III

ROLE OF MEDICAL PRACTICE

Mark L. Wahlqvist

Department of Medicine, Monash Medical Centre, Monash University, Clayton, Victoria, Australia.

Health Promotion in Medical Practice

There are divergent views about whether medical practice should or should not be confined to the care of the sick, but to the extent that sickness is preventable, it seems entirely reasonable that doctors should be involved. Indeed, the credibility of a medical practice which is only sickness-orientated, and where the remuneration for services relates to this exclusively, is increasingly at risk unless a high level of operation of medical ethics responsive to changing community norms consistently prevails (see Section VII). An example of this is provided by dentistry. Dental practice over the last 50 years or so has been increasingly directed towards prevention of dental caries and, now, towards problems of malocclusion during growth and development and of gum disease in later life; it has provided a model of how 'doing oneself out of business' adds new dimensions to professionalism and practice.

'Health Promotion' can be defined in various ways, but in the declaration of the Alma Ater WHO conference it was put this way[1,2].

> *'Health promotion comprises efforts to enhance positive health and prevent ill-health, through the overlapping spheres of health education, prevention, and health protection.'*

Health promotion is surely preventive medicine, but the 'preventive medicine' descriptor links the activity to health care and, in particular, to medical practice. More than that, it avoids the exemption of medical practice from the arena of health promotion. Health promotion can be initiated in a number of sectors or settings, governmental, educational, industrial and domestic. But there has been a notion in some quarters that these sectors or settings are not inclusive of medical practice[3] which would not only disenfranchise a group of professionals from this activity, but distance the at-risk public from special expertise (often, admittedly requiring enhancement) which would be otherwise available. For the public health, even a full health promotional effort is unlikely to be enough to effect needed behavioural change.

Further, preventive medicine is not the exclusive domain of health care professionals any more than health promotion is an exclusive province of any sector.

Historically and contemporaneously, the prevention of medical problems has proceeded from sanitary engineering, production of a microbiologically and toxicologically safe food supply, through the provision of adequate food, through immunization programmes and through maternal-child health programmes.

Medical training

Recent years have seen medical undergraduate education broaden to add significant psychosocial dimensions. This provides a background against which both preventive and nutritional approaches to practice, as well as their combination, can develop.

One of the most used educational methodologies is that of the *patient or case study*, whether it be personal experience, or written or oral presentation by oneself or others. When it is agreed that preventive nutrition is worthwhile, problem identification can be encouraged and problem-solving and preventive strategy development pursued.

Problem identification

Problem identification can be encouraged in the training setting that patient studies provide. For example, a post-menopausal woman, Mrs AB, expresses concern about the possible development of osteoporosis. Her nutritional and non-nutritional risk factors can be defined and explained (see Section V). Whether or not she has a family history of the problem and whether she has children can be noted.

Problem-solving and preventive strategy development

These concerns can be pursued in respect of individual patients with their various needs. For example Mrs AB's food intake history reveals that her food pattern is characterized by low nutrient density overall, with liberal use of caffeinated beverages and salty food. She is a smoker and has little physical exercise. Her daughters are aged 18 and 24, she has four sons. Herein lie several risk factors, probably still worthy of concern from the point of view of osteoporosis and certainly from the point of view of general health. Her daughters, at particular risk if they have a similar life-style, and if there is a family history of osteoporosis, have yet to reach peak bone density. The consultation with Mrs AB can be a first step towards motivating her daughters in healthful changes, given that she has sought advice herself and is, at this point, motivated.

Whilst individual counselling opportunities abound in undergraduate and postgraduate medical training, those for group programmes in prevention, and for community-wide approaches are usually less available. Nevertheless, medical students themselves belong to groups and to communities and, amongst them, many valuable experiences for problem identification and solving can be found. Examples of these are university student groups, sports clubs, religious groups, neighbourhood organisations, schools, and business groups. Such training activities can, in themselves, be catalytic for preventive medicine and nutrition.

