

# CURRENT ISSUES

## THE INSIDE STORY



### Our Legitimacy – As Evidenced by CFDR Funded Practice-based Research

When the Canadian Dietetic Association (CDA) celebrated its 50<sup>th</sup> anniversary in 1985, Kay Watson-Jarvis challenged its members to become a legitimate profession. How to do this? She suggested “building a sound research base for the practice of dietetics today and tomorrow” (1). This Current Issues takes a look at how we, as a profession, have met this challenge after two decades. It highlights the important role that the Canadian Foundation for Dietetic Research (CFDR) plays in expanding the research base that the profession uses.

During this period, members of the profession have examined the integration of research into practice and the barriers to doing practice-based research (2-10). Dietitians are often involved in informal research, but to have research formalized into their practice they needed management support for resources and opportunities for research skills development (5-10). In one of the first CFDR funded projects, Morley- Hauchecorne and Patourel found research had seldom been integrated into the clinical dietitian's role in British Columbia. Barriers included lack of dietitians' self-confidence, and environmental barriers, including lack of access to computers, statistical support and staff relief. They recommended that programs developed to increase research participation should provide knowledge and skills training, and aim to enhance self-confidence, networking and mentoring (8).

#### Creating a Research Culture

Within the dietetics profession a “research culture” is evolving (10). Most Canadian university dietetic and nutrition programs now offer courses, either at the undergraduate or master's level, that focus on research methods and practice-based research. Nasser described the addition of research dietitian positions, part-time and full time, in 10 Canadian hospitals. Several of the positions have a cross-appointment with a local university (11). Research dietitians encourage and support practice-based research by mentoring practitioners, initiating, coordinating and implementing practice-based projects with a view to improving practice. In addition to educational opportunities to learn practice-based research skills at the Dietitians of Canada (DC) conference and DC regional activities, dietetic interns across the country are encouraged to present their research, either at their

internship site or at one of several regional internship research days.

#### Canadian Foundation for Dietetic Research

In 1991 the Canadian Foundation for Dietetic Research (CFDR) was created by CDA (Dietitians of Canada as of 1996) and incorporated as a charitable foundation. CFDR's purpose was, and still is, to provide grants to support practice-based research by dietitians. The current mission is to be “the catalyst for dietetic and applied nutrition research by funding research and disseminating new knowledge in support of evidence-based decisions”. Grants to support practice-based research have been awarded since 1993 and the number and size of grants has steadily increased with 79 dietitians and their research teams being awarded more than \$910,000 to date. There are two categories of grants: a regular grant competition and a consumer focused grant competition. In 1997 the Canadian Inventory of Nutrition and Dietetic Associated Research (CINDAR) was created by CFDR to facilitate the sharing of Canadian research activities. It is a unique database consolidating food, nutrition and dietetic research activity in Canada. More about the grants and how to apply, CINDAR and other valuable research resources can be found on the CFDR website: [http://www.dietitians.ca/cfdr/research\\_directions.asp](http://www.dietitians.ca/cfdr/research_directions.asp).

Evidence from CFDR funded research not only strengthens our profession but provides dietitians and other health professionals with practice guidance for the prevention and treatment of chronic disease and the pursuit of optimal health for Canadians. While abstracts of all CFDR funded projects can be found in CINDAR, highlights and outcomes of a few of the diverse projects are presented in this Issue.

#### Professional Issues

In times of healthcare cost constraints, all activities within a department are looked at from a cost-benefit perspective. Silver and Gillis studied the cost-benefit of a dietetic internship and the dietitians' perceptions of intangible costs and benefits associated with training dietetic interns. While the results showed a net financial

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cost to the institution, it also provided data showing that as the interns gained experience the benefits of an internship program outweighed the financial costs to the department (12).

Advances in food technology and nutritional science happen at a rapid pace and dietitians are consulted for answers. Lacroix and Sheeshka surveyed 151 dietitians on their attitudes towards functional foods and their professional role as the intermediary between the food industry and the consumer. Eighty-one per cent felt dietitians were the most appropriate professionals to recommend functional foods and while most were favourable towards functional foods, they wanted sound, unbiased research and regulatory mechanisms in place to ensure that health claims are accurate (13). Results of their study will be published in a future issue of the DC journal. Ryan-Harshman and Vogel interviewed key informants, nationally and internationally, and conducted six focus group interviews with dietitians across the country to find out what dietitians knew about and what they needed to know about nutritional genomics and dietetic practice (14). Preliminary findings have been presented at two national research events and their literature review has been submitted for publication. Their next project is to develop web-based tools and resources to meet dietitians' knowledge needs about nutritional genomics.

