

Canadian Foundation for Dietetic Research

St. John's Fun Run/Walk Breaks the FUNdraising Record!

2017 ANNUAL REPORT



www.cfdr.ca



Message from the Chair

A Record-Setting Year!

As we near the end of 2017, we, the CFDR Board of Directors, would like to congratulate the recipients of the 2017 research grants. We would also like to acknowledge the significant contributions of individual Canadians (many of them dietitians) and funding partners, who continue to make the work of CFDR possible. We raised a record amount of funds to support practice based dietetic research at this year's 13th Annual Fun Run in St. John's, NL. This wouldn't have been possible without the contributions of volunteers and those conference delegates who participated.

The Board of Directors has had a busy year as we have adjusted

structure of CFDR to better meet our key goal: growing the body of practice-based nutrition research available for knowledge transfer and evidence-based decision making. We have been pleased to welcome Janis Randall Simpson to the role of volunteer Executive Director of the organization; she is Professor Emerita in the Department of Family Relations and Applied Nutrition at the University of Guelph and she brings to CFDR a wealth of knowledge and experience.

What have we accomplished?

This year, we were pleased to award six research grants. These diverse research projects will advance knowledge in the areas of school food programs, Type 1 diabetes, and eating disorders and appetite in children, among others.

More than 30 researchers presented their abstracts as part of the CFDR Research Showcase at the Dietitians of Canada conference in June 2017; the abstracts appear in the September, 2017 issue of the Canadian Journal of Dietetic Practice and Research. In addition, 32 students presented their research in a poster presentation during the Exhibitor's Showcase. Look for these abstracts on the CFDR website.

Looking ahead!

Members of the CFDR Board of Directors are looking forward to a year of growth and change in 2018 as CFDR continues to adapt to shifting landscapes in the public and private sectors – both academic and corporate.

Once again, thank you to all of our volunteers, staff at Dietitians of Canada, and to our corporate sponsors and partners for their financial commitments and for time for their leaders to serve on the CFDR Board of Directors. CFDR could not succeed without your valued contributions.

Sarah Newko

Sarah Hewko RD, MHA Chair, Board of Directors



Message from the ED

In January 2017, I was honoured to take on the position of volunteer, parttime Executive Director of CFDR for a two-year term. My responsibilities involve managing the research aspects of CFDR that include the Research Grants Program, the Research Showcase at the DC National Conference, the Morgan Medal, and directed research.

My research program at the University of Guelph has included working with young children and young adults. My major research contribution has seen the development of the 17-item nutrition screening questionnaires (NutriSTEP®) for parents of toddlers and preschoolers. I have an extensive history of reviewing grants for agencies such as the Canadian Foundation for Dietetic Research, the Canadian Institutes for Health Research, and the Danone Institute of Canada. My administrative experience includes serving as Graduate Coordinator and Acting Chair in FRAN and as Treasurer and Conference Coordinator for both the Canadian Society for Nutritional Sciences and the Canadian Nutrition Society for many years.

Janis Randall Simpson

Janis Randall Simpson PhD, RD, FDC **Executive Director**

CFDR at the 2017 Dietitians of Canada Conference in St. John's, NL

FUN RUN

The Fun Run/Walk through the beautiful trails in St. John's broke the record for the highest proceeds raised at any CFDR Fun Run. Participants proudly exceeded the pledge goal of \$10,000, and raised over \$18,000 in pledges! Sponsors also contributed \$14,500 and, after expenses the net proceeds were nearly \$30,000, beating the previous record of \$25,000.

Congratulations to Timothy Lau, winner of the 10K Run, Dean Simon winner of the 5K Run and Gerry Kasten, the top fundraiser, with over \$2,700 in pledges. Thanks to the many other participants who also raised noteworthy pledges. It was a fun and proud day for everyone involved!

CFDR is also grateful for the generous contributions of our sponsors for making the Fun Run a success: (Gold) Dairy Farmers of Canada, (Silver) PepsiCo Canada, (Bronze) Campbell's Foodservice, Canadian Sugar Institute, Clif Bar & Company, Hydration Pharmaceuticals Canada, Left Field Foods, Pfizer Consumer Healthcare, Tim Hortons and Prize Sponsor, PROLINK.



Heather Tufts

The 2017 Morgan Awards

CFDR has a mandate of supporting the next generation of researchers focused on food and nutrition. To that end, the Morgan Awards were created in 2007. The Morgan Awards and Medal were created in honour and in memory of Suzan Morgan, a former CFDR manager and dietitian, who was an ardent supporter of the dietetic profession, of practice-based research, and of mentoring novice researchers.

