Appendix A: Description of Nutrition Workforce Development for Primary Health Care project and context of the review

This section provides a brief overview of the food and nutrition context in South Australia, information about the background to the review, the purpose and aims, and the process of implementation.

A.1 Context and background

Food and Nutrition Policy context

The Commonwealth Government launched a National Food and Nutrition Policy in 1992 with the aim of fostering changes in food choice and eating behaviour at the individual and population level. Its goal is to ‘improve health and reduce the preventable burden of diet-related early death, illness and disability among Australians’ (SIGNAL 2001). There are five key policy issues or principles identified by the policy document:

- social justice
- quality of food supply and food system
- community participation, intersectoral action and partnerships
- food and nutrition system and its wider interactions
- ecological sustainable development.

Following evaluation of the implementation of the policy in 1995, critical partnerships and whole of system issues were emphasised. Subsequently, Eat Well Australia – the national public health nutrition strategy – was developed under the guidance of SIGNAL.

SA Food and Nutrition Policy context

Following the development of a first draft in 1995, South Australia’s first food and nutrition policy was published in 1999. A South Australian public health nutrition action plan followed in 2002. The action plan largely reflects Eat Well Australia priorities, given the release of the Eat Well Australia document in 2001 and the States’ and Territories’ commitment to implementing it. There is, however, considerable consistency with areas identified in the SA Food and Nutrition Policy (Health Promotion SA 1999) http://www.dhs.sa.gov.au/pehs/food-index.htm; accessed 16/4/2003

Background to project

Eat Well South Australia is the state public health nutrition action plan. The Nutrition Workforce Development for Primary Health Care project was initiated as part of Eat Well South Australia, in response to the national nutrition strategy, Eat Well Australia
Appendices

(incorporating the National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan), and the SA Food and Health Policy. Eat Well South Australia is a population strategy. It reflects the need to engage a broad range of organisations in both health and non-health sectors, the latter, for example, including the community services and local government sectors.

The draft Eat Well South Australia plan comprises six key action areas:

1. Improving nutrition for mothers, infants and young children
2. Increasing consumption of vegetables and fruit
3. Promoting the healthy growth and weight of children and the prevention of weight gain in adults
4. Improving nutrition for older people
5. Improving food supply, food access, food security (particularly for vulnerable groups) and increasing demand for healthy food
6. Developing state infrastructure and capacity to support nutrition improvement.

Workforce development, along with research, communication, monitoring and evaluation is a component of this last area and an integral part of achieving outcomes in all other areas.

Health Promotion SA sees one of its roles as contributing to building capacity to promote health. As far as nutrition is concerned, organisations and workers have articulated a range of needs. A survey was conducted in 2001 in preparation for the preliminary draft of Eat Well South Australia. In response to questions about what organisations needed to support their nutrition work and what they thought the SA Department of Human Service (DHS) could do, broad themes identified were the need for funding, partnerships, resources, training and more specialist nutrition staff. A state nutrition network was established in December 2002. At the first two meetings, the members, who are almost all specialist dietitians or nutritionists, identified the need for a more coordinated approach to improving nutrition, resources, more support for nutrition at central level and in their own organisations. It is thus an ideal time to commence tackling workforce development for improved nutrition.

Overall the public health nutrition workforce development project is envisaged as containing the following three phases:

1. Identifying effective approaches to workforce development for the primary health care and other relevant non-health sector workforces
2. Establishing strategies, in conjunction with key groups, to enhance workforce capacity to contribute to addressing Eat Well South Australia priorities
3. Implementing and evaluating workforce development approaches to improving population health via improved nutrition.

This review and report is concerned with the first of these phases.
A.2 Description of review

Aim
To identify models and effective approaches to workforce development for the primary health care and other relevant non-health sector workforces.

Objective
To undertake a literature review on the theoretical and methodological approaches to workforce development in the primary health care sector, with a focus on action research methods, and approaches to improving nutrition.1

Strategies
1. Search existing literature (both peer reviewed and ‘grey’ literature) for models of workforce development which have used a primary health care approach eg action research, and address improving nutrition
2. Describe theoretical frameworks used for models of primary health care workforce development in different settings
3. Examine methods and strategies used for workforce development in primary health care approaches and report on their effectiveness.

The target audience for the report is: Health Promotion SA; DHS; managers and service delivery staff in organisations that have a role in addressing priorities of Eat Well South Australia, for example, organisations in the community health (metro), regional health (country), local government and community services sectors.

Implementation and management
A small reference group was formed to provide expert advice to the review. The reference group comprised the contract manager, Patricia Carter, Health Promotion SA, DHS; a consultant, Dr. John Coveney, Department of Public Health, FUSA and representation from other relevant groups, including:

- Australian Health Promotion Association (SA branch) – Cynthia Spurr
- Nutrition Unit at Flinders University – Kaye Mehta
- Metropolitan Division, DHS – Alison Pascoe
- Social Justice & Country Division, DHS – Geoff Cook

Three reference group meetings were held – October 24th and Dec 17th 2002 and March 19th 2003.

The purpose of the Reference Group was to:

---

1 The New South Wales capacity building framework definition of workforce development and NCETA work on workforce development for Drug and Alcohol workers provide examples of the approach taken in the project. For the purposes of this project ‘primary health care’ also includes relevant non-health sector workforces such as those in local government, community services, and industry. The particular workforces will depend on the particular issue being addressed.
provide expert knowledge on public health nutrition and primary health care workforce development issues

assist with identification of literature, particularly ‘grey’ literature

read and comment on report drafts.

Method

A literature search strategy using electronic data bases and the internet was piloted in April/May 2002 and, from the results of this, search terms and limits were established. The main literature searching took place in July-August. Relevant material was identified from abstracts and full texts obtained. All material was entered onto Endnote v5 bibliographic databases according to main topics of interest. The topics were divided between two researchers for the purpose of reading and summarising the literature into main themes and ideas. Each researcher drafted sections of the report based on their topics and these were then revised in light of discussions between the researchers and the reference group and integrated.

A draft report was presented to the project manager on 29th November. The reference group met to consider this draft on 17th December. Early findings were also presented to the state Public Health Nutrition Network on 13th December. Following feedback, a second draft was sent out to the reference group at the end of February 2003. The reference group met on March 19th to consider the second draft. Following some further writing and editing the final draft was presented to the reference group on 14th April 2003.

A.3 Definitions and scope

This section outlines the definitions and scope of terms as used in the review.