Situational learning runs the risk of being anecdotal unless it has an epidemiological context and a scientific framework. A knowledge of the patterns of disease in one's community, of how food habits and intake might affect disease processes, and how effective or otherwise various preventive approaches and interventions might be is vital.

The clinical and nutritional epidemiological approach[4,5]

Population-derived data

Basic population-derived data required for the practice of rational preventive nutrition in a community include those which have to do with demography, food, health, and the causation of health problems (Table 1). Needless to say, much of this information will not currently be available for the community in which one works, and may actually be rapidly changing, especially in transitional societies where a mix of problems of undernutrition and overnutrition can be seen side by side in the population or together in the same individual[7]. An example would be increasing abdominal obesity where micronutrient deficiency still occurs, as a food supply of low nutritional quality increases, physical activity declines, and alcohol and cigarette consumption increase.

The stimulus to gather data arises from the appreciation of the problems. Appropriate methodologies are also required. A significant development has been the application of anthropological techniques to the gathering of relevant infor-

Table 1. Origin of basic population-derived nutritional data.

(1) Demography:	Gender	
	Age	
	Socioeconomic status	
	Educational status	
	Religious or philosophical beliefs	
(2) Food:	Food beliefs	
	Food habits: choices	
	storage	
	preparation	
	convenience factors	
	gross intake	
	patterns of intake over day, week, season, within family	
	expenditure	
	Nature of food supply: use of local food technologies (eg salting, curing, smoking, freezing) accessibility	
(3) Health:	Morbidity rates	
	Mortality rates	
(4) Causation of health problems:		Genetic determinants[6]
		Life-style factors: activity substance abuse food intake sleep patterns work patterns recreations
		Psychological factors: mood, sense of humour
		Socioeconomic factors
		Beliefs
		Problem-solving skills (intelligence, education)
		Life-support skills (organisational ability)
		Food use as causal or pathogenic factor

mation for primary health care. One such approach has been the use of 'Rapid Assessment Procedures' (RAP), developed for UNU (United Nations University) by Susan Scrimshaw and Elaine Hurtado[8]. Once the extent of the food-health problem in a community or individual is established, priorities can be set.

Documenting food intake

The way in which food intake is expressed to allow decision-making at the community and individual levels is worthy of consideration. There is a tendency to turn food intake data into nutrient data for this purpose, when food intake data would not only do, but would provide more predictive and useful information (see chapter on non-nutrients in Section V).

An example would be diet and heart disease[9,10]. It is acknowledged that saturated

Table 2. Foods grouped according to biological source

Animal	**Cereals and grains**
Eggs	Morning cereal
Milk	Corn
Dairy (eg cheese, yoghurt)	Oats/porridge
Fish	Rye (bread)
Shellfish (eg mussels, oysters)	Rice
Crustaceans (eg prawns, lobster)	Pastry
Ruminants (eg sheep, cattle)	Biscuits
Monogastric (eg pig)	Cake
Poultry (eg chicken, duck, turkey)	Pasta
Game (eg rabbit, bird, kangaroo)	Bread – white wheat flour
Liver	Bread – wholemeal wheat flour
Brain	
Giblets (eg kidneys, heart, intestines)	
Plant	**Fruits**
Vegetables	Citrus (eg oranges, lemons)
Root, white (potatoes)	Tropical fruit (eg mango, papaya, banana)
Root, yellow (carrots)	Stone fruit (eg plums, apricots, cherries, peaches)
Leafy (eg spinach, cabbage)	Apples
Marrow	Pears
Flowers (eg broccoli, cauliflower)	Berries (eg strawberries, raspberries)
Stalks (celery)	
Onion-like (eg spring onions)	
Tomato	
Peppers (capsicum)	
Legumes (eg beans, peas, lentils)	
Mushroom and other fungi	

Table 3. Seven-day food information: (a) doctor's record, (b) patient's food diary.

