Conclusion
10.0 The CIISC project

The success of the CIISC Project was due, in large part, to the involvement of a multi-disciplinary team of scientists, researchers, practitioners, key community stakeholders and members of the seafood industry in the extensive planning stage of the project. Their input from the onset of the project ensured that all resources developed were relevant to each of the end-users targeted. This collaborative approach allowed all parties direct input into the project and thus afforded them ownership of the research process.

The use of a participatory action research model where each stage informs the proceeding stage was also essential to the success of this project. This model assured currency and relevance of the intervention to the community.

Although the CIISC intervention was implemented and evaluated in Western Australia, all resources were developed with the aim to conform with Australian guidelines, curriculum and regulations to maximise dissemination and usability beyond the life of the project.

10.1 Objectives of CIISC Project achieved

The Community Intervention to Increase Seafood Consumption (CIISC) Project used a whole-of-community approach resulting in an increase in seafood consumption (as measured by sales) of 24% over the intervention period and a residual increase of 15% in the proceeding month.

All objectives of the project were achieved, being:

- A systematic review of all published evidence around the health benefits of seafood consumption;
- Industry guidelines around health messages and seafood (including a practical summary of food labelling laws and regulations);
- A series of targeted seafood health benefits communication resources for educational institutions, health professionals and their clients, seafood consumers and members of the seafood industry;
- A vocational education training resource; and
- To trial and evaluate the seafood health benefits communication resources developed in a single community to determine whether seafood consumption in that community can be increased.

10.2 Outcomes from the CIISC Project

A number of outcomes from the CIISC project have already been achieved:

- 30 national or international conference presentations;
- 7 peer reviewed journal articles;
- 11 research reports;
- 12 educational resources;
- 24 printed media stories;
- A three-part series on Today Tonight; and
- 3 radio interviews.
10.3 Planned outcomes from the CIISC project

A forum for investigators, researchers and key stakeholders within the City of Mandurah will be held to present the findings of the CIISC project. Key findings will be published on the CESSH Curtin University website plus the ASCRC website. Findings will also be published in relevant professional journals and presentations made at appropriate professional conferences.

A half-day forum will be held in Perth with members of the seafood industry to provide an outline of learnings from the CIISC Project that may be of benefit to the industry. Other forums can be presented across Australia if additional funding is provided. A summary of the outcomes presented at the forum will be available on the CESSH and ASCRC websites.

A number of additional outcomes will be achieved by early February 2012 including: 5 additional peer reviewed articles from the CIISC Project (currently in end stage preparation – making 12 in total); and promotion of educational resources through existing networks across Australia to maximise reach.

10.4 Further development

The CIISC Project could quite readily be implemented in any city or town across Australia using the methodology, resources and evaluation framework developed. It could be scaled up or down as required with minimal modification depending on the specific target groups involved in the target communities. It would also be suitable for use in urban regional or remote locations.

The cost of further implementation would be greatly reduced as the CIISC resources have national relevance and were developed in paper-based and electronic formats. Costs of production could be shared. The educational resources could also be extrapolated to the electronic whiteboard used in schools across Australia with minimal cost making it more accessible to teachers and students. Furthermore, considerable value could be added to any future interventions developing additional resources as requested in the evaluation of CIISC (e.g. additional GP resources); addressing recommendations herein and through the conduct of a more rigorous evaluation of impact on attitudes and behaviours over time.
Section 11

Recommendations and Legacy
11.0 Recommendations from the CIISC Project

A number of recommendations and suggestions for future research have arisen from the project. They include the vital role of planning in the success of a whole-of-community intervention; recruitment of key stakeholders within the community; and strategies to maximise seafood purchasing through in store promotion.

11.0.1 Recommendation 1 - Planning for success

Interventions targeting food security, seafood supply and seafood consumption across a community must adopt a collaborative and multi-faceted approach that targets key stakeholder groups within that community. These include:

- A leading organisation with credibility and a reputation for excellence in seafood-based research and experience in the development, implementation and evaluation of community-based intervention research projects;
- A local council that is supportive of the initiative and has been well versed in all aspects of implementation prior to implementation;
- A team of researchers with expertise across all areas relevant to the project;
- Seafood business outlets that accept and support in-store point of sale materials;
- Educational institutions from primary schools through to vocational education organisations;
- Health professionals;
- Seafood industry partners;
- Media spokesperson/s that offer credibility and have an ability to communicate effectively with the general population; and
- Major funders that provide both cash and in kind support.