Workforce development

The Workforce, Research and Training Taskforce of the South Australian Generational Health Review provides the following definitions:

Training – has a focus on the skills and knowledge necessary to perform a job that exists now

Education – provides a broad theoretical and conceptual framework that encourages and requires critical analysis. The focus of education is general preparation for a future role

Development – is that activity that prepares (usually) employees for a future role that is specific and strategically determined by the organisation (GHR 2002).

This suggests that the individual worker is ‘developed’ to fulfil a strategic need within the organisation.

A definition of workforce development from the NSW Framework for Capacity Building (2001) has a similar theme of workforce development being used to help achieve organisational goals.
...a process initiated within organisations and communities, in response to the identified strategic priorities of the system, to help ensure that the people working within these systems have the abilities and commitment to contribute to organisational and community goals. (AHPA 2001).

This definition broadens the role to include systems and community goals. It suggests that drivers for workforce development exist at many levels. However, it is also explicitly about organisational change.

A national study by the Australian Health Promotion Association (AHPA) reported that current approaches to workforce development were, for the most part, confined to individual staff development. The AHPA reported that limited support or consideration was given to strategies that changed organisational structures as part of an overall approach to support practice development.

*Workforce development for health promotion is not generally considered a core activity to develop the infrastructure for health promotion* (AHPA 2001).

The exception to this appears to be clinical and educational settings. There has been considerable learning in settings approaches to health promotion (eg Health Promoting Hospitals, Health Promoting Schools, Healthy Cities) about how to build the infrastructure for health promotion. Settings approaches incorporate workforce development but have a different starting point, eg reorienting health services or building capacity for health promotion in schools. Evidence for comprehensive or system approaches to workforce development is therefore likely to exist outside the ‘workforce development’ literature, in organisational learning and health promoting settings literature. For example, much of the action research evidence is embedded in classroom and school settings or relates to implementing educational reform. This means that how workforce development is conceptualised determines where evidence of its effectiveness may be found.

**Primary health care**

Primary health care is a complex concept. It is both a level of service delivery (the primary health care sector) and a set of principles of practice (the primary health care approach) (Legge, Wilson et al. 1996; May, Crawford et al. 1997). This project focuses on primary health care as service delivery but also touches on an understanding of the primary health care approach to workforce development itself.

The principles which define the primary health care approach include:

- self reliance
- community participation
- intersectoral collaboration
- integration of health services
- special attention to high risk and vulnerable groups
- the use of appropriate technology

Primary health care aspires to integrate:

- the personal and population level of analysis
- the technical and biological with the social and existential aspects of health care
- the sectoral tasks of health care delivery with the wider civic project of social development (Legge, Wilson et al. 1996).

A primary health care approach to workforce development would emphasise characteristics such as intersectoral and multi-disciplinary work, skills in communication and working with communities and an understanding of equity and the social determinants of health.

**Definitions of public health nutrition**

In the Australian context, the Strategic Inter-Governmental Nutrition Alliance (SIGNAL) provides a definition of public health nutrition that includes a population focus and recognises all aspects of the food supply as well as community attributes.

*Public health nutrition focuses on issues affecting the whole population rather than the specific dietary needs of individuals. The impact of food production, distribution and consumption on the nutritional status and health of particular population groups is taken into account, together with the knowledge, skills, attitudes and behaviours in the broader community (SIGNAL 2000).* [http://www.dhs.vic.gov.au/nphp/signal/whatis.htm](http://www.dhs.vic.gov.au/nphp/signal/whatis.htm); accessed 24/10/02

**Primary health care/nutrition workforce**

Three major categories of worker are used in this report: professional dietitians and nutritionists, the primary health care workforce and non-health sector workers.

SIGNAL and the Eat Well Australia Agenda for Action clearly recognise the need for workforce development and capacity building in a broad range of primary health care and non-health workers as well as those directly responsible for nutrition and dietetic work.

*Government health departments can seek to improve the infrastructure for delivery of public health nutrition programs, with the tertiary sector to increase the number and skills of qualified personnel, and with both the health and non-health workforces to develop their capacity to provide effective nutrition-related programs and services (SIGNAL 2001 p19).*

**Nutrition and dietetic workforce**

The nutrition and dietetic workforce includes public health nutrition specialists, community nutritionists and dietitians and private sector dietitians.
Primary health care workforce
The primary health care workforce includes health promotion and public health generalists, Aboriginal Health Workers, general practitioners, community nurses, maternal and child health nurses, physiotherapists, oral health therapists, occupational therapists and pharmacists. To enable them to be involved in implementing Eat Well Australia they need access to nutrition information and program specific training (SIGNAL 2001).

Non-health sector workforce
The NHRMC subcommittee on nutrition education alluded to the need for nutrition education for non-health professions such as teaching staff, and for nutrition training for those people having the opportunity to influence food knowledge or eating habits, for example, food service and catering personnel, police, physical fitness instructors, social security and welfare workers, community workers, youth leaders, social workers, agricultural scientists, food technologists and food scientists (Australian Institute of Health and Welfare 1994). People working in non-health sectors can influence nutrition in positive or negative ways. Providing training to these workers to improve their nutritional influence on the population is stated to be a cost efficient way to increase the reach of Eat Well Australia (SIGNAL 2001).
Appendix B: Workforce development activity

This section describes workforce development activity at a national level and within South Australia. Workforce development activity in public health is described, as well as initiatives that focus on nutrition.

B.1 National workforce development activity

National Public Health Partnership

The National Public Health Partnership (NPHP) was established by Health Ministers in 1996. This partnership plays a planning and coordinating role for public health efforts by bringing together Commonwealth, State and Territory governments.

In 1998, the New South Wales Department of Health, on behalf of the NPHP, undertook a statewide consultation re the development of the national public health workforce. Madden and Salmon (1999) describe the consultation process and report on four of the themes that emerged:

1. There was a consensus re the need to articulate the specialised knowledge and skills required by the public health workforce and that training should be directed at achieving an appropriate level of skill, commensurate with role responsibilities.
2. Three broad types of public health worker were identified - specialist and generalist public health workers and health workers who have a public health component embedded within their practice. It was agreed that most health workers require some public health knowledge and skills to be effective. Respondents cited the Royal Australian College of General Practitioners which has included population health needs and priorities as one of three dimensions used to develop their new curriculum.
3. There was recognition that workforce development is seldom achieved effectively in isolation from broader organisational concerns. Physical infrastructure, appropriate job descriptions and roles that support the desired skills and knowledge, organisational support for change and adequate resources were identified as pre-requisites for effective workforce development. A ‘learning organisation’ approach was highlighted as an appropriate model.
4. The rural public health workforce was identified as priority group. (Madden and Salmon 1999)

Respondents identified the need to link workforce issues to long-term broad goals in public health and argued for greater recognition of the value of knowledge and skills available through work settings and evaluation and practice-based research in the development of organisational learning (NSW Department of Health 1998).

