

**Department of Human Services  
Health Development Section, Public Health Division**

**Project Brief**

**PUBLIC HEALTH NUTRITION EVIDENCE BASED HEALTH  
PROMOTION RESOURCE AND RESEARCH PROJECT**

**1. Introduction**

The Victorian Government is committed to supporting evidence-based practice in planning and implementation of effective health promotion. The practical use of evidence promises better health outcomes by informing decision-making by practitioners, program planners and funding bodies as they develop and select health promotion strategies, methods and activities.

The Health Development Section, Public Health Division, Department of Human Services, in collaboration with Statewide health advancement organisations, has prepared a series of systematic reviews including:

- Evidence-Based Health Promotion: Resources for Planning. No.1 Oral Health
- Evidence-Based Health Promotion: Resources for Planning. No.2 Adolescent Health
- Evidence-Based Health Promotion: Resources for Planning. No.3 Falls Prevention
- Evidence-Based Health Promotion: Resources for Planning. No.4 Child Injury Prevention (review complete, resource in preparation)

Evidence-based reviews provide a method of identifying the most effective and efficacious interventions, in addition to information to help ensure efficient use of resources. They are developed using current evidence in each field and contain a critical appraisal of the findings. Reviews are intended for use by practitioners to assist in decision-making about the type and range of interventions to be used in program planning and delivery; they do not tell practitioners how to deliver programs. They are intended to support health promotion program planning in a wide range of agencies, organisations and networks.

Recommendations from evidence-based reviews need to be considered in relation to the context for implementation to ensure a realistic application of the principles. The advice provided by such reviews complements, rather than replaces, the practical experience and judgement of planners and practitioners.

There is also the need to test and evaluate the effectiveness of these interventions in local conditions, considering local needs, priorities and resources. Investing in agreed public health nutrition research priorities is essential to ensure that planning and service delivery is based on good evidence. The maintenance of a public health nutrition research agenda in Victoria is important to ensure that there is adequate information that is specific to Victorian conditions as well as contributing to the overall public health nutrition knowledge base nationally and internationally.

Only properly structured and controlled evaluation of interventions and programs can provide the level of detail and the understanding needed to identify the true benefit of these public

health nutrition program in informing future planning and resource allocation. This project therefore includes the development of an intervention research proposal which will provide the information needed to secure funding and implement and test such a program.

## **2. Project Aim**

To identify population based strategies/interventions that are likely to be effective in improving the nutrition of families with children (birth to age fifteen).

To achieve this aim this project brings together two streams of work:

- The production of an evidence based review of population based nutrition interventions to support the public health nutrition sector in selecting and implementing appropriate and effective interventions.
- The development of an intervention model to put the learnings of the evidence based review into practice. This will add to the evidence base regarding the selected interventions and specifically examine the organisational, capacity and expertise requirements that also need to be considered for implementation in the Victorian context. This will be structured as a research initiative providing learning that will directly contribute to the development of public health nutrition services in Victoria.

## **3. Rationale**

### **3.1 Why Target Nutrition?**

- Optimum nutrition in early childhood is associated with major public health gains.
- For the child, appropriate nutrition ensures potential growth and development is achieved which contributes to overall health status of communities.
- Sound nutrition can have major economic and social benefits. A well-nourished and healthy population is essential to economic development and to social and community cohesion. Investing in nutrition can help to contain costs in the health care system by reducing pressure on the acute care sector through reduced rates of illness and disease.
- The recent burden of disease study that the leading causes of overall disease was cardiovascular disease (20%) followed by Type 2 diabetes (3%) and colorectal cancer (3%). These are all diet related.
- Major risk factors contributing to the overall burden of diseases include physical activity (6.7%), obesity (4.3%), inadequate consumption of vegetables and fruit (2.7%) and high blood cholesterol (2.6%).
- There is strong evidence linking poor nutrition in early childhood with diseases developed later in life such as diabetes, heart disease and cancer.
- Being overweight/obese as a child dramatically increases the likelihood of being overweight as an adult. Being overweight is a key risk factor in the aetiology of many of these adult diseases.
- The incidence of overweight/obesity is increasing. It is estimated that one in four Australian children are either overweight or obese. Attaining and maintaining a health weight is associated with good nutrition and physical activity.