It is essential to form an Advisory Group representing key stakeholders that could assist to make the project successful. The CIISC Advisory Group was extensive; however, it is important to inform potential members on recruitment of their expected level of commitment and what it would entail. For example, some CIISC Advisory Group members were only called upon once whilst others were involved at various stages throughout the entire project.

A research team with expertise across all major areas involved in the project is essential for success. A whole-of-community project requires input from a large number of people with varying levels of expertise, input and commitment to the project. Planning is the most important element of any intervention of this nature. Detailed planning based on the most current available evidence and with input from representatives from all sectors involved in the proposed intervention is the key to success.

Planning for a whole-of-community intervention around increasing seafood consumption as part of a healthy diet should involve:

- Systematic reviews of published and unpublished literature (including reports);
- Recruitment of advisory and/or expert groups;
- Enlisting of support from key stakeholders within the study community including the local council;
- Needs assessment of the study community including a community audit;
- Audits of relevant seafood businesses and/or entities;
- An informed and detailed plan of how the intervention will be developed, implemented and evaluated;
- Development and validation of appropriate measurement instruments (or permission to use existing validated instruments if suitable) for data collection and evaluation of the effectiveness of the intervention;
- Development and trial of any resources required to support the intervention; and
- A dissemination plan that includes a variety of communication strategies.
11.0.2 Recommendation 2 - Considerations for interventions aimed at influencing local food supply

Although supermarkets and other food retail stores have state or national management, there is often potential for communities to influence local decisions regarding stock, promotion and pricing policies. This is particularly true when dealing with food stocks from local primary industries such as the seafood industry. Opportunities to improve the promotion of seafood food options at retail outlets in a localised area may involve: enlisting the support of a significant number of businesses in the area and auditing these businesses to build a picture of the sales profile of various types of seafood (using one or more indicative types as a measure/s) within that community. In addition to the paper-based food audit, an observation study of promotion of seafood within a large range of food outlets should be conducted.

Food audit and observational studies of seafood outlets provide the following baseline measures:

- A snapshot of the basic operations of the outlets including their hours of business, main clientele, peak operational times, most popular sales, usual in-store promotions, usual mode of food preparation (e.g. made to order and/or pre-prepared), barriers to increasing sales of seafood and the influences on decisions to stock various types of seafood;

- An understanding of the current availability and promotion of seafood;

- Identification of opportunities and support for change within and across outlets (critical mass);

- Current sales of seafood and sales over time by kilogram as standardized proxy measure of current local community consumption and trends in consumption over time;

- The willingness of local businesses to actively engage in a community intervention to increase seafood consumption; and

- The level of commitment to in-store promotion and provision of post-intervention measures to evaluate change during the intervention period.

11.0.3 Recommendation 3 - Involving restaurants and takeaways

Fast food and take-away outlets vary enormously in the quality and variety of the seafood served, and improvements in the range and nutritional quality of the seafood supply can have a big impact on the diet of a local community. Many people obtain a regular and significant proportion of their household seafood consumption from prepared food outlets therefore, it is important to consider the preparation methods, quality of ingredients, and the variety and relative price of the seafood served. There is often potential to improve the nutritional quality of seafood on these menus, as well as introducing identified healthy choices.

11.0.4 Recommendation 4 - Involving convenience stores and local shops

Small corner shops, general stores, and convenience stores are commonly used as ‘top up’ shops to supplement larger shopping trips to a supermarket. However, for many vulnerable people who are unable to access supermarkets on a regular basis, the small local shop can represent the primary seafood retail outlet. Those reliant on local stores include: people without cars; older people and people with a disability who find public transport difficult to negotiate; those living on the urban fringe where public transport is limited and where supermarkets do not exist yet; and people in remote areas with limited retail outlets. The key difficulties faced by those who rely on corner shops or general stores for their primary seafood supply are that the range of seafood available is usually quite limited and the prices are often higher than in most supermarkets.

Small seafood retailers are often unable to modify the range and price of their goods due to an insufficient volume to achieve wholesale prices; small margins and under-capitalisation in refrigerated storage facilities; customers with less to spend; and slow turnover and thus risk of spoilage of perishable goods. Although convenience stores continue to sell basic ‘top up’ items such as bread and milk, they are also more oriented to the sale of high profit Snack foods and drinks. Despite this, there is potential for motivated community organisations and consumer groups to negotiate with these stores to include the type and range of seafood that would benefit those who rely on them as their primary seafood source.