As a result of the NSW consultation, the NPHP agreed on three priority areas for public health workforce development, including health promotion and leadership skills. As a further outcome, the NPHP commissioned work on the development of a planning framework for the public health workforce. The resulting discussion paper
(Ridoutt, Gadiel et al. 2002) proposed a model that focused on social and community needs rather than staff as the providers of services. The proposed model entailed:

- defining the services the public need
- determining the skills and competencies needed to deliver these services
- deriving both the numbers and types of staff required to satisfy competencies to deliver services at the organisational / program level
- matching actual positions with competencies and identifying gaps
- linking to training and education policies.

A similar model has been piloted at the Northern Metropolitan Community Health Service (AG 2002) pers. comm. February 1, 2002.

Roger Hughes’ work relating to workforce development for public health nutrition (in Victoria) starts from a similar position of defining priority actions. In broad terms, Hughes advocates for a model of workforce development that encompasses the following steps:

- define priorities
- find out what works (ie evidence base for interventions)
- decide what intervention is required
- articulate what the workforce needs to be doing – and competencies required
- assess the capacity of the current workforce
- identify training needs, policy and organisational structures required to effectively intervene (RH 2002) pers. comm. October 9, 2002.

In addition to a population focus, the model proposed by Ridoutt et al focuses on the core functions of public health as the basis for defining competencies. Organisations first identify those core functions that are relevant to their objectives. Competencies are further defined by the public health domain (eg communicable disease) or specific target populations (eg refugee population). In this way, Ridoutt et al’s model avoids the focus on personal attributes that has beset competency approaches to workforce development (Public Health Association of Australia Inc. 1995).

**The health promotion workforce: a NPHP priority**

As stated earlier, the NPHP identified the health promotion workforce as a priority group and in 2000 invited the Australian Health Promotion Association (AHPA) to join with NPHP to develop a national strategic approach to development of the health promotion workforce. The Health Promotion Workforce Development Task Group was formed and commissioned a scoping paper. This was followed by meetings and teleconferences to debate issues raised by the scoping paper and to make recommendations to AHPA and NPHP (AHPA 2001).

Key issues arising from Australian Health Promotion Association consultations were:

- lack of a coordinated and strategically planned approach to workforce development
- lack of a clearly defined resource base for workforce development
- limited approach – focus on individual, limited support or consideration was given to organisational infrastructure, policies, as part of an overall approach to support practice development
- lack of quality criteria in health promotion education and training. No national framework to drive better links between training and practice. Piecemeal approach - individual Universities were creating their own links, structures and processes for working with industry/employers
- little evaluation of workforce development strategies.

**SIGNAL**

The Strategic Inter-Governmental Nutrition Alliance (SIGNAL) is the nutrition arm of the National Public Health Partnership (NPHP). Its role is to coordinate action to improve the nutritional health of Australians. SIGNAL representatives include Commonwealth Department of Health and Ageing, all the State/Territories Government Health Departments, the Australian Institute of Health and Welfare, the Australian New Zealand Food Authority, and the National Health and Medical Research Council.

**Eat Well Australia**

Eat Well Australia is the national framework aimed at expanding the national capacity for addressing health gain priorities through research, dissemination, workforce development, communication and information resources. The Agenda for Action report (SIGNAL 2001) presents planned initiatives for Eat Well Australia, including some relevant to workforce development. Thus, workforce development is seen as part of a strategic plan for improving nutrition.

The Eat Well Australia Strategic Framework (SIGNAL 2001) comprises three major domains:

1. Health Gain
2. Capacity Building

One of these, Capacity Building, includes a sub-domain ‘Building Human Resource Capacity’ that is relevant to workforce development. The ‘Agenda for Action’ statements relating to building human resource capacity include:

- building human resource requirements
- expand and extend tertiary education
- training PHC professionals
- training the non-health workforce.

The SIGNAL report recognises the need to improve the capacity of the public health nutrition and health promotion workforce, in order to implement public health nutrition initiatives. An objective under the ‘building human resource requirements’ component of the *Eat Well Australia Agenda for Action* is to:

*Improve the capacity of public health nutrition and health promotion workforces, including increasing the specialist nutrition workforce, to*
support and deliver Eat Well Australia and National Aboriginal & Torres Strait Islander Nutrition Action Plan initiatives (SIGNAL 2001).

Proposed actions under this objective include:

- fund a needs assessment to investigate the workforce requirements and structural relationships necessary to deliver Eat Well Australia initiatives
- fund adequate human resources to implement Eat Well Australia initiatives
- review, restructure and resource workforce infrastructure according to recommendations of the needs assessment
- include public health nutrition training as part of a new monitoring system of public health workforce needs
- offer training packages tied to implementation of Eat Well Australia initiatives
- examine outcomes of the Public Health Research & Education Program (PHERP) in relation to the public health nutrition workforce.

**B.2 Workforce development: the South Australian context**

**Health promotion**

In 2000, the Australian Health Promotion Association (AHPA) consulted with key players in health promotion in each of the states and territories to develop a ‘snapshot’ of workforce development practice (AHPA 2001). South Australian respondents identified two major workforce development initiatives: the South Australian Community Health Research Unit (SACHRU) consultancies and seminars, and the Country Primary Health Care (PHC) Forum.

**South Australian Community Health Research Unit**

SACHRU is a small Department of Human Services funded unit with the primary purpose of conducting research and evaluation in the community health sector in South Australia. In addition to conducting core and grant funded research, SACHRU contributes to workforce development in two ways. Training seminars and workshops specifically targeted at the primary health care sector are run annually. Topics on planning and conducting research and evaluation are covered. Additional workshops on research related topics may be requested by primary health care organisations. SACHRU also undertakes research and evaluation consultancies that are designed as capacity building projects. SACHRU researchers work collaboratively with primary health care practitioners to enhance their skills and ability to conduct research and evaluation within their own organisations.

**Country PHC Forum**

The Country Primary Health Care Forum is a network of primary health care/ health promotion staff across the seven country health regions in South Australia. It is a key structure in terms of providing peer support to relatively isolated workers. There are few staff positions dedicated to health promotion within country health regions. More
than that, the network has effectively pooled its human resources and developed strong links with ‘central office’ staff to tackle some major challenges:

- integrating a Primary Health Care/Health Promotion framework across health, housing and community services
- strengthening community participation
- developing structures and processes that acknowledge communities as key players in the planning, implementation and outcomes of PHC/Health Promotion initiatives.