### **3.2 Why Target Families with Children? (birth to school age)**

- Families/parents have the greatest influence on the well-being and outcomes for the health of a child.
- Healthy eating habits developed in childhood may shape adult eating habits and thus can significantly contribute to the reduction in the incidence diet related diseases.
- Development of eating habits is a complex process. It depends on the physical and emotional environment, food availability and cultural beliefs. The values of society and the accepted norms displayed by specific peer groupings will also impact on the food choices people make. Therefore it is essential to include the impact parents/families have on shaping the eating habits of their children.
- Most research targets nutrition problems already in existence instead of identifying intervention strategies that act to initiate and maintain good nutrition.
- There is a dearth of Australian research, which investigates the impact of promoting healthy eating to families in the general population.
- It is generally accepted that early intervention is effective but there is no clear direction as to best practice population nutrition focussed interventions that work.

## 4. Part I: Evidence-Based Health Promotion: Resources for Planning No. 5 Population Based Nutrition Interventions Targeting Families with Children

### 4.1 Evidence Review Objectives

1. To identify the broad range of strategies that are likely to be effective in improving the nutrition of families with young children (birth to school age).
2. To specify the best practice models/approaches that are effective in improving the nutritional status of families with young children.
3. To advise on the types of evaluation appropriate to each of the best practice models identified. Consideration needs to be given to both short and long term evaluation.
4. To provide a summary of the information/research gaps in the area of improving family nutrition.
5. To develop and deliver a strategy to disseminate this information to the identified target groups.
6. To evaluate the dissemination process.
7. To produce summary reports and tables of the above areas in addition to a full report inclusive of executive summary and recommendations.
8. To produce at least one draft manuscript ready for submission in a peer review journal.

### 4.2 Intended Audience for this Review

- A range of health/community professionals with a current role/or a future interest in delivering nutrition services to population groups of families with young children (birth to pre-school). This may include community and public health dietitians, community health workers or people working with indigenous or different ethno specific communities.
- Management of Community Health Services, DHS regional offices, Primary Care Partnerships and alliance agencies and non-government organisations with a key role in delivering public health nutrition messages to the wider community.
- Universities and TAFE or other learning institutions which deliver nutrition courses, especially those with a public health focus. The outcomes from this review will serve to inform the content and manner in which students are taught to implement Public Health Nutrition programs.

### 4.3 Guidelines for Methodology / Critical Appraisal System

There is strong evidence in the general field of health promotion that programs which use a combination of multifaceted interventions are the most effective and powerful in terms of long-term outcomes for the community. **Figure 1** shows the relationships between ensuring the capacity of the system for health improvement, health promotion approaches and health promotion interventions. This figure also illustrates how these approaches and interventions relate (on a continuum) to an individual and to the whole population. Further detail of the description of health promotion interventions is given in **Attachment 1**.

It is expected that the review will go beyond analysing practice that focuses on knowledge and specific behaviour change interventions, to include practice and evidence incorporating a mix of strategies and capacity building approaches in a range of settings. Health promotion settings refer to the places or social contexts in which people engage in daily activities and

where environmental, organisational and personal factors interact to affect health and well-being (World Health Organisation, 1998).<sup>1</sup> Examples of settings relevant to this nutrition review potentially include maternal and child health services, childcare centres, kindergartens, schools, community health centres, ante-natal care services, parents/parenting groups, hospitals, community groups and the workplace of parents with young children.

In formulating the best practice models for this nutrition topic the consultants need to consider significant risk factors such as birth weight, rate of breastfeeding, growth rates, level of regular physical activity, in addition to consideration of the social determinants of health. This includes the emotional, behavioural and environmental factors that have a role in determining and influencing the eating patterns and beliefs of families. The impact of the commercial mass media, and the availability of foods are also important. Refer to Table 1 for a list of some of the factors associated with eating patterns and behaviour.