(a)

PATIENT NAME: _____ DATE: _____

FOOD INTAKE
(DOCTOR'S RECORD)

	USUAL FOOD INTAKE	EXCURSIONS
BREAKFAST		
MORNING SNACK		
LUNCH		
AFTERNOON SNACK		
DINNER		
SUPPER		
OTHER		

ACTION: _____

(and probably trans fatty acid) fat intake is a major contributor to coronary heart disease[11]. The food sources of such fat are well known – fatty ruminant meats (from sheep and cattle), diary fat, foods fried in such fat or hydrogenated vegetable or fish fat, or food with 'recycled and hidden' fat such as pastries, sweet biscuits (and, to a lesser extent savoury biscuits and crackers), and ice-cream[12].

By asking relevant food questions of the patient, an estimate of high, moderate or low saturated and trans fatty acid intake can be obtained. In order to form an adequate picture of an individuals' diet it can be useful to start with a checklist of foods such as in Table 2. Food records will need to be kept by doctor and patient

(b)

PERSONAL FOOD DIARY NAME: _____

DATE: _____

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
BREAKFAST							
MORNING SNACK							
LUNCH							
AFTERNOON SNACK							
DINNER							
SUPPER							

Comments: _____

Actions: _____

Instructions

- Write down everything you eat and drink for the next seven days.
- Try not to change your usual eating habits too much if this is the first week diary. OR endeavour to implement agreed action for subsequent diary.

(Table 3a,b). The broad categories of saturated fat intake shown in Table 4 may be employed to attempt the assessment of the patient's dietary pattern in respect to

Table 4. Categories of saturated fat intake.

Saturated fat intake	Percent energy intake
High (daily use of several of the major sources of saturated fatty foods)	>15%
Moderate (daily use of one or two of the categories of saturated fatty foods, eg fried foods, sweet biscuits, pastries, ice-cream, or occasional use)	10–15%
Low (minimal use of any saturated fat source)	<10%

Table 5. *Peanut butter**

	% (*g/200 g*)	*Energy Value* (kJ/100g)	% *Energy*
Total fat	51.6	1909	76.1
Saturated fat	9.6	355	14.1

*Item 11B1 – 021, 'Nutritional Values of Australian Foods'.

intake of fatty foods.

At the community level, appropriate labelling of food for saturated fat helps individuals to make, and their health advisors to give, more helpful advice. An example of such an approach and basis for food labelling has been developed by an NHMRC of Australia 'Food labelling' working party[13]. An example of a label is given in Table 5. Fat intake may be expressed as percentage energy intake, mass (grams) per day, or nutrient density (g/1000 cal or g/100 mJ, for example).

When this is done, and population-based data from a representative sample obtained, the centile distributions of fat intake or any other nutrient or food intake can be established (Table 6–8). These can then be used to see how any individual is positioned in relation to the community as a whole. For Australia this is now possible using the Victorian Food and Nutrition Survey of 1985[14] and the National Dietary Survey of 1983[15].

It must be acknowledged that the whole population may be skewed in an unfavourable direction for food or nutrient intake. A bimodal distribution with a subset eating problem may also be found (eg an ethnic minority following migration). Populations can be compared with each other for their different distributions, and how these relate to health profiles. Prevention often requires work to shift the distribution curve as a whole and to deal specifically with individuals at the high or low end. Pluralistic health care systems that address both public health and individual needs allow for this.

Returning to the 'food *versus* nutrient' theme, it is noteworthy that for health problems where nutrients are of paramount importance, prediction of health outcomes is often better achieved by way of food indices (see Section V). Important examples come from the protective role of high energy intake (and expenditure)[16-19,20], plant food intake[16-18,20], and fish intake[22,22] insofar as primary and secondary prevention of macrovascular disease are concerned. It would be remiss to focus only on fat.

Possibilities for change and consideration of value of change

When the population is described, possibilities for nutritional change emerge, and the likely impact on health profiles and prospects can be estimated. Cost/risk-benefit analysis can also be applied, although the methodology for this is still in its infancy. Some of the issues that the health care practitioner must consider have been set out in a report on Food and Nutrition Policy in the Australian State of Victoria[13,23].

Table 6. The effect of age and sex on the daily intake, density of fats in the diet and atherogenic indices of the diet.