*The Preparing the Ground for Healthy Communities Manual: a new approach to workforce planning and development in primary health care* (May, Crawford et al. 1997) is one of the resources that this group has compiled to document the learning that has occurred in responding to the specific challenges of rural, remote and regional settings.

**Public health nutrition**

Several South Australian initiatives have identified workforce development in public health nutrition as an important strategy to improve population health status. A brief description of these initiatives follows:

*Eat Well South Australia*

Workforce development is one component of Eat Well South Australia.

*SA public health nutrition network*

A state public health nutrition network has been established. It involves a representative of each metropolitan community health service, regional health service, metropolitan major hospitals, non-government organisations and university departments. The group has met four times since December 2001. Its goal is to support implementation of Eat Well South Australia.

*Improving nutrition for older people*

A short-term needs assessment is currently underway to identify priorities to improve nutrition for older people in SA. Although not complete, as at March 2003, emerging themes include:

- nutrition is not on the agenda of those in the Department of Human Services charged with developing ageing strategies or, largely, of those services engaged in delivering care to older people
- once the issue is raised, there is considerable enthusiasm for workforce development.

*Improving nutrition for Aboriginal people*

Improving ATSI workforce capacity is a priority identified in NATSINSAP (the indigenous component of EWA). In May 2001, a joint workshop was held with Aboriginal Health Workers and dietitians to explore a partnership approach to
developing workforce capacity in public health nutrition. Since then, there have been discussions with two Aboriginal Health Worker forums, within DHS and with the Aboriginal Health Council of SA Inc. There is a current proposal to develop a case for nutrition training for Aboriginal Health Workers, decided at an initial meeting of key interest groups in Port Augusta on Feb 27th and follow up working group meetings in March and April 2003.

Improving breastfeeding rates
Workforce training has been identified as a key strategy in improving breastfeeding rates in South Australia, in the development of the SA breastfeeding strategy.

Other initiatives
In addition to the South Australian initiatives described above, a range of workforce development initiatives are being developed and implemented as components of other DHS and Commonwealth funded nutrition programs, for example:

- Start Right, Eat Right nutrition award scheme (Gowrie, Noarlunga Health Services)
- Healthy Food Choices in Family Day Care Project (Flinders University, Noarlunga Health Services)
- Community Foodies (Noarlunga Health Services).

Generational Health Review
In 2002, the incoming State government announced a wide-ranging review of South Australia’s health system. The Generational Health Review began in July 2002 and is due to release its final report in May 2003. The Workforce, Research and Training group is one of five Task Groups assisting the Review Committee. The terms of reference for this task group include:

1. Making recommendations re appropriate structures for healthcare staffing, including opportunities for redesigning roles
2. Taking a long-term view – examining knowledge and skills required ten years from now
3. Examine methods for improving work practices, especially re multi-disciplinary approaches
4. Explore the feasibility of developing an education and training model that crosses professional boundaries and acts as core platform on which all specialisation is built; flexible career pathways (GHR 2002).

The Workforce, Research and Training group had its first meeting in August 2002. Key points arising from the meeting were:

- tertiary sector training is expensive and numbers are limited
- the roles of health professionals are blurring, and professional groups are taking even more entrenched positions (GHR 2002).
In October 2002, the Review produced a Discussion Paper that refers to a number of international reports on workforce and training. For example, in the United Kingdom, workforce planning and development arrangements were found to inhibit multidisciplinary planning and creative use of professional skills. A review of funding for education and training of health care workers has suggested reorganisation of funding on an interdisciplinary basis to produce new types of health worker. In Canada, an ‘integrated educational curriculum for health [care] providers, including common courses that would facilitate cooperation and build mutual respect between different types of providers’ has been proposed (GHR 2002).

In terms of the allied health workforce, the Review notes that funding shortages resulted in cuts to positions in the 1980s and these positions have, for the most part, not been regained. Shortages are linked to salary levels, training and development opportunities, and lack of opportunity to contribute at senior level in hospital policy and planning. Allied health professionals are more likely to be managers of community-based agencies than hospitals (GHR 2002). The Review goes on to state that services are being run on unpaid overtime, with no budget to cover planning and unplanned leave and no locum agencies. These current funding arrangements have driven the workforce to focus on direct clinical work and service improvement, with research and continuing education the components that have suffered. Changes to work organisation are suggested including: consistent access to training, qualifications and professional development, multidisciplinary teams, multi-skilling, and valuing the contribution of other workers and disciplines.

The Review describes the failure of a true partnership between the education sector (which has failed to fully recognise its role in assisting to meet workforce needs) and employers (who have failed to fully recognise their responsibility to support and explore quality clinical training with flexible options) (GHR 2002).

The Review notes that difficulties in workforce planning in Australia arise from the different levels at which funding responsibilities operate. This impacts on health services, educational system, industrial relations and professional registration. An Australian Health Care Agreement Reference Group Report highlights the need for a national approach to health workforce issues (GHR 2002).
Appendix C: Public health nutrition workforce

This section of the review describes the public health nutrition workforce. The scope of this workforce, as defined in Section 2, includes specialist dietitians and nutritionists, other health workers, and people working outside the health sector but whose positions have an influence on community food and nutrition.

C.1 Characteristics of the nutrition and dietetic workforce

Dietitians and nutritionists working in public health nutrition are an important subset of the health workforce with a role in improving community nutrition.

There are no accurate data enumerating and describing the nutrition and dietetic workforce in Australia. A number of surveys have been conducted nationally and in state jurisdictions to estimate the number and characteristics of the workforce.

In 1991, an Australian survey of 165 dietitians, recently graduated from Australian training institutions (Scott 1991) found that 91% were female, 53% were aged under 25 years and 40% held a previously awarded nutrition related undergraduate degree. This contrasts with the situation in the United States where, of those classifying themselves in public health nutrition, 47% had graduate degrees and only 14% had graduate degrees in public health nutrition or public health (Haughton, Story et al. 1998). In the Australian survey, nearly three-quarters of those surveyed worked in hospitals, and the same proportion had direct responsibility for patients or clients.