**Figure 1: Health Promotion Approaches and Interventions**

<b>Individual focus</b>				<b>Population focus</b>		
<b>Health Promotion Interventions</b>						
Screening, individual risk assessment and immunisation	Health information	Health, education, counselling and skill development	Social marketing	Organisational development	Community Action	Economic and regulatory activities
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<b>Medical approach</b>		<b>Behavioural approach</b>		<b>Socio-environmental approach</b>		
<b>Ensuring the capacity of the system for quality health promotion action</b>						

**Table 1.**

<p>The eating patterns of individuals and families are constantly being shaped and changed by a variety of factors. Some of these include:</p> <ul style="list-style-type: none"> <li>• The kinds of food that are available at the local supermarket or shop</li> <li>• Cultural and family background</li> <li>• The amount of time available to shop for, prepare and cook food</li> <li>• The personal likes and dislikes of household members</li> <li>• Values, attitudes and beliefs about food and eating</li> <li>• Knowledge about food and nutrition</li> <li>• Advertising campaigns and food promotions</li> <li>• The amount of money that can be spent on the food budget</li> <li>• Access to transport<sup>2</sup></li> </ul>
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The consultant is required to be rigorous in conducting the following:

- A systematic review of the published and unpublished literature (e.g. systematic searches of computerised databases of published literature and report evaluations,

<sup>1</sup> World Health Organisation. (1998). Health Promotion Glossary. World Health Organisation, Geneva.

<sup>2</sup> Australian Guide to healthy Eating (1998) Commonwealth of health and Family services under the National Food and Nutrition Policy program

reviews of the reference lists of other reviews and the articles themselves, scanning conference proceedings, HEAPS database and not yet published data)

- A structured program of consultation with health promotion practitioners especially those delivering nutrition programs, Department of Human Services' Regional staff, experts in the area of paediatric, maternal and family nutrition and the Project Advisory Group.
- To identify what interventions are most likely to work and secondly, to investigate what would be the most useful format for the outcomes of this review to be made available to practitioners.
- Production of an evidence-based health "best practice" models related to improving the nutrition of families with children (Product 1 and 3 ).
- Provision of recommendations for future action (contained within Product 3).
- Development and undertaking of a satisfactory process of dissemination and evaluation (Product 2),

Applicants are required to use the *Proposed Schema for Evaluating Evidence on Public Health Interventions Produced* by the Public Health Partnership (Attachment 2) to inform and support their methodological framework. In addition, *An Instrument for Analysing Effectiveness Studies on Health Promotion and Health Education: Development, Use and Recommendations* (Attachment 3) should be considered in the development of the methodological framework.

#### **4.4 Intended Products - Evidence Review**

The consultant will have the responsibility to ensure that all products listed below are in a format that can be immediately used by the identified intended audience (Section 5). Dissemination will also be the responsibility of the consultant and will need to be included below as a product.

##### **Product 1:**

- Description of Product 1 : A summary of the strategies/interventions plus guidelines for action, that have been found to be effective in improving the nutritional health of families. Using the *Proposed Schema for Evaluating Evidence on Public Health Interventions Produced* by the Public Health Partnership each of the strategies will be assigned some level of potential health gains. This will include:
  - Ideal timing and setting for nutrition health promotion activities.
  - Best practice models demonstrating what nutrition interventions are most effective. The term best practice in this context refers to a mix of interventions, that when implemented together create the biggest impact on health outcomes.
  - Types of evaluation appropriate for each of the best practice models identified. Consideration needs to be given to short and long term evaluation

- Method for Product 1: A systematic review of the published and unpublished literature (systematic searches of computerised databases of published literature and report evaluations, reviews of the reference lists of other reviews and the articles themselves, scanning conference proceedings, HEAPS database and not yet published data).

A structured program of consultation with: nutrition health promotion practitioners, DHS Regional Office staff, Project Reference Group and experts in the area of public health nutrition.

- Deliverable for Product 1: This will comprise of a summary table and a written report that is in a form/style that is immediately usable by practitioners and others for whom this review is intended. Refer to the example of the oral health document.

In addition, a summary of the information and research gaps needs to be identified.

The results need to be organised in some way i.e. either by age of child, setting of intervention, demographics of the family, environmental and social factors to allow practitioners quick and easy reference to determine what strategies are likely to work for different population groupings.

