

**HSFC CIHR Chair in Hypertension Prevention and Control 2011-2016, University of Calgary, Recipient: Norm Campbell MD, June 2013-2014-third year report**

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**PREAMBLE:**

I feel honored to be the HSF CIHR Chair in Hypertension Prevention and Control. This third year report of my mandate will attribute many activities to me; however, the success of all the activities has been dependent on the strong contributions of many individuals and to the collective support and contribution of national health and scientific organizations (especially the member organizations of the Hypertension Advisory Committee, specifically Hypertension Canada.) Further, Tara Duhaney, the Policy Director of the Hypertension Advisory Committee, has played a critical role in many of the stated activities.

**SYNTHESIS AND RESEARCH PROBLEM:**

Increased blood pressure is the world’s leading risk for premature death and disability causing vascular damage that results in ischemic heart disease, heart failure, strokes, kidney failure and other vascular diseases such as dementia. About half the blood pressure related death occurs in those with ‘normal’ but not optimal blood pressure and the other half occurs in those with clinically defined hypertension. The causes of increased blood pressure (e.g. unhealthy diet, physical inactivity, abdominal obesity, excess alcohol etc.) are largely known and are preventable. The majority of hypertension is directly or indirectly (through obesity) caused by unhealthy eating. To date, many internationally recommended policy interventions to prevent increased blood pressure have not been implemented in Canada. Treatments are available to prevent disease caused by high blood pressure and although there has been much improvement in Canada, there are still many Canadians with high blood pressure who are not diagnosed or adequately treated.

The objective of the HSFC CIHR Chair in Hypertension Prevention and Control is to provide leadership to prevent and reduce high blood pressure and associated diseases using a comprehensive action plan that aligns governments, as well as non-government organizations in appropriate action. A ‘Framework’ on what actions are recommended to reduce the burden of blood pressure related disease in Canada (2011-2020) was developed and in my application I indicated the Framework would be used to guide me.

The major mechanism to achieve the ‘Chair’ mandate was the development of the Canadian Hypertension Advisory Committee (CHAC) representing national health charities and health care professional organizations (Table 1). CHAC agreed to assist in operationalizing the Canadian Hypertension Framework, which was updated in 2012 based on their input. The committee prioritized prevention of hypertension as its major function and, given the majority of hypertension is caused by unhealthy eating, further prioritized advocating for healthy food policy as the major activity. Building partnerships to create supportive environments, evolving the healthcare system and strengthening community action were rated as second, third and fourth priorities, respectively. In the 2013-2014 timeframe the Canadian Diabetes Association, the Canadian Association for Cardiovascular Prevention and Rehabilitation, and Canadian Society of Nephrology joined CHAC.

During this reporting period I have further assumed responsibilities as the President of the World Hypertension League which has a global mandate for hypertension prevention and control operating through its council of national hypertension and cardiovascular organizations. Thus, I have been increasingly working to share Canada’s best practices globally and to learn best practices of other countries to bring them to Canada.

**Table 1: Organizations Represented on the Canadian Hypertension Advisory Committee**

|   |
|---|
| <b>Canadian Hypertension Advisory Committee</b>                               |
| Canadian Association for Cardiovascular Prevention and Rehabilitation (CACPR) |

|  |
|--|
| Canadian Cardiovascular Society (CCS)  |
| Canadian Council of Cardiovascular Nurses (CCCN)   |
| Canadian Diabetes Association (CDA)  |
| Canadian Medical Association (CMA)   |
| Canadian Nurses Association (CNA)  |
| Canadian Pediatric Society (CPS)   |
| Canadian Pharmacists Association (CPhA)  |
| Canadian Society of Internal Medicine (CSIM)   |
| Canadian Society of Nephrology   |
| Canadian Stroke Network (CSN)  |
| College of Family Physicians of Canada (CFPC)  |
| Heart and Stroke Foundation (HSF)  |
| Hypertension Canada (HC)   |
| Public Health Physicians of Canada (PHPC)  |
| Canadian Institute for Health Research- Institute of Circulatory and Respiratory Health (ex officio) |