Williams (1993) presents the results of two surveys of the dietetic workforce in New South Wales over a seven-year period 1984-1991. The survey method focused on hospital dietitians and DAA members but there was an attempt to capture non-DAA member dietitians also. The survey revealed that the proportion of non-DAA members fell over the period 1984-1991 to 11.6% of the active workforce. However, the author notes this still relatively high figure reduces the reliability of DAA statistics. The results indicated that over 70% of respondents had less than 10 years experience, the workforce was relatively young compared to the national average and only 5-7% were male. The active workforce grew by 155 positions (60%) between 1984 and 1991. Most of this growth was in hospital positions but there was an increase in other sectors from 20% to 29% of the total workforce. The largest growth area was in community-based ambulatory services and health promotion, private practice, NGOs and industry. National data for 1993 reveals that among members of the DAA, 15% were working in community health (Australian Institute of Health and Welfare 1994). This trend to dietitians working in non-hospital sectors is important in planning competency-based standards for entry level dietitians and for training schools (Williams 1993).

The NSW survey was updated in 2000 (Meyer, Gilroy et al. 2002). The new survey found that there had been a 48% increase in the number of dietitians (from 468 to 666) since 1991. The majority still worked in hospitals but there was an increase in the proportion employed in other sectors from 29% to 38% of the total. Half the workforce time is spent on non-clinical work, and the authors note that this has implications for competency standards and undergraduate programs.
The Dietetics Association of Australia (DAA) collates information annually from its membership renewal forms. This provides a snapshot of the dietetic and nutrition workforce who are financial members of the DAA. In 2001, total membership was 2,245. Employment status for Australia and South Australia is shown in Table 1.

### Table C.1 Numbers of DAA members and employment status in 2001

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Australia (number)</th>
<th>South Australia (number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently employed as a dietitian or nutritionist</td>
<td>1,500</td>
<td>108</td>
</tr>
<tr>
<td>Student</td>
<td>244</td>
<td>49</td>
</tr>
<tr>
<td>Other</td>
<td>501</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,245</strong></td>
<td><strong>179</strong></td>
</tr>
</tbody>
</table>

The DAA also collates data on category of employment of members. The information for 2001 is shown in Table 2. These data include part-time workers and are for individuals rather than FTE positions.

### Table C.2 Number and percent of positions (full and part time) occupied by DAA members in 2001

<table>
<thead>
<tr>
<th>Employment category</th>
<th>Australia (number)</th>
<th>Australia (%)</th>
<th>South Australia (number)</th>
<th>South Australia (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>960</td>
<td>45.3</td>
<td>58</td>
<td>39.2</td>
</tr>
<tr>
<td>Community health</td>
<td>223</td>
<td>10.5</td>
<td>27</td>
<td>18.2</td>
</tr>
<tr>
<td>Private practice</td>
<td>426</td>
<td>20.1</td>
<td>36</td>
<td>24.3</td>
</tr>
<tr>
<td>Commonwealth, State or Local government</td>
<td>70</td>
<td>3.3</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Industry</td>
<td>85</td>
<td>4.0</td>
<td>2</td>
<td>1.4</td>
</tr>
<tr>
<td>Education</td>
<td>104</td>
<td>4.9</td>
<td>8</td>
<td>5.4</td>
</tr>
<tr>
<td>Nursing homes</td>
<td>42</td>
<td>2.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>209</td>
<td>9.9</td>
<td>15</td>
<td>10.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,119</strong></td>
<td><strong>100%</strong></td>
<td><strong>148</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

A number of commentators have suggested that it is important to have information about the dietetic workforce in order to assist health planning, education and training and resourcing issues. Accurate workforce statistics are vital for health planning: to plan training courses, to develop continuing education programs, and to support arguments for changes in staffing establishments (Williams 1993). Hughes (1998) maintains that a lack of national workforce data is a weakness for workforce development and the identification of issues.

An audit of the South Australian specialist nutrition workforce in March 2003 revealed a total of 76.8 FTE in South Australia (56.8 in metropolitan Adelaide, 20.0 in country SA). Of the FTE metropolitan positions, approximately 43 are clinical and 12 are community based. These data do not include dietitians working in private practice, private hospitals or non-government organisations.
Implications

Although there is no date on the profile (e.g., age, experience) of the SA dietetic workforce, observation would suggest that, as in NSW, it is substantially female and relatively young, with most individuals having less than ten years experience in the profession. The workforce is growing rapidly with the majority employed in hospitals but over one third working in other sectors. Half of all time is spent on non-clinical work.

These findings suggest that the dietetic workforce is likely to be mobile, seeking flexibility in work hours and moving to positions outside the clinical hospital setting. Education, training, and workforce development should take into account the need for a range of non-clinical skills to reflect the actual work undertaken. The changing role of the public health nutrition workforce and the specific implications for workforce development are discussed next.

C.2 Describing and classifying roles

The definition of public health nutrition given by SIGNAL (see page 39) suggests a number of roles, skills, and competencies are needed for an effective workforce. In addition to clinical and dietary services for individuals, public health nutrition workers need to be able to take a population health perspective and act in a way consistent with primary health care and health promotion principles.

An ongoing concern highlighted in the literature is the problem of defining and identifying different classes and roles within the public health nutrition workforce. In the United States, Rogers (2001) argues that public nutrition goes beyond public health nutrition by including action on public policy outside direct health and nutrition areas. Public nutrition includes a range of professional practitioners, and an activist, problem-solving approach to nutrition issues. Rogers (2001) argues for the definition and promotion of public nutrition as a professional discipline. This would:

- encourage specific education and training
- provide a context for research (as currently grants and publications follow traditional disciplinary lines)
- attract people with the broad skills (e.g., anthropology, sociology, economics, statistics) needed at a high level in order to influence policy.

In Australia, this distinction between public health nutrition and public nutrition is less precise, perhaps due to the higher rate of graduate nutrition training that includes a public health focus. Public health nutrition, using the ‘new public health’ framework includes multi-disciplinary and intersectoral approaches, a focus on policy and systems change and is supportive of a mix of epidemiological and qualitative research.

Hughes and Somerset (1997) present a model for defining and categorising different classes of dietetic/nutrition work in Australia. They argue that having no consistent terminology for community-based dietetics/nutrition, impacts on developing and assigning competencies for training and quality assurance. They propose four modalities for human nutrition:
These modalities are distinguished by the setting, reach, level of prevention, illness or wellness paradigm, key personnel, determinants of action and outcome timeframe. Public health nutrition is defined as

*The art and science of promoting population health status via sustainable and equitable improvements in the food and nutrition system. Based upon public health principles, it is a set of comprehensive and collaborative activities, ecological in perspective and intersectoral in scope – including environmental, educational, economic, technical and legislative measures* (Hughes and Somerset 1997).