### Prevention and Treatment of Disease

Do we do the right things, the right way for the right people? Cook and colleagues surveyed 164 clients, one week after hospital discharge, to determine if in-patient nutrition counselling is effective in promoting changes in eating behaviours. The clients were asked to complete the Health Habits and History Questionnaire before counselling and then at three and six months following discharge. The results suggest that in-patient nutrition counselling, especially for those on a heart healthy diet, is perceived as valuable and leads to positive dietary behaviours, the majority of which were sustained at six months. (15). Cowan Weber, Payette and Lacombe studied 33 elderly subjects at nutrition risk who were recently discharged from a Geriatric Assessment Unit. While control subjects received no follow-up, the intervention subjects received nutritional follow-up counselling by a dietitian within two weeks following discharge and two telephone calls at two and three months post discharge. Two weeks following discharge both groups had adequate and similar daily protein intakes. Three months post-discharge, experimental subjects had maintained adequate daily protein intakes

while a decrease was noted in the control group ( $p < .01$ ). The results of this study provides good evidence that a three month post-discharge systematic telephone follow-up by a dietitian improves dietary quality in elderly individuals identified at nutrition risk (16).

Alberda, Gramlich, Meddings, Field, McCargar and Kutsogiannis et al conducted a preliminary study to determine whether patients in the intensive care unit (ICU) who received an enteral nutrition formula containing probiotics developed fewer complications, including infections and diarrhea. Forty patients requiring enteral nutrition were randomly assigned to either standard enteral nutrition or standard enteral nutrition containing a probiotic. Based on the positive results of the preliminary study, the investigators conducted a randomized, double-blind, placebo-controlled trial with 28 patients with multiple organ dysfunction syndrome in the ICU of a teaching hospital. Patients receiving viable probiotics showed a greater immune activity than did patients receiving either placebo or probiotic bacterial sonicates. There was a small decrease in the incidence of diarrhea in those receiving the probiotics (17).

Delivery of the required amount of enteral nutrition is often inadequate in the critical care setting. Mackenzie and colleagues investigated whether implementation of an evidence-based nutrition support protocol aimed at reducing morbidity in critical care could improve enteral nutrition delivery. The protocol improved the proportion of enterally fed ICU patients meeting their calculated nutrition requirements. The protocol / algorithm or best practice guideline was implemented and is actively being used, resulting in better patient outcomes, at all 3 adult acute care Intensive Care Units in the Calgary Health Region (18).

### Health of Canadians

Inadequate food security continues to present an obstacle keeping many Canadians from being nutritionally healthy. Power and colleagues surveyed 589 randomly selected CDA members for their opinion on the relevance and effectiveness of six strategies to improve food security in Canada. The strategies were all seen as relevant and eighty-nine per cent of respondents stated that advocating for food security should remain a high priority for CDA (19, 20). Power went on to use the results of this study and her practice expertise to author the 2005 Dietitians of Canada Food Security Position Paper – Individual and Household Food Insecurity in Canada (21). Using the Delphi process, Brauer and colleagues began the

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development of a care map, or practice guideline, for the nutritional therapy of dyslipidemia. The resulting care map, "Dietitian's Quick Reference Guide for Clinical Nutrition Therapy for Overweight Clients with Dyslipidemia" provides a basis for current practice and new effectiveness studies. The Winter 2007 issue of the Canadian Journal of Dietetic Practice and Research will have an article on the results of their study and the evidence-based, practical, quick reference guide (22).

### The Future

It is clear that CFDR has had an influential impact on the development of a research culture in the dietetics profession in Canada. It has supported dietitians in their search for evidence-based answers to practice questions. With the on-going financial support of corporate partners and DC members, CFDR will continue to help dietitians grow into that legitimate profession we were challenged to be 22 years ago by Watson-Jarvis.

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