of the scope of nutrition in general practice will address patients and conditions that are easier and more immediately rewarding to treat, such as patients with iron deficiency and patients needing information on sports, pregnancy, and geriatric nutrition. This is likely to enhance GPs' enthusiasm and confidence.

The second important requirement is that nutrition teaching be specifically tailored to GPs. The GP perspective tends to be much more pragmatic and case-based and less theoretically focused than many specialists or dietitians realize. This inevitably means that substantial GP input is needed for any successful educational initiative for GPs (23), something often lacking in general practice nutrition education. It is not only the style of teaching, but the methods and approaches for practicing clinical nutrition that need to be made suitable for the unique environment of general practice. When efforts were made to tailor methods of nutritional assessment and treatment specifically to GPs, these efforts were well received (5, 12).

On the research side, Australian studies on nutrition and general practice have so far been mainly descriptive, and in large part based on self-report. What is needed now is objective evidence of what GPs actually do, rather than what they say they do or think they should do—things that have been shown to be very different (24). Such research will allow us to reach more sophisticated models of how clinical and preventive nutrition fits into the context of general practice. Ultimately, such research will lead to

TABLE 5
Nutritional knowledge scores of health professionals and students of those disciplines

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Professionals</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>General practice</td>
<td>2.9 [64]</td>
<td>1.5 [27]</td>
</tr>
<tr>
<td>Dietetics</td>
<td>6.5 [40]</td>
<td>6.3 [15]</td>
</tr>
<tr>
<td>Naturopathy</td>
<td>1.4 [34]</td>
<td>3.4 [50]</td>
</tr>
</tbody>
</table>

1 Maximum score = 8. n in brackets. Different professional disciplines were significantly different; P < 0.001 (ANOVA). From A Helman, unpublished data, 1990.
2 Medical students doing a general practice term. Significantly different from professionals, P < 0.05 (t test).
practical approaches that enable GPs to effectively implement nutrition interventions in their own patients.

REFERENCES

3. Helman A. Practices, attitudes and knowledge of Australian GPs in relation to nutrition, with a special emphasis on vitamin prescribing. Sydney, Australia: Department of Community Medicine, University of Sydney, 1986.
8. Hughes R. Don’t ask me about nutrition: survey results of the rural and remote nutrition education project. Toowoomba, Australia: Darling Downs Regional Health Authority, 1995.