	Age-group: (years)									
	Less than 30		30–39		40–49		50–59		60: and over	
	Men (n = 361)	Women (n = 459)	Men (n = 304)	Women (n = 394)	Men (n = 217)	Women (n = 266)	Men (n = 195)	Women (n = 207)	Men (n = 235)	Women (n = 251)
Total fat										
g/day	121	87	103	85	96	87	91	79	80	72
g/MJ	10.8	10.6	10.3	10.8	10.4	10.9	10.3	10.5	10.0	10.3
Saturated fat										
g/day	50	36	41	35	39	36	38	33	32	30
g/MJ	4.5	4.4	4.1	4.5	4.2	4.5	4.3	4.4	4.0	4.3
Mono-unsaturated fatty acids										
g/day	40	29	34	28	31	29	30	26	26	23
g/MJ	3.6	3.5	3.4	3.6	3.4	3.6	3.4	3.5	3.3	3.3
Polyunsaturated fatty acids										
g/day	20	14	19	14	17	14	15	12	14	12
g/MJ	1.8	1.7	1.9	1.8	1.8	1.7	1.7	1.6	1.8	1.7
Oleic acid										
g/day	34	24	29	24	27	25	26	22	22	20
g/MJ	3.0	2.9	2.9	3.1	2.9	3.1	2.9	2.9	2.8	2.9
Linoleic acid										
g/day	18	13	17	13	15	13	14	11	13	10
g/MJ	1.6	1.6	1.7	1.7	1.6	1.6	1.6	1.5	1.6	1.4
Linoleic acid										
g/day	1.35	0.98	1.15	0.96	1.07	0.99	1.05	0.95	0.91	0.85
g/MJ	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.11	0.12
Arachidonic acid										
g/day	0.62	0.41	0.54	0.41	0.46	0.41	0.42	0.35	0.40	0.38
g/MJ	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Stearic acid										
g/day	12.6	8.8	10.4	8.7	9.4	8.4	9.2	7.8	7.8	7.0
g/MJ	1.13	1.08	1.04	1.04	1.02	1.05	1.04	1.04	0.98	1.00
Cholesterol										
mg/day	369	264	305	263	305	283	303	266	260	228
mg/MJ	33.0	32.3	30.1	33.5	33.1	35.3	34.3	35.4	32.6	32.7
Polyunsaturated-to-saturated fat ratio	0.43	0.42	0.49	0.43	0.48	0.44	0.46	0.41	0.48	0.44

Table 7. Cholesterol density and percentage of energy derived from various fats.

Nutrient	Mean energy	Percentiles of contribution to total energy										
		5th	10th	20th	30th	40th	50th	60th	70th	80th	90th	95th
Men												
Total food	38.2%	28.3%	31.4%	33.9%	35.6%	37.1%	38.5%	40.0%	41.3%	42.7%	44.8%	46.7%
Saturated fatty acids	15.5%	10.4%	11.5%	12.8%	13.8%	14.7%	15.5%	16.3%	17.2%	18.3%	19.5%	20.6%
Mono-unsaturated fatty acids	12.5%	8.8%	9.5%	10.5%	11.3%	11.9%	12.5%	13.1%	13.7%	14.4%	15.4%	16.5%
Polyunsaturated fatty acids	6.7%	2.6%	3.0%	3.8%	4.6%	5.6%	6.6%	7.5%	8.3%	9.2%	10.5%	11.7%
Cholesterol density (mg/Mj)	32.9	18.2	21.0	24.7	27.1	29.7	31.6	34.0	36.5	40.1	45.5	50.9
Women												
Total fat	38.9%	29.1%	31.5%	34.3%	36.3%	37.8%	39.2%	40.5%	41.9%	43.7%	45.9%	47.6%
Saturated fatty acids	16.1%	11.2%	12.1%	13.5%	14.4%	15.2%	16.0%	16.8%	17.6%	18.6%	20.3%	21.5%
Mono-unsaturated fatty acids	12.9%	9.0%	9.8%	10.9%	11.6%	12.2%	12.8%	13.5%	14.1%	14.9%	15.9%	17.0%
Polyunsaturated fatty acids	6.4%	2.6%	3.1%	3.7%	4.6%	5.5%	6.3%	7.1%	7.8%	8.7%	9.8%	11.0%
Cholesterol density (mg/Mj)	34.2	19.8	22.5	26.2	28.8	30.9	33.3	35.6	38.8	41.5	46.3	50.8

Table 8. Mean daily intakes and percentile intakes for fats, fatty acids and cholesterol.