The definitions and descriptions of different classes of the nutrition workforce provoked considerable debate in the field. For example, Ash, Capra et al. (1997) argue that the distinction between nutrition and dietetics is inappropriate and outdated. They point out that the competency standards published by the DAA in 1994 take a primary health care approach to all aspects of practice and that professional nutrition services encompass individual and population strategies. Further, they argue, dietitians working in hospitals and industry often use public health strategies, and that most nutrition and dietetic degrees are based in schools of public health and all courses offer substantial public health nutrition components.

**Support to non-specialist nutrition workers**

The Australian Institute of Health and Welfare (1994) suggests that because there are so few dietitians, the best use of resources would be for this group to provide authoritative dietetic support to other professional groups. Although somewhat dated, the report suggests that their training equips dietitians for this role. Similarly, the most effective use of dietetic specialists is in training other professionals to provide nutrition education. This means that the education of specialists should include teaching, management and negotiation skills.

**Changing roles**

Australian governments are encouraging a shift in health system thinking to incorporate a population approach and focus on evidence based practice. Health services are starting to move resources into primary health care and public health. The implementation of public health principles and moves to evidence based practice have resulted in a need for the dietetic workforce to take on a health promotion approach. Health promotion practitioners are expected to strengthen the field through story telling, research, testing strategies and development of new skills and expertise and contribute to a role for health promotion that anticipates changing the understanding of government and health systems (Health Canada 1997). Training is needed for this activist role (Rogers 2001).
To contribute to health promotion strategies, public health nutrition workers need skills in research and evaluation and working in a multi-disciplinary framework (Yngve, Sjostrom et al. 1999). Multidisciplinary and intersectoral collaboration is a major strategy in community/public health nutrition practice (Hughes and Somerset 1997). Specifically, dietitians and nutritionists must be able to:

- apply knowledge, leading to research led action
- use evidence based practice, evaluation and monitoring
- link policy to evidence (Yngve, Sjostrom et al. 1999).

**Implications**

Classification and delineation of roles within the specialist public nutrition workforce is the subject of debate. It is clear, however, that roles are changing as the health sector moves to population health and primary health care approaches. As roles change and are redefined, education, training and workforce development needs to change in order to provide the workforce with the skills and knowledge needed to implement new strategies and ways of working. These skills include working collaboratively with health and non-health professionals and with groups and communities, undertaking research and using research evidence, understanding the social determinants of health and equity issues, and tackling advocacy and system change.

Another major role for the specialist nutrition workforce is in training, supporting and providing leadership to other health and non-health personnel in strategies to improve community nutrition. There are two main drivers of this role. The shortages in the specialist workforce mean that it would be both unrealistic and ineffective to expect all nutrition work to be directly undertaken by professional dietitians and nutritionists. Food consumption and nutritional health is necessarily determined by a large range of factors outside the scope of the specialist workforce. This means that training and workforce development must equip dietitians and nutritionists to act as leaders, trainers, supports and mentors to a wide range of others.

From a primary health care perspective that espouses intersectoral and multi-disciplinary work, there is also value in using dietitians and nutritionists to support and influence the broader health promotion and food related workforce. This increases the scope and coverage of nutrition health promotion and helps to build capacity in a range of workforces and communities. All primary health care workers need to be able to contribute to organisational change in order to bring about the re-orientation of health services.

**C.3 Workforce issues**

**Recruitment and retention**

Nationally, there is a shortfall in the number of post-graduate nutritionist/dietitians working in the public sector that are needed to make achieve a major impact (SIGNAL 2001). This is particularly the case outside metropolitan regions and is exacerbated by short term stays. For example, Hughes (1998) found that 11% of the rural workforce was likely to leave the rural area within one year. Rural upbringing
was identified as a major factor in determining return to work in rural areas following training.

Training and education

Barriers to continuing education have been identified. For example, 36% of the rural nutrition workforce reported that it was difficult for them to achieve continuing professional development points (Hughes 1998).

Referring to the formal education of health and food industry professionals, the Australian Institute of Health and Welfare (1994) notes that graduate and Masters courses are available in most states. However, the Master of Nutrition and Dietetics is a full fee paying course, at least in South Australia, which presents a barrier to many potential students.

Implications

Nationally, there is a shortage of specialist nutrition workers, particularly in rural areas. Barriers to continuing education have been identified, again, these are particularly relevant in rural areas. Given the key strategy of a partnership model in SIGNAL and public health approaches generally, consideration needs to be given to breaking down professional training in isolation and to the promotion of broader learning across disciplines. The Generational Health Review has a strong focus on encouraging multidisciplinary education and training in order to increase movement across disciplines and access to skills.
Appendix D: Public health nutrition workforce development

D.1 Rationale for workforce development

Changing role to PHC

As health services move towards primary health care and an early intervention focus, the role of the specialist nutrition workforce is changing. Skills are needed in work with a health promotion focus involving multi-disciplinary and intersectoral work, community participation, community development and advocacy. Recognition of the social and environmental determinants of health mean that the nutrition workforce needs to engage with a wide range of other health and non-health workers and systems that influence the food supply and consumption.

New models of professional development are needed to support reform changes (Firestone and Pennell 1997). SIGNAL agrees:

> The need for a broader, population centred approach has driven much of the more recent nutrition policy initiative. In contrast to the past emphasis on ‘at risk’ individuals and nutrition behaviour counselling by dietitians or other health personnel, the 1990s have seen the growing recognition that primary prevention at the population level may provide greater benefits in the long term (SIGNAL 2001 p8).

In the United States, Haughton, Story et al. (1998) concur that if health agencies are to shift in function, then ‘a substantial proportion of the public health nutrition workforce must not only change how they practice but also have the knowledge and skills to do so’.

Retaining a skilled workforce

The National Centre for Health Promotion argues that keeping a skilled workforce requires the development of a strategic planned approach to workforce development and training (National Centre for Health Promotion 1998).

Improve health of Australians

Several writers have suggested that workforce development for nutrition workers is a strategy needed in order to improve the nutritional health of the population. For example, the long term goal of the Masters project is to contribute to improvements in the health of people across Europe (Yngve, Sjostrom et al. 1999). The task of undertaking effective population based strategies over Europe in the field of public health nutrition demands people that are trained and competent, with comparable skills. Haughton, Story et al. (1998) argue that a well trained public health nutrition workforce is needed to improve the nutritional health of Americans and meet national nutrition objectives.
This is also the view of the Centre for Public Health Nutrition in New South Wales where Moxon, Macoun et al. (2000) argue that effective change in the nutritional health of populations requires a range of actions including workforce development within the field of nutrition. According to SIGNAL, the non-nutrition public health workforce needs more training in aspects of public health nutrition. All public health practitioners need to be competent and have knowledge of nutrition and public health practice.