These annual awards are presented as recognition of individual personal achievement of a dietetic intern or practicum student for their completed research project. The program consists of two categories: regional awards for each of the six regions of Dietitians of Canada and a national award - the Morgan Medal - selected from one of the six regional winners.

CFDR Research Showcase at DC Conference

Research from 65 professionals and students was presented at the Canadian Foundation for Dietetic Research (CFDR) Showcase at the Dietitians of Canada)(DC) Conference in St. John's , NL and included both oral and poster presentations from researchers from across the country.

There were 11 sessions with 33 professional oral presentations

that included clinical research and experience-sharing topics. The oral presentations were well-attended with over 200 attendees for the sessions on June 8th and over 130 attendees for the sessions on June 9th.

The formal poster presentations were expanded this year and included student posters that were exhibited during the Exhibitor Showcase. More

Morgan Medal 2017

The winner of the Morgan Medal for 2017 was Heather Tufts from the British Columbia Region. Heather's interest in research started during her MSc at McGill University, where she developed and implemented a fieldbased project in Kenya. This sparked her interest in dietetics, which she pursued at the University of British Columbia where she is currently the Interim Dietetic Education Coordinator for the dietetics major program. Heather presented her research on the prevalence of metabolic syndrome in an oral presentation in the CFDR Research Showcase at the Dietitians of Canada Conference in St. John's.

Regional Morgan Award Winners

Alberta and the Territories *No awardee*

Atlantic

Alexandra Rogers

Manitoba and Saskatchewan No awardee

Northwest and Central Ontario Katherine Jefferson

Northeast Ontario and Quebec Jillian Ingribelli

Congratulations to all of our 2017 awardees!

The Morgan Awards and Medal for 2017 were supported by the Canadian Foundation for Dietetic Research, the Morgan family and individual donors.



than 100 abstracts were submitted for the CFDR Research Showcase and all are posted on the CFDR website.



The CFDR 2017 Research Awards

In 2017, CFDR awarded six research grants totalling \$107,920. The recipients of the 2017 grants were announced at the Awards Ceremony at the Dietitians of Canada Conference in St. John's, NL in June 2017.

Three of this year's grants were funded in part through a grant from the Danone Institute of Canada (DIC). Our organizations share a mandate of promoting knowledge translation in food and nutrition research. One grant was funded in part from funds raised by CFDR through the 2016 Grant Challenge initiative.

The six 2017 successful CFDR grant proposals were:

A randomized controlled trial to evaluate the effectiveness of the Pure Prairie Living Program in a community setting.

Catherine Chan, PhD and *Fatheema Subhan, PhD, RD* (University of Alberta)

This study will implement and evaluate the Pure Priairie Living Program (PPLP) in a community setting in Alberta to promote healthy living lifestyles among people with type 2 diabetes. The PPLP includes nutrition education and a cookbook based on the Canadian Diabetes Association Clinical Practice Guidelines. This project is supported in part through DIC funding.

Type 1 Diabetes and eating disorders: Status and challenges of nutritional therapy.

Katherine Desjardins, MSc, RD (Clinical Research Institute in Montreal) and *Mona Gupta, MD, FRCPC, PhD* (University of Montreal)

The objective of this study is to characterize disordered eating amongst adult patients with Type 1 Diabetes Mellitus. Web-based surveys will be employed to describe the clinical problem as experienced by patients as well as the therapeutic challenges faced by practicing dietitians. This project is supported in part by funding of the DIC.

Validation of a tool to assess appetite in children.

Andrea Haqq, MD, MHS, FRCP(C) and Diana Mager, PhD, RD (University of Alberta)

This study will determine the validity of a new method to assess appetite in children ages 4-8 years. This tool uses pictures and verbal questions about the pictures to determine a child's level of appetite. This newly validate tool will facilitate the investigation of the role of appetite on regulation of food intake and the impact of interventions on appetite in young children.

Exploring relationship between weight-related behaviours and sleep patterns in Canadian university students. What are the implications for dietitians?

Efrosini Papaconstantinou, RN, PhD (University of Ontario Institute of Technology) and Virginia Quick, PhD, RD (Rutger's University) This study, using a survey and focus groups, will explore the relationships of sleep patterns and duration of sleep with weight-related behaviours such as eating, physical activity. Findings may call for new approaches to nutrition assessment with dietitian at the forefront of lifestyle counselling, including sleep habits.