Nutrient	Mean daily intake	Percentiles of daily intake										
		5th	10th	20th	30th	40th	50th	60th	70th	80th	90th	95th
Men (n = *1319*)												
Energy (MJ)	9.7	5.2	5.9	6.9	7.7	8.4	9.2	10.0	10.9	12.1	13.9	15.8
Total fat (g/day)	100.8	45.7	55.1	67.2	77.5	86.1	93.8	102.9	114.5	130.7	154.5	173.5
Saturated fatty acids (g/day)	41.1	17.3	21.2	26.0	30.1	34.2	37.8	41.9	46.9	54.1	65.3	74.5
Mono-unsaturated fatty acids (g/day)	33.1	14.5	17.3	21.7	24.9	27.7	30.6	33.7	37.5	43.5	52.6	58.8
Polyunsaturated fatty acids (g/day)	17.5	5.3	6.7	8.7	11.1	13.4	15.7	18.3	21.0	25.1	30.2	36.1
Oleic acid (g/day)	28.3	12.3	14.9	18.5	21.3	23.6	26.1	28.7	32.2	37.2	45.2	49.8
Linoleic acid (g/day)	15.8	4.0	5.4	7.3	9.4	11.6	14.0	16.6	19.5	23.2	28.0	33.7
Linolenic acid (g/day)	1.1	0.5	0.6	0.8	0.8	0.9	1.1	1.2	1.3	1.5	1.8	2.0
Arachidonic acid (g/day)	0.5	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.9	1.2
Stearic acid (g/day)	10.2	4.1	5.0	6.3	7.3	8.3	9.2	10.3	11.7	13.5	16.4	18.7
Cholesterol (mg/day)	314.5	132	156	199	230	261	292	323	358	413	500	569
Polyunsaturated-to-saturated fat ratio	0.5	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9
Women (n = *1597*)												
Energy (MJ)	7.8	4.2	4.8	5.7	6.3	6.9	7.4	8.0	8.7	9.6	11.2	12.6
Total fat (g/day)	82.7	37.7	45.3	56.4	63.9	70.5	77.6	85.0	94.4	105.8	126.6	143.4
Saturated fatty acids (g/day)	34.3	14.9	18.3	22.4	25.8	29.1	32.1	35.0	39.3	44.4	53.8	62.1
Mono-unsaturated fatty acids (g/day)	27.4	12.3	14.7	18.1	20.6	23.0	25.6	28.3	31.5	35.7	42.9	48.8
Polyunsaturated fatty acids (g/day)	13.5	4.0	5.2	7.2	8.9	10.6	12.1	14.0	16.1	19.1	23.4	26.9
Oleic acid (g/day)	23.5	10.3	12.6	15.4	17.5	19.6	21.7	24.2	26.9	30.7	37.1	41.8
Linoleic acid (g/day)	12.1	3.2	4.2	6.0	7.6	9.2	10.8	12.6	14.7	17.6	21.6	25.0
Linolenic acid (g/day)	1.0	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.4	1.6
Arachidonic acid (g/day)	0.4	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.7	0.9
Stearic acid (g/day)	8.1	3.4	4.2	5.2	6.0	6.7	7.4	8.3	9.3	10.7	13.0	15.1
Cholesterol (mg/day)	262	115	141	173	199	223	247	271	299	342	407	450
Polyunsaturated-to-saturated fat ratio	0.4	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.7	

AGRICULTURAL PRODUCTION

Excessive production of *animal fat* as carcass fat or milk fat. To produce and then discard or to reuse as 'hidden fat', in conjunction especially with cereal products and/or sugar, is wasteful of agricultural production and environmental resources.