Rise of evidence based practice and developing best practice

The increasing emphasis on outcomes and evidence based practice also requires practitioners to understand and apply research and evaluation, or to undertake this themselves.

> Good scientific evidence is the base for clear messages to the public. The task of developing and undertaking effective population based strategies over Europe demands people that are trained and competent with comparable skills. This calls for proper training across Europe (Yngve, Sjostrom et al. 1999 p 449).

Rada, Ratima et al. (1999) describe evidence based health promotion (based on the concept of evidence based medicine) as an approach to practicing health promotion in which the provider and purchaser are aware of the evidence supporting selected strategies, and the strength of that evidence.

Swaby and Biesot describe a demonstrable improvement in the quality of health promotion activities with better skilled staff, greater awareness of community needs and resource and information sharing (Swaby and Biesot 2001).

Improve use of information and research uptake

It is not sufficient to undertake research and evaluation to identify effective interventions without ensuring dissemination of findings to policy makers and practitioners. One of the goals of the Centre for Public Health Nutrition is to support public health workforce development in New South Wales in order to improve the use of information for decision making, policy formulation and practice relating to public health nutrition (Moxon, Macoun et al. 2000).

In a context of HIV prevention, Kelly and colleagues argue that dissemination of effective interventions needs more than information: it also requires intensive staff training and ongoing communications. The authors go on to say that service providers need integrated systems of training and technical assistance to move intervention from research to the field. For example, professionals can be trained as volunteer 'research translators' to service provider organizations (Kelly, Sogolow et al. 2000). This also supports capacity building in the workforce.

Sustainability of health care system

Olsen describes sustainability of health care under three dimensions one of which is organisational capacity (Olsen 1998). An ingredient of organisational capacity is
workforce capacity. Strategies for increasing workforce capacity include encouraging personal development through in-service training, delegation of responsibility and authority, rewarding through promotion, salary raises and recognition.

Professional development of staff in health promotion practice is identified as a key outcome of the best practice framework developed by Swaby and Biesot (2001). The framework comprises three key components — structural, strategic and supporting. The structural component embodies the development of health promotion policy and commitment at organisational level, an intersectoral reference group to facilitate partnership approaches and capacity building and relevant working groups. The strategic component includes resources and procedures to plan, implement and evaluate health promotion initiatives, including the requirement that the intersectoral health promotion reference group endorses all health promotion initiatives. The supporting component builds on the planning and evaluation requirements, ensures staff have access to relevant health and social demographic information at community/regional level, formalises the expectation that all staff have a role in health promotion and allocates resources for the employment of a health promotion coordinator to support staff (Swaby and Biesot 2001). Workforce development is thus viewed as one strategy, among many required to reorient the health care system to achieve more effective use of resources and sustainability.

Implications

A large number of benefits have been identified from investing in workforce development. These can be summarised as the need to have a workforce able to respond to changing needs and policy development within the health system and increasing worker and organisational capacity to improve services and outcomes for the population.

D.2 Workforce development needs

Haughton, Story et al. (1998) report on a survey of the nutrition workforce in US, (n=7,550). They found conflicting results when comparing the major health problems identified by nutrition units and the training needs most valued by the nutrition workforce.

Table D.1  Major health problems and training needs

<table>
<thead>
<tr>
<th>Top health problems (nutrition units)</th>
<th>Top training needs (nutrition workforce²)</th>
<th>Least mentioned training needs (nutrition workforce)</th>
</tr>
</thead>
<tbody>
<tr>
<td>diet/nutrition to prevent chronic disease</td>
<td>nutrition for children with special health care needs (40%)</td>
<td>home-based health care (6%)</td>
</tr>
<tr>
<td>low breast feeding rates</td>
<td>infant and child nutrition (28%)</td>
<td>nutrition and health promotion for the elderly (7%)</td>
</tr>
</tbody>
</table>

² 78% of funding is from Women, Infants and Children program
The importance of breast feeding and infant nutrition was agreed upon by nutrition units and workers. However, it is clear that issues of ageing and chronic disease (both of which require a multi-disciplinary response) were not rated as highly by the workforce. Top emerging issues for nutrition units were also identified as: health care reform, funding and scarce resources, chronic disease/health promotion issues, and staff retention and recruitment (Haughton, Story et al. 1998).

Haughton, Story et al. (1998) note that competencies for entry-level dietitians focuses on population groups and community based programs and research. However, 66% of survey respondents classed their position as having client-focused responsibilities. In Australia, however, Scott (1991) found graduates were satisfied with the clinical nutrition, food science, and food service and catering components of their academic training. They were less satisfied with organisation and management, communication skills, behavioral science and nutrition education and dissatisfied with community nutrition and research skills.

**Implications**

In the United States, there are differences between the top health problems identified by health services and the topics nominated for workforce development by practitioners. There also appears to be a mismatch between a population and community focus in competences and the individual client work actually undertaken in practice. It appears that preparation and training for dietetic work in the United States has developed faster towards a population approach than work in the field, which is still focused on individual clients. In Australia, the opposite has been suggested, with students wanting more training in non-clinical aspects of their practice. This raises a question in terms of the timing of changes to the curriculum. In looking to produce cultural change towards public health and health promotion in organisations, should the focus be on changing the education and training of new professionals so that they can bring new ideas to the workplace or should organisational change be tackled from within? Either way there is the potential for a period of misfit.

**D.3 Training methods**

Workforce development may involve formal or informal education and training. The National Centre for Health Promotion (1998) suggests that a range of methods is valuable including:

- access to formal education
- on the job training
- regular supervision linked with performance appraisal
- access to short courses for knowledge update
access to technical knowledge and skills.

**Formal education**

Formal education includes undergraduate and postgraduate courses. Rogers (2001) recommends post-graduate courses for research and academic staff; entry level/mid career training for practitioners; in-service training for the field and short courses for policy makers. Rogers argues for interaction between classroom and field and states that field experience is essential. This appears to need further resources and development since Hughes found that almost half the respondents in his rural survey were involved in training students, and 40% of these felt inadequately supported by the university (Hughes 1998). Accreditation can also be a useful tool in workforce development. Hughes (1998) reports widespread support for the Accredited Practicing Dietitian program.

Electronic resources and distance education methods are important in addressing training needs, particularly for part time students and those working or residing in rural localities. The results of Hughes’ (1998) survey demonstrated a demand for distance based and flexible continuing education and professional development for rural dietitians. Access to e-mail and internet resources may reduce isolation and increase opportunities for continuing education. A choice of on-campus and distance learning formats are important to address the needs of full time and part time students (Haughton, Story et al. 1998). Short intensive courses may also be convenient for students in employment.