Nutritional status of Anabaptist women and children in Southwestern Ontario.

Natalee Ridgeway, MScFN, RD (Perth District Health Unit) and Janis Randall Simpson, PhD, RD, FDC (University of Guelph)

This study will assess dietary intakes and vitamin D status in Anabaptist women and children and folate, vitamin B12 and iron status in Anabaptist women. The result will be used to inform practices related to routine laboratory testing, provision of nutritional assessment and education and recommendations for supplementation. This project is supported in part through DIC funding.

Evaluation of an integrated school food program.

Sarah Woodruff, PhD, CEP (University of Windsor)

This project will develop educational supports for teachers, students and their parents for use in the Farm to School model for the Ontario Student Program in Southwestern Ontario. These resources will help with uptake of programs to promote consumption of fruits and vegetables. This project is funded in part by the CFDR 2016 Grant Challenge.



THE DANONE INSTITUTE OF CANADA: HELPING PUT RESEARCH INTO ACTION

For the 2016 and 2017 grant cycles, CFDR has been in partnership with the Danone Institute of Canada (DCI), a foundation with a mission of promoting the links between food, nutrition and human health. A key focus of DIC's mandate is knowledge translation (KT). DIC believes in putting research findings into action through the dissemination, exchange and application of nutrition knowledge to improve the health of Canadians.

Half of the funding for three of our 2017 successful grant proposals was provided by DIC based on their KT relevance.

"We value our partnership with CFDR as the match funding DIC provides is invested in projects that serve the mandates of both of our organizations" said Dr. Robert Bertolo, former President of the DIC Board of Directors and Professor, Department of Biochemistry, Memorial University.

Unfortunately, the DIC is no longer in operation; therefore, this is the final year for its support to CFDR. CFDR extends thanks to the Danone Institute of Canada for its commitment to dietetic research and for their generous support for the past two years. In particular, CFDR thanks Dr. Bertolo for his generous contributions of time in reviewing CFDR grant proposals for relevance to the DIC mandate.

CFDR Research Results

CFDR congratulates investigators for completion of several projects in the 2016-2017 year.

Highlights of several completed projects are presented. Full abstracts for all completed CFDRfunded projects can be found in CFDR's Research Room at: http:// researchroom.cfdr.ca/about.aspx



Allison Cammer PhD (cand) RD (left), Debra Morgan PhD, Susan Whiting PhD (right), University of Saskatchewan

Nutrition care practices for residents with dementia in urban and rural long-term care: Perspectives of Care Aides.

Dementia is the top chronic condition necessitating relocation to long-term care (LTC). Nutritional health of LTC residents with dementia is central to quality care and quality of life. Most direct resident care in LTC is performed by care aides with limited training in nutrition and dementia. This qualitative research explored best practices in nutrition care from the perspective of care aides. Four LTC homes participated: 2 urban and 2 rural. Two focus group discussions were conducted at each home with 43 care aides. Findings were organized into 6 thematic areas that directly influences nutritional care performed by care aides: balancing residents' care needs, experiential learning, operationalizing person-centered care, coping strategies, competing demands, and perception of nutrition care. These findings indicate a need for RDs in supporting nutrition care to enhance training, provide greater coordination of nutrition care,

give supportive supervision, and adaptive mentoring for care aides in performing nutrition care for residents with dementia.



Audrée-Anne Dumas, MSc, RD (left), Annie Lapointe, PhD, RD (center), Sophie Desroches, PhD, RD. (right) Laval University

Users, uses and impacts of social media in dietetic practice: a scoping review.

Social media are increasingly used by registered dietitians (RDs). In order to convey the breadth and depth of this emerging field, a five-stage scoping review was conducted. Sixty-four publications (48 unique studies) were included; most were primary research articles, protocols or dietetics practice application articles published since 2010. Most publications targeted the general population. Discussion forums were the most frequent social media tool (19 studies). Social media tools were the delivery mode for interventions promoting behaviour change in most studies. Evidence for positive impact using social media was reported in 19 publications for outcomes such as compliance, fruit, vegetable and energy intakes, cognitive restraint, uncontrolled eating, and weight management. Of the few studies describing barriers and facilitators, both were related to perceptions of characteristics of specific social media, such as innovation, design concerns, and the validity of the resources, and, to a lesser extent, human and organizational environments. This scoping review will help knowledge users (e.g., RDs) make informed decisions about the use of social media.