Excessive production, with gluts, of various products occurs as consumer needs are distanced from production. Australia is, however, in the forefront in arguing more rational food production policies from the point of view of trade. Such developments should allow retention and optimization of local food production for local needs – and minimize unnecessary import of foodstuffs which can be grown in Australia, such as olives for olive oil, nuts, citrus fruit, rapeseed for canola oil, and rice.

TRANSPORT

The closer food can be produced to usage, the less the fuel and transport costs; the less also will be the storage costs, although this will depend on the food handling and preservation system used (eg fresh, frozen, canned, flour production).

FOOD PROCESSING

Food processing is, in general, an advantage for the food supply since it minimizes waste, increases shelf life and increases the biological variety of food-stuffs available to consumers. Nutrient retention can also be high and additive use minimized through processes like canning and freezing.

Problems are arising where products are less identifiable as basic commodities (eg ready to eat dishes rather than an array, say, of possible frozen ingredients like fish and vegetables) and, more particularly, where food analogues – 'functional foods' or 'nouveau' foods – are developed. Here the consumer is prone to make errors in choice unless labelling for ingredients, nutritional profile and nature of technology is clear and understood. Often, altogether unnecessary 'value'/cost is added to basic commodities with no nutritional advantage. We can expect that this will be a major area of concern for nutrition scientists and food technologists in the next decade.

FOOD PACKAGING

Food packaging provides a vehicle for labelling with useful information, essential where food has been processed by others for one's own consumption. However, while convenient, it increases the costs of production, and the use of non-renewable resources (or those of limited renewability) such as plastic and aluminium will be an increasing consideration, as will the environmental cost of the waste.

FOOD HANDLING

Food handling hygiene in restaurants, take-away shops and at home continues to account for much short-term morbidity and lost productivity in Australia. Education for food handlers and employment of food and health inspectors will remain a required cost.

ADVERTISING

Advertising costs are now a significant part of food costs. Some of this budget could be turned to health promotion.

ENVIRONMENTAL COSTS

Environmental costs are found at all levels-production, transport, processing, packaging and advertising – and need careful attention if the food supply is to be sustainable.

AFFORDABILITY

Even in an affluent society like Australia, affordability of 'value-added' food can be an issue, especially for marginalised groups like single parent families and homeless youth.

Monitoring prevention in medical practice

Monitoring change in nutritionally-related health outcome in the population at large is usually the responsibility of government national or local, or of various health agencies.

Significant data management arrangements are usually required. But more often these are not in place. RAP approaches would tell whether nutritional messages are being picked up, whether it is practical to alter food intake in particular ways, whether food labelling is helpful or confusing (eg what do '90% fat-reduced', 'fresh', 'natural', 'high-fibre', 'no additives' mean?), what supermarkets are offering, whether the undergarment industry is changing its sizes upwards or downwards on account of shifting demand, where people are setting their nutritional advice, and much more. Focus group and targeted surveys and questionnaires can be of great value. Working with market researchers where rapid responses are possible is also an important avenue[24]. Medical practitioners will be able to participate more and more in these activities.

For one-to-one patient-doctor consultation, some key end points will be worthy of consideration for preventive nutrition profiling in a medical practice, such as:

- use of saturated fatty food, of salty food, of fish, of fruits, of vegetables
- obesity (body mass index > 30) and abdominal fatness (waist-to-hip ratio greater than 0.85 for women and 0.90 for men although these limits are a matter of judgement on the basis of available data)
- family history of obesity or of hypertension – untreated and treated
- hyperlipidaemia and its family history
- people at risk of osteoporosis
- colo-rectal cancer, breast cancer; identified families at risk
- diabetes and family history of diabetes
- gall bladder disease
- peptic ulcer

The analysis can include prevalence, incidence, individual change at various intervals, and family clustering, intervention, risk change and clinical events in family members of the propositus.

The individual practitioner will sometimes be well served in achieving and measuring the preventive nutrition objective though linkage with other agencies which are appropriately resourced, and with a common philosophy, such as governmental health services, health maintenance organizations (HMOs), health care teams (including data managers) at tertiary referral centres, university/medical school departments as a research network, and commercial organizations directed towards prevention.