**On-the-job training**

Workforce capacity can also be improved by on-the-job training. This should not be seen to replace graduate level course work but as an opportunity to enhance competencies for those unable to leave the workplace (Haughton, Story et al. 1998).

It has been suggested by the GHR (2002) that on-the-job training can be provided at little or no additional expense and that there should be stronger emphasis on learning in the workplace through coaching, mentoring and structured on-the-job opportunities.

Swaby and Biesot (2001) describe the support played by the Health Promotion Officer employed by a community health organisation. This position played a vital role in educating and supporting staff, driving initiatives and liaising with community agencies. Organisations that have adopted new interventions can act as consultant trainers to other organisations (Kelly, Sogolow et al. 2000).

**Informal education and training**

Other resources for workforce development are provided by professional associations, seminars, interactive workshops and network meetings. According to Haughton, Story et al. (1998) professional organisations should make continuing education a priority. This view is confirmed in the Canadian approach:

*Some distinct progress has been made in enhancing preventive practices among health professionals, spearheaded by professional associations* (Health Canada 1997).
There appears to be room for improvement in support provided by the DAA at least for rural based nutrition workers. Hughes (1998) used a self administered questionnaire to rural DAA members (n= 140, response rate~30%) to assess professional development initiatives that would be welcomed by members.

Table D.2 Workforce Development Needs

<table>
<thead>
<tr>
<th>Proposed DAA initiative</th>
<th>Respondents agreeing (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>support for distance education</td>
<td>84</td>
</tr>
<tr>
<td>bursaries for conferences</td>
<td>64</td>
</tr>
<tr>
<td>support networks</td>
<td>45</td>
</tr>
</tbody>
</table>

In the same survey, current professional development support from the DAA was rated at average or below by 85% of respondents (Hughes 1998). It would be useful for this survey to be repeated in order to obtain more up-to-date information.

Information exchange and networks

Information exchange and networks are an important component of workforce development. These links need to be within a profession and, particularly to facilitate a primary health care approach, between professions.

To encourage professional identity, the workforce needs exposure to:

- interaction between research and policy/practitioners
- e-mail networks
- peer reviewed journals
- professional associations
- professional meetings (Rogers 2001).

Cross-profession links and information exchange between organisations can be achieved through multidisciplinary international workshops (Brunner, Rayner et al. 2001). Journals and other ways to link research and policy are recommended (Kelly, Sogolow et al. 2000) Participation in research can be a useful antidote to limited professional development opportunities (Hughes 1998).

The SIGNAL report identifies a debate about the relative benefits of specialist versus multi-disciplinary public health nutrition training. The report argues for an expansion of tertiary education and in-service training in public health, including special training for the public health nutrition workforce and for the inclusion of public health nutrition modules in existing public health coursework (SIGNAL 2001).

There is a need to assess what nutrition knowledge and resources different professional groups need and to develop appropriate training strategies and resources. Activities must be linked to community and environmental activities and supported by infrastructure and specialists. Professional associations can help to reduce structural and policy barriers (SIGNAL 2001).
Public health nutrition staff recognise and already work in partnership with many of these groups. Workers need access to education and training on nutrition and Eat Well Australia initiatives. There is also a need to identify key groups to facilitate collaborative approaches to training, funding and information and to assess relevant course work and on-the-job training for the non-health workforce (SIGNAL 2001).

Implications

A mix of formal and informal education and training is required to meet different needs. There is room for the DAA to play a major role in workforce development. The growth of electronic resources and information technology will help in the delivery of training and will encourage networking and information exchange within and between professional groups and other stakeholders. State departments of health can also contribute to this. For example, in South Australia, a state public health nutrition network has recently been established. The group communicates through email and meetings. Rural people receive support to attend these.

D.4 Training topics

In thinking broadly about training needs for health promotion the National Centre for Health Promotion (1998) identifies three main categories of topics to be included:

- content issues
- design, delivery and evaluation of health education and promotion programs
- research and evaluation skills.

Swaby and Biesot (2001) report that regular education sessions by a health promotion officer in the health service created wider acceptance of the importance and spectrum of health promotion. The sessions, supported by management, provided training focused on health promotion principles, program planning, implementation, and evaluation and community consultation (Swaby and Biesot 2001).

Rada and colleagues note that the process and practice of evidence-based health promotion requires skills that are not traditionally part of health promotion/health education training: extensive cross-disciplinary literature searches, selection of most effective of the relevant programs, and applying rules of evidence and appraisal of study quality (Rada, Ratima et al. 1999). Research and evaluation skills are needed in order to undertake or understand research findings and so advance based-based practice. For example, Brunner, Rayner et al. (2001) argue that nutrition undergraduate and postgraduate courses should include 'data synthesis' as a component of research skills.

Management, working in partnership and communication skills have also been identified as important. For example, SIGNAL consultation respondents identified the need for more training in management areas such as nutrition monitoring and surveillance, data analysis and evaluation, managing committees and partnerships and health promotion (SIGNAL 2001). Specialist education should include teaching, management and negotiation skills (Lester 1994). This will enable the nutrition workforce to undertake training and support for other professionals involved in food and nutrition services. Primary Health Care professionals and the non-health
workforce need training in communication with the public to ensure readily understood, clear, concise and consistent nutrition information (SIGNAL 2001).

**Implications**

An exclusive focus on clinical human nutrition is clearly not appropriate in the education and training of the specialist nutrition workforce. For dietitians and nutritionists to be involved in broader health promotion work their training needs to incorporate all aspects of planning, design, implementation and evaluation of health promotion work. Working in a collaborative, multidisciplinary and participatory manner requires particular skills and aptitudes that need to be addressed in the preparation for work.

The specialist workforce is also called upon to provide management, training and support to others in the health and non-health fields who have an interest in food and nutrition, and undertake research. These aspects of education and training need to complement the clinical skills and content knowledge components of courses.

Finally, to contribute to the promotion of an understanding of primary health care and public health principles, the workforce will need skills in working in partnership with communities, food industries, government funders and policy makers in order to advocate for changes at the highest structural levels to improve nutritional health in Australia.
References


Hawe, P., L. King, et al. (2000). Indicators to help with capacity building in health promotion. Sydney, NSW Health Department.


Performance Indicators in Community Health Project Working Group (2002). Performance Indicators in Community Health: Development of a Process, South Australian Community Health Research Unit.


Evidence
(Health status/outcome)

Program or Policy

Action Research
Identifies workforce development needs

Competencies

Capacity Building
(System/organisational support)

Specific workforce Methods/strategies Resources

Reflection, evaluation