Nanci Guest MSc, RD, PhD candidate (photo), Paul Corey, PhD, Jason Vescovi, PhD, Ahmed El-Sohemy, PhD. University of Toronto

Caffeine, CYP1A2 genotype and endurance performance in athletes

Many studies have examined the effect of caffeine on exercise performance, but results are inconsistent. The objective of this study was to determine if the CYP1A2 gene, which affects caffeine breakdown, modifies athlete's response to caffeine in a 10-km cycling race. Competitive male athletes (n=101; age: 25 ± 4 years) cycled under 3 conditions: 2 or 4 mg of caffeine per kg body mass or placebo. DNA was isolated from saliva and analyzed to see what form of the CYP1A2 gene athletes had: 'fast', 'slow' and 'ultra-slow' metabolizers of caffeine. Overall, 4 mg/kg caffeine improved performance by 3%, but "fast metabolizers" were faster by 7% (1.2 min) at 4 mg/kg, and 5% (0.8 min) faster at 2 mg/kg. In 'ultra-slow metabolizers', 4 mg/ kg worsened performance by 12% (2.5 min) vs placebo. No effects were observed among 'slow metabolizers'. Not all athletes benefit from caffeine. Rate of caffeine breakdown as determined by the CYP1A2 gene should be considered when deciding whether athletes should use caffeine for enhancing endurance performance.

Other CFDR-funded projects that were completed are:

Accuracy of Common Prediction Equations and Cross-Validation of Population-Specific Equations in Individuals with Spinal Cord Injury Hugues Plourde, Ph.D., RD, McGill University

Phosphorus and potassium content of low sodium meat, poultry and fish products: implications for patients with chronic kidney disease Pauline Darling MSc, PhD, RD, St. Michael's Hospital, Toronto



Véronique Ménard MSc RD (left) and Hope Weiler PhD, RD (right). McGill University

Evaluation of dietary intervention and pregnancy outcomes among food insecure women attending the Montreal Diet Dispensary Program

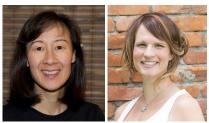
This study characterized the rate of adverse pregnancy outcomes at the Montreal Diet Dispensary and risk according to ethnicity and immigration status. Most women (32 \pm 5 y, n=1387) were new immigrants < 5 years (65.8%) of White (55.3%), Black (30.1%) and Asian (14.6%) ethnicity. The prevalence of gestational diabetes mellitus (GDM: 17.2%) and anemia (44.9%) infants exceeded national statistics, whereas preterm birth (PTB), low birth weight (LBW) and small for gestational (SGA) were significantly lower. Using logistic regression, elevated risks were identified for: PTB in Black vs White women; anemia in immigrants (> 5years) vs Canadian born, and in Black vs White women: SGA and GDM were elevated in Asian vs White; and LWB, PTB and SGA in single parents. Disparities in maternal and infant outcomes were present for some groups of women, most concerning of which were GDM and anemia.

Experiences and perceptions of adults accessing publicly available nutrition behaviour change mobile apps for weight management

Jessica Lieffers, MSc, RD, University of Waterloo

Are we over or underfeeding residents in Long Term Care? Colleen O'Connor, PhD, RD, Brescia University College

Effect of Nuts on Cardiovascular Disease and Cancer Risk in Type 2 Diabetes: A Randomized Controlled Parallel Trial



Sophia Yeung BSc, RD (left) and Leslee Hilkewich BSc, RD, CDE (right). Alberta Health Services

Protein intakes are associated with reduced length of stay: A comparison between Enhanced Recovery After Surgery (ERAS) and conventional care after elective colorectal surgery

Protein can modulate the surgical stress response and postoperative catabolism. Enhanced Recovery After Surgery (ERAS) protocols (including oral nutrition supplements) are evidence-based care bundles that reduce morbidity. In a prospective cohort study in adult elective colorectal resection patients after conventional (n=46) and ERAS (n=69) care total protein intakes, from three-day food records, were significantly (p < 0.02) higher in the ERAS group (0.54 g/kg/ day) than in the conventional group (0.33 g/kg/day) and also when controlled for baseline and surgical variables (p=0.001). Total protein intake did not meet recommendations. Nausea was a predictor of protein intake. The ERAS group had shorter length of stay (LOS) (p=0.049), and fewer total infectious complications (p=0.01). Each unit increase in preoperative Malnutrition Screening Tool (MST) score predicted longer LOS of 2.5 days (p<0.001). Consumption of $\geq 60\%$ of protein requirements during the first three days of hospitalization was associated with shorter LOS of 4.4 days (p<0.001).