11.0.5 Recommendation 5 - Opportunities for local government and community involvement

The 1992 Australian Food and Nutrition Policy identified that local government action could significantly impact on the food system and nutrition. Opportunities exist for health professionals to work with local government to promote nutrition and to impact on the food and nutrition system. Responsibilities of local government that impact on the food system include information provision, monitoring and enforcement of food regulations, and community services.

Following are some key factors that should be considered by local government when aiming to improve seafood availability and accessibility within the community:
11.0.5.1 Location of supermarkets

Supermarkets are a key factor in determining the quality of seafood supply in a community (wider range of goods and/or able to offer lower retail prices than alternative outlets). Mapping the location of supermarkets and influencing decisions around access to healthy seafoods across all sectors of the community can significantly improve the food security of whole communities. For example, coordination of public transport routes with locations of healthy seafood outlets can significantly improve the quality of a food supply for those on limited incomes who do not own their own cars.

11.0.5.2 In-store price, availability and promotion

While supermarkets usually contain a wide variety of foods, the stock of healthier foods is often minimal, and the in-store prepared seafoods (deli and salad bars) offer a limited range of relatively high fat dishes. Local government entities, researchers and organised consumers working together can significantly improve the range and quality of fresh seafood stocked in food retail outlets; the price competitiveness of those foods; and the way healthy seafood options are displayed and promoted within stores. In-store promotion can assist consumers to locate the healthy choices; and the use of healthy catering practices for the prepared seafood lines in supermarkets has considerable scope for improving nutrition. These strategies can also be implemented as part of a holistic approach to improving community health through the promotion of seafood as part of a healthy diet.

Activities focussing on seafood promotion may include regular ‘specials’ offering healthy food/prepared dishes at a reduced price; product tasting and demonstrations on how to prepare seafood; more efficient displays of fresh seafood; in-store radio promotions and simple shelf-tags identifying cost effective and healthy seafood options.

Results from the CIISC Community Survey found that consumers are interested in:

- Easy to read and informative food labels to aid consumers when making purchasing decisions;
- Nutritional information panels for each type of seafood sold; and
- Quick and easy recipes for seafood at the point of sale.

11.0.5.3 Local government involvement in improving seafood consumption

The City of Mandurah (CoM) is a proactive local council that is vitally interested in improving the health of their residents and is committed to supporting the long term viability and commercial prosperity of local seafood businesses. The CoM was central to the success of the CIISC community intervention.

A number of recommendations are made for other councils who may wish to improve the health of their constituents whilst supporting local industries. These include:

- Provision of incentives for businesses to promote local seafood produce — including grants or reductions in business fees for businesses providing reasonably priced healthy food options;
- Provision of leadership in developing mixed-use retail ‘clusters’ in which small or independent seafood outlets can flourish;
- Streamlined applicable licence and permit processes;
- Provision of technical assistance to entrepreneurs and store owners who are interested in improving their communities’ access to nutritious seafood;
- Improved transportation services to local seafood and fresh food markets;
- Nutrition education classes and activities including education on shopping, storage, freezing and preparation of a variety of cost effective and easy seafood meals;
- Public health campaigns promoting seafood consumption as part of a healthy diet; and
- Inclusion of small fresh food markets (including local seafood outlets) as a vital component of neighbourhood revitalisation projects.
11.1 Legacy of the CIISC Project

Legacies of the CIISC project include:

- Effective links between State/Territory Departments of Fisheries, Professional Industry Associations and social scientists/researchers;
- An understanding within the seafood industry of the benefits of working with research-active social scientists;
- Strong professional relationships between the seafood industry and seafood scientists and researchers that support proactive engagement;
- The seafood industry values the contribution of scientists and researchers to the promotion and profitability of the seafood industry;
- Institutionalisation of seafood as a core nutritional therapy that compliments existing best practice treatments for nutrition-related health conditions;
- Communication of seafood health messages to a range of end users;
- A suite of evidence-based nutritional education resources for specific target groups within the Australian population;
- A comprehensive intervention that can be scaled to fit any sized community within Australia with the potential to improve biomarkers for health through increased seafood consumption at a population level; and
- A significant number of scientists, researchers, educators and industry members with a clear understanding of the processes required to develop, implement and/or evaluate a community-based intervention to increase seafood consumption.