### **Product 2:**

- Description of Product 2: The dissemination of the results to the field including both rural and metro Victoria. The reviewers are also required to evaluate the dissemination process.
- Method for Product 2: The method by which this will occur is dependent of the outcomes of the review itself. In particular there needs to be an emphasis on the needs of the target audience and the best way to engage them. A focus on innovative approaches that bring the findings of this review to light, will be favoured.
- Deliverable of Product 2: In consultation with the DHS project management team the successful applicant will determine the dissemination method to be used dependant on the outcomes of the review. The successful applicant will also have the responsibility to disseminate the results of this nutrition evidence based review across Victoria (rural and metro). It is anticipated that just under a third of the total funds will be allocated to the dissemination of the the results.

### **Product 3:**

- Description of Product 3: A complete report including an executive summary and recommendations. The DHS requires five hard copies of the complete report and the summary report (Product One). In addition the DHS requires a copy of all the references cited, a summary of all the interviews as well as the full transcript. The DHS require seeing an early draft and a near final draft of the report before it is submitted in final form.
- Deliverable of Product 3: The full report as well summary reports and table needs to be provided in hard copy as well as on disc. The references need to be organised, bound and available in summary on disc. The bibliography is to be presented and formatted as an “endnote” file. The reports and tables need to be on Microsoft Word.

**Product 4:**

- Description of Product 4: At least one draft manuscript ready for submission in a peer review journal.

## 5. Part II Development of a healthy eating research proposal

### 5.1 Research Proposal Objectives

Primary objectives for the development of the research proposal include:

- To develop a proposal for an research initiative to implement and evaluate the a comprehensive, community based public health nutrition program which is designed to improve eating behaviours with a specific focus on families with children.
- To utilize the learnings from the evidence based review to ensure the research proposal is responsive to the social, environmental and economic factors that influence food behaviour.
- To ensure that the proposal is based on the best available evidence in promoting healthy eating.
- To ensure the research proposal is responsive to the current structure and capacity of the Victorian primary health care sector.
- To work collaboratively with the service system to identify potential sites for this research to be implemented.
- To report on the development of the proposal in a format that will inform program planning and implementation for other public health nutrition program providers.

### 5.2 Intended products – Research Proposal

The consultant will be responsible to ensure that a broad range of advice is sought for the development of the research proposal. This will include the formation of an expert reference group and direct liaison with at least one Department of Human Services Regions.

Initial opportunities for the research proposal funding will be from the DHS Public Health Research Program. Other potential sources of funding will need to be explored.

#### **Product 5:**

- Description and Deliverable of Product 5: A detailed and appropriately formatted research proposal that can be used to secure funding for the implementation of the proposed program.
- Method for Product 5:  
The research proposal is to be developed in a way that :
  - Utilises an action research methodology
  - Incorporates the findings of the evidence review process (Part 1 described above)
  - Is responsive to the broad public health nutrition issues current in Victoria
  - Considers the broader range of social, environmental and economic conditions that influence and affect eating behaviour
  - Is relevant to and can be implemented (with additional research funding) within the context of current service capacity and structures.
  - Is designed to provide information that will help to inform future public health nutrition planning and funding allocation

- Has the capacity to identify and measure the gains (behavioural change and health outcomes) that may be achieved.

**Product 6:**

- Description and Deliverable of Product 6: A report, journal manuscript (or other resource as appropriate) describing the rationale and process undertaken in the development of the research proposal and the contextual, organisation and capacity issues that were raised. This product will be designed to inform the public health nutrition sector of the rationale and issues associated with the development of public health nutrition strategies.

## 6. Selection Criteria

- Demonstrated ability to critically review the literature and other sources of evidence regarding public health nutrition interventions targeting families with children.
- Demonstrated experience and knowledge of current practice in the delivery of paediatric, adolescent, maternal and family nutrition programs.
- Demonstrated experience in population research and public health nutrition intervention design.
- Demonstrated capacity and experience to undertake activities for the dissemination of resources, such as workshops, or an existing partnership with an agency / organisation with expertise in this field.
- Knowledge and understanding of nutrition services and programs within the Victorian human and primary care service system.
- Demonstrated understanding of the brief and required outcomes.

## 7. Roles and Responsibilities

### Management

The Department of Human Services will be the contract manager of the project. A project manager (Department of Human Services) will be identified for the day-to-day management issues.