David Jenkins, MD, PhD, DSc, Stephanie Nishi, HBSc, RD, University of Toronto

Risk of Inpatient Malnutrition: Adopting Safety Screening (RIMSS) Lenora Duhn, RN, MSc, Angela Hollett, BSc, RD, Kingston General Hospital

Does the child and parent's perceptions of the quality of life in families of different ethnicities influence dietary adherence to the gluten free diet and nutritional intake in children with Celiac Disease? *Diana Mager, PhD, RD, University of Alberta*

Summarized Balance Sheet

As of Aug 31, 2017

ASSETS	2017	2016
Cash	110,685	176,625
Investments	2,319,490	2,355,944
Sundry receivables	67,672	29,296
	2,497,847	2,561,865
CAPITAL ASSETS	9,586	16,838
	2,507,433	2,578,703
LIABILITIES		
Current	176,677	184,300
NET ASSETS		
Restricted	1,915,108	1,868,434
Unrestricted	415,648	525,969
	2,330,756	2,394,403
	2,507,433	2,548,703

Summarized Statement of Revenues, Expenses and Fund Balances

Year Ended Aug 31, 2017

REVENUES	2017	2016
Donations - Corporate	90,825	114,100
Donations - Individuals	8,208	12,413
Revenues from Fundraising Events	32,901	74,889
Directed Research	43,060	29,858
Investment Income	61,560	134,385
Unrealized gain on investments	25,174	30,192
	261,728	395,837
EXPENSES		
Research Program	111,980	110,685
Open Grant Competition Expenses	29,014	46,023
Administration	49,504	62,190
Governance	45,544	66,390
Fund-raising	45,181	86,768
Research Communications	36,734	62,350
Investment losses	3,765	-
Expenses on Fund-raising events	2,390	31,087
Directed Research	1,263	1,099
	325,375	466,562
Deficiency of Revenue over Expenses for the Year	(63,647)	(70,725)
Net Assets - Beginning of Year	2,394,403	2,465,128
Net Assets - End of Year	2,330,756	2,394,403

CFDR Legacy Leaders 2016-17

CFDR is grateful to our corporate partners who believe in the value of dietetic and nutrition research in building a healthy Canada. Our partners contribute funds and human resources to support the work of the Foundation. Legacy Leaders are CFDR's cornerstone supporters, with a commitment of three or more consecutive years.

CFDR is proud to work with the following Legacy Leaders at all levels of financial support:

FOUNDER \$25,000 ANNUALLY

Dairy Farmers of Canada Dietitians of Canada

BENEFACTOR \$15,000 ANNUALLY Nestlé Health Science PATRON \$5,000 ANNUALLY Egg Farmers of Canada General Mills Canada Corporation Kellogg Canada Inc. PepsiCo Canada

Note: a complete set of audited financial statements is available from CFDR on request. http://www.cfdr.ca/Publications/AnnualReports.aspx



Canadian Foundation for Dietetic Research

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Charitable Registration No. 892702150 RR0001

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Volunteer Committees

CFDR relies on the dedicated volunteers who help ensure the success of our programs. Thanks to all of those who donated their time and expertise this year.

DC Conference Abstracts Review Committee

Chair: Christina Lengyel (University of Manitoba)

Committee: Susan Campisi (University of Toronto); Elaine Cawadias (Ottawa); Andrea Glenn (St. Francis Xavier University); Mahsa Jessri (University of Ottawa); Jessica Lieffers (University of Alberta); and, Janet Madill (Brescia University College, Western University)

Morgan Medal Judging Panel

Chair: Gail Hammond (University of British Columbia) Committee: Rhona Hanning (University of Waterloo); Grace Lee (Toronto); Shelley Vanderhout (University of Toronto)

Fun Run/Walk Committee

Chair: Georgette Harris (Dietitians of Canada)

Newfoundland Committee members: Rebecca Whalen (Lead Volunteer), Ana Maria Gascoyne and Angie Knee, as well as the many volunteers who helped out on the day of the event

Scientific Review Committee

Chair: Alison Duncan (University of Guelph) Committee: Russell de Souza (McMaster University); Paula Dworatzek (Brescia University College, Western University); Maria Kalergis (Dairy Farmers of Canada); Chris Marinangeli (Pulse Canada); Dawna Royall (Dietitians of Canada). External Reviewers: Vicki Drapeau (Laval University), Royden Loewen (University of Winnipeg)