Opportunities for prevention in medical practice

Access to medical practitioners varies enormously in different parts of the world. There may be one practitioner per 300 of the population in developed countries to one per several thousand people in developing countries. Other health care workers, including traditional ones, are much more important as the scarcity of medical practitioners increases. In a place like Australia, although there are particular problems for aboriginal Australians, about 70–80% of the population visits a primary health care medical practitioner (known as a general practitioner, GP, or family doctor) each year, and this practitioner is therefore, arguably, the equivalent of the traditional practitioner in other societies[25]. Other health care practitioners of great consequence numerically and practically in Australia and countries of similar economic development are nurses (maternal and child welfare, district nursing service, and community health-centre-based) and pharmacists (at least two or three for each community, usually operating from a shop). These networks have great potential to be recruited into the service of preventive nutrition. The National Heart Foundation of Australia, working with Monash University's Department of Community Medicine in Melbourne, is now putting into effect a programme whereby GPs would be agents of nutritional change insofar as coronary risk is concerned.

A great advantage of the GP's involvement in preventive nutrition is that it can be integrated with the several other dimensions of health care and, indeed, preventive medicine. For example, opportunities to arrest the development of obesity in the child of obese parents, to modify eating patterns in a patient with hypertension, and to encourage cessation of smoking and help deal with any ensuing weight gain[26,27] are available to the GP, working in primary health care. However, considerable opportunity for prevention arises at the secondary level of health care (community and regional hospital, nursing care, rehabilitation programmes) and at the tertiary level (usually major university medical centres). In Australia, a programme of nutrition support to reduce the prevalence of immunodeficiency and associated morbidity is underway (see chapter on nutrition and immune function in Section I).

At the tertiary level, a Health Hospitals project has been initiated under the auspices of the nutrition arm of the 'Better Health' Committee of the Australian government[28]. It is consistent with recent WHO recommendations of a similar kind[29,30]. This targets not only patients in major hospitals, but their families, often at higher risk as well, their friends, and hospital staff. It seeks to deliver preferred catering as an example for institutional catering at large. It works to create role models among staff where often attention to personal health and life-style has been deficient. For example, nurses as a group have one of the higher prevalences of cigarette smoking in Australia[26,27]. The view has been taken that food health

MONASH UNIVERSITY

Melbourne, Australia

DEPARTMENT OF MEDICINE
PRINCE HENRY'S HOSPITAL

Postal Address:
St. Kilda Road.
Melbourne, Victoria. Australia 3004
Telephone (03) 62 0621 ext. 2403

Professor Mark L. Wahlqvist
B.Med.Sc. M.D. (Adelaide), M.D. (Uppsala) FRACP. FAIST

11th April, 1989

Dr. N. Blewett,
Minister for Community Services & Health,
Australia Government,
Parliament House,
Canberra, ACT 2600.

My Dear Minister,

RE: GROUP EDUCATION BY MEDICAL GRADUATES

One of the prime roles of medical practitioners is to educate their patients to avoid, minimize and manage illness. "Doctor" means "teacher".

Whilst the one-to-one counselling situation is the traditional way in which doctors educate, it need not be the only way. Indeed, increasing numbers of us are engaged in group and community education. The medical graduate is uniquely positioned to assume this role with a good training in the biomedical and psycho-social sciences on to which can be grafted more in the way of health education techniques. This approach is consistent with the recommendation of the Doherty enquiry into medical education.

It would increase cost-effectiveness if doctors could be engaged in group education and remunerated appropriately for it. A move in this direction could lead to a minor revolution in health care in this country. Can I suggest that a working party be set-up to examine the possibility?

In the fields of clinical and public health nutrition, a declared area of importance by the Better Health Commission, group education by doctors would be invaluable. One cannot ignore the role doctors play sociologically as reference points for this sort of counsel and education.