### Project Advisory Group:

A small Project Advisory group will be formed by the Health Development Section, Department of Human Services, and will provide the consultant with advice on the various project issues, including communication with regional staff and other key partners, budget issues and project accountability. The group will read and provide comment on early and final drafts of the products.

The Project Advisory group will include representatives from the Health Development Section, DHS and representatives from the consultant's project working group. The frequency of the meeting will be determined at the start of the project.

### Consultant

In consultation with the Project Advisory group, the Consultant will be required to complete all tasks necessary to successfully achieve the project products and outcomes.

The Consultant will form an Expert group to provide content input into the project as well as advise on specific content issues. This may include representatives from the Project Advisory Group, Statewide organisations, VicHealth, universities and individuals with particular expertise in the area of paediatric, maternal and family nutrition.

The Consultant will be required to liaise with the Corporate Communications of the Department of Human services with regards to the preparation of Product 1. This will ensure that the final document adheres to corporate Department of Human Services' style guidelines.

The Consultant will attend Project Advisory Group meetings providing project status reports, an early draft version of the printed document (Product number 1 ) and the draft final products (Product numbers 1 and 3) to be submitted prior to the end of the contract period.

The consultant will be responsible for the final printing and the dissemination of Product 1. In the budget justification, the consultant will therefore need to incorporate the costs associated with the development and the delivery of the dissemination activities.

## 8. Budget

Funding of up to \$90,000 is available for the project including all aspects of Evidence Review and the Research Proposal Development. Unless alternatives are presented and justified funding allocation should reflect the following balance:

• Part 1 – Evidence review	65,000
• Part 2 – Research proposal development	25,000
	<b>\$90,000</b>

This funding is to cover all work, products and other costs required for the successful completion of the project, exclusive of GST. A detailed budget is to be included as a part of submissions.

## 9. Timeline

The project will commence in May 2001 with an implementation time of six to nine months. Applications are encouraged to provide a timeline for project implementation as a part of their submission.

## 10. Submissions

- Written submissions are required including the sections: *Project title, Background, Review questions, Methodology / Critical Appraisal system, Project timetable, Expertise of the review team, Dissemination strategy, Evaluation strategy, Budget justification, References, Curriculum vitae of person/persons to be directly involved in the project are required (including three relevant referees).*
- Potential consultants that are short listed within this process will be invited to give an oral presentation of their proposal to a panel selected from the Project Advisory group.
- Supply three copies of written submissions.
- Closing date for submission is 5:00pm Monday 19 March 2001.
- Submission to be forwarded to Veronica Graham, Statewide Public Health Nutritionist, Health Development Section, Public Health Division, Department of Human Services, Level 16, 120 Spencer Street, Melbourne, 3000. Veronica Graham can be contacted by phone 9637 4047 or email Veronica.Graham@dhs.vic.gov.au

## Attachment 1 Health Promotion Interventions

<b>Screening, Individual Risk Factor Assessment and Immunisation</b>	
<b>Definition</b>	<p>Screening involves the systematic use of a test or investigatory tool to detect individuals at risk of developing a specific disease that is amenable to prevention or treatment. It is a population-based strategy to identify specific conditions in targeted groups before any symptoms appear.</p> <p>Individual risk factor assessment involves a more comprehensive process of detecting the overall risk of a single disease or multiple diseases. These can include biological, psychological and behavioural risks.</p> <p>Immunisation aims to reduce the spread of vaccine-preventable diseases across targeted population groups.</p>
<b>Examples</b>	<p>Common medical screening procedures include pap smears and blood pressure testing. Disease risk assessments include the identification of a range of factors (depending on the specific purpose of the assessment) such as body weight, diet, family history, activity levels, life circumstances and tobacco intake.</p> <p>Risk assessment tools can also be used to assess susceptibility to risk conditions, —for example, working with older community members to assess their physical environment for the risk of falls. Individuals may self-administer some tools, but for tools requiring diagnostic interpretation, individuals should be referred to qualified professional staff.</p> <p>Common immunisations include those for tetanus, measles, polio and influenza.</p>
<b>Health Information</b>	
<b>Description</b>	<p>Information aims to improve people's understanding about the causes of health and illness, the services and support available to help maintain or improve health, and personal responsibility for actions affecting their health. Improving peoples access to health information will provide the first step to increasing their capacity to make informed choices about their health and well-being, including opportunities for preventive care.</p>
<b>Examples</b>	<p>Health information is provided in a range of formats. Written materials in the form of service directories, brochures, newsletters and magazines are common. Telephone information services, 'infotainment/edutainment' video options, the Internet and other computer programs are increasingly providing health information.</p> <p>The Better Health Channel is an excellent and expanding client and staff resource. Appendix 2 lists guidelines for the development of health information.</p>
<b>Health Education, Skills Development, Counselling</b>	
<b>Description</b>	<p>Health education, counselling and skills development include the provision of education to individuals (through discrete planned sessions or opportunistically through clinical contacts) or groups, with the aim of improving knowledge, attitudes, self-efficacy and individual capacity change.</p>
<b>Examples</b>	<p>Education may be offered proactively as part of a planned program, opportunistically or reactively (in response to client requests). This action can also include counselling for individuals, and skills development and training in illness prevention and health promotion for peers and carers.</p> <p>These activities may take the form of individual or group sessions, such as healthy cooking classes, motivational counselling for physical activity and personal financial budgeting skills. Health education and skills development can also be a core component of secondary prevention programs such as cardiac rehabilitation and support programs.</p>
<b>Social Marketing</b>	
<b>Description</b>	<p>Social marketing involves programs designed to influence the voluntary</p>

	behaviour of target audiences to benefit this audience and society as a whole. It typically uses persuasive (not just information) and cultural change processes. It requires a process of setting clearly defined goals, objectives, strategies and evaluation process, with the aim of maximising reach and impact to achieve intended changes in awareness, attitudes or behaviours.
<b>Examples</b>	<p>Social marketing is often interpreted as the use of mass media. However, it may involve a wide range of media, from radio and television to highly targeted messages delivered through low technology media.</p> <p>The Transport Accident Commissions social marketing strategies have been successful in encouraging people to wear a seatbelt and not to drive a car when their blood alcohol level is over 0.05 per cent. In some areas, local promotional activities have effectively complemented the Statewide campaign.</p>
<b>Organisational Development</b>	
<b>Description</b>	Organisational development aims to create a supportive environment for health promotion activities within organisations. such as schools, local businesses and sporting clubs. It involves ensuring that policies, service directions, priorities and practices integrate health promotion principles.
<b>Examples</b>	<p>PCP agencies may choose to assist local schools to develop comprehensive Health Promoting Schools programs and healthy eating school policies. Working with local entertainment venues to provide alcohol-free entertainment opportunities is another example.</p> <p>Local councils may be well placed to support organisational development interventions in funded agencies such as sporting clubs and aged care agencies.</p>
<b>Community Action (for Social and Environmental Change)</b>	
<b>Description</b>	Community action aims to encourage and empower communities (both geographic areas and communities of interest) to build their capacity to develop and sustain improvements in their social and physical environments.
<b>Examples</b>	<p>Community members involved in decision making committees is an example of community action for environmental health protection, as is a community-led advocacy group for the retention of open space.</p> <p>Self-help and support groups for young mothers and people with chronic illness are other examples of community action, which can foster social capital and enhance the well-being of communities.</p>
<b>Economic and Regulatory Activities</b>	
<b>Description</b>	This action involves the application of financial and legislative incentives or disincentives to support healthy choices. These approaches typically focus on pricing, availability, restrictions and enforcement.
<b>Examples</b>	<p>Regulation and incentives have been used to increase immunisation coverage, with school entry certificates and child care payments linked to timely administration of childhood immunisation.</p> <p>An example of economic and regulatory activities at the local level is stricter enforcement of regulations relating to the sale of cigarettes to minors, advertising and competitions encouraging the sale of tobacco products.</p>

**Attachment 2:** *A Proposed Schema for Evaluating Evidence on Public Health Interventions (National Public Health Partnership)*

**Attachment 3:** *An Instrument for Analysing Effectiveness Studies on health promotion and health Education: Development, use and Recommendations (IUHPE)*