The Australasian Clinical Nutrition Interest Group (ACNIG) of which I am chairperson and whose executive is:

Prof Mark L. Wahlqvist (Chairman)
Prof Laurie Bellin
Prof Ian Lewis
Prof Jim Mann (N.Z.)
A/Prof Cliff Tasman-Jones (N.Z.)

would be pleased to provide advice on these matters.

Yours sincerely,

Mark L. Wahlqvist
Professor of Medicine

Encl.

Figure 1. Securing a change in the structural arrangements of medical practice to facilitate group health education and promotion – the bid.

COMMONWEALTH OF AUSTRALIA

GPO Box 9848
Canberra ACT 2601
Telephone: (062) 89 1555
Telex: 61209 Fax: (062) 81 6946

DEPARTMENT OF
COMMUNITY SERVICES
AND HEALTH

Professor M L Wahlqvist
Department of Medicine
Prince Henry's Hospital
St Kilda Road
MELBOURNE VIC 3004

Dear Professor Wahlqvist,

The Minister for Community Services and Health, the Hon. Neal Blewett, has asked me to thank you for your letter of 11 April 1989 concerning group counselling on health education topics by general practitioners.

The role of GPs in health promotion has been the subject of debate for some time. While the advantages you have described are recognised, I am sure you appreciate the conceptual difficulties in incorporating your proposal within a health insurance system based on fee-for-service medical care.

Other considerations are the appropriateness of current GP training for this role, and the cost-effectiveness of using GPs compared with other health professionals.

However, the Minister has referred this question to a permanent review group to be established later this year to consider a range of issues relating to general practice.

Yours sincerely,

Ian Wingett

Ian Wingett
Assistant Secretary
Community Health and Workforce Branch

Figure 2. Securing a change in the structural arrangements of medical practice to facilitate group health education and promotion – Government response.

messages should be clear as they emanate from the tertiary health care sector.

Regrettably, in difficult economic times, hospitals often resort to short-term revenue-raising goals, in order to preserve services, without a view to the future and to prevention. This is illustrated by a current controversy at the Royal Children's Hospital in Melbourne where the fast food chain, McDonald's, has negotiated a long-term contract to establish a franchise on hospital premises. Health care professionals and the Government Inter-Departmental Committee on Food and Nutrition Policy, along with community groups, and commerce, are all embroiled in the matter. Advantages are that the chain is responding with product change in relation to national dietary goals as a result of pressure; sick children will not feel so different to their healthy counterparts; and the hospital raises revenue. Dis-

advantages are that it will provide a *de facto* catering service, not subject to the usual hospital catering criteria, for the dominantly ambulatory care population of the hospital and, to a lesser extent, the in-patients. It is probably a first step towards such chains providing food in institutions and at places of employment (hospital staffs are always comparatively large), so progressively adding to the use of ready-prepared food by consumers. One of the principal methods by which effective personal choice operates in relation to food is that knowledge about and, at least some, control over food preparation is in place. At the Monash Medical Centre, Melbourne, which had a major focus on public health and clinical nutrition in 1991, without any input from medical staff, the public relations department issued an invitation to general and medical staff to obtain bonus meals at the local McDonald's outlet. The ground rules for preventive nutrition, if they ever existed, are rapidly changing, and medical practitioners must be aware of this.

An area of medical practice which has scarcely developed in industrialized countries is group consultation or counselling. Mostly medical practice proceeds on a one-to-one basis, but 'doctor' means 'teacher' and communication skills are part of good medical practice. It ought to be possible to turn these skills to greater use and to the service of many more individuals. How the concept of group consultation or counselling can be developed remains a question for the future (Figures 1, 2).

Again, where doctors practise in small communities, they often participate in service organizations. These remain opportunities for preventive nutrition. What is also required is for doctors in more amorphous and dispersed communities to identify an 'operational community' and participate in it. This might be a neighbourhood within a district (as applies to 'Neighbourhood Watch' for household security), a work-force for which the doctor is adviser, an alumni association which may act as a leadership group, service organizations and others. An advantage here is that the doctor gets useful feedback and the community develops its own solutions and assumes responsibility collectively with the doctor.

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