**RESEARCH FINDINGS 2013-2014 (PLEASE SEE REFERENCES AND PRESENTATIONS FOR DETAILS IN THE APPENDIX)**

**1. FRAMEWORK COMMUNICATION AND DISSEMINATION**

Operationalizing the Hypertension Framework is an ongoing priority. Many organizations have posted the framework and notified their members of the framework through various communications. The Framework and supporting resources (e.g., executive summary, slide deck, supporting publication) is housed on the website [hypertensiointalk.com](http://hypertensiointalk.com), created to support my Chair mandate. The framework has been endorsed by the following organizations to date: Canadian Council of Cardiovascular Nurses, Canadian Nurses Association, Canadian Cardiovascular Society, Canadian Stroke Network, College of Family Physicians of Canada, the Heart and Stroke Foundation, Hypertension Canada and the Public Health Physicians of Canada. The Council of Chief Medical Officers of Health has further written a letter expressing their collective support for the framework and commitment to bringing forward the concepts. The framework is mainly utilized to guide the CHAC agendas with expressed interest to update it and recirculate

**2. CHAC POLICY DEVELOPMENT**

Many of the CHAC policies are supported by publications and talks I give on an ongoing basis (see appendix).

**2.1 Marketing unhealthy food to children**

A national policy statement advocating for a broad ban on marketing unhealthy foods and beverages was developed and formally launched in 2012 through a formal media release. The statement is endorsed by 24 national and provincial organizations as well as the WHO Collaborating Centre on Nutrition Changes and Development (University of Montreal) (Table 2). The statement can be accessed here: ([http://www.hypertensiointalk.com/publications/marketing\\_to\\_children/](http://www.hypertensiointalk.com/publications/marketing_to_children/)). The focus in 2013-2014 was building awareness and support for the policy. Dissemination has included multiple summaries in CHAC member organization publications (Canadian Journal of Cardiology, Canadian Pharmacists Journal, Canadian Nurse and Canadian Journal of General Internal Medicine) and a slide set at HypertensionTALK. A summary is in press in the Canadian Family Physician. There is currently a national effort being led by the Canadian Obesity Foundation and the Heart and Stroke Foundation to form a Pan Canadian Policy Position. It has not yet been decided what

policy position will be advocated. CHAC will work with other organizations in the next reporting year to ensure as far as possible that there is a unified position.

**2.2 Healthy food procurement**

A call to action was finalized in 2014 and a summary is in press in the Canadian Journal of Cardiology. We are working to tailor a policy summary for publication in multiple clinical journals of CHAC member organizations. Of note, in 2014 the College of Family Physicians of Canada has implemented a healthy food procurement policy for their organization and Hypertension Canada has a healthy food procurement policy for the Hypertension Congress. Currently 15 organizations have endorsed (Table 3). A systematic review of the evidence that healthy food procurement interventions positively influence increase dietary behaviors has been published.

**Table 3: Healthy Food Procurement Endorsing Organizations**

|   |
|---|
| Alberta Policy Coalition for Chronic Disease Prevention       |
| Canadian Association of Cardiac Rehabilitation and Prevention |
| Canadian Association on Gerontology                           |
| Canadian Council of Cardiovascular Nurses                     |
| Canadian Diabetes Association                                 |
| Canadian Nurses Association                                   |
| The Canadian Society for Exercise Physiology                  |
| Canadian Society of Internal Medicine                         |
| Canadian Society of Nephrology                                |
| Canadian Society for Exercise Physiology                      |
| Canadian Stroke Network                                       |
| Champlain Cardiovascular Disease Prevention Network           |
| College of Family Physicians of Canada                        |
| Heart and Stroke Foundation                                   |
| Hypertension Canada   |

**2.3 Healthy food policy**

Consistent with the directions supported by the WHO, UN and other international food policy recommendations for healthy diets, in 2013/14 a short overarching position statement calling for policies to support healthy affordable food and beverages for all Canadians is under development for consideration by CHAC. To date, support has been received by the College of Family Physicians of Canada, the Canadian Pharmacists Association and Hypertension Canada.

**2.4 Fiscal policies to increase healthy eating.**

A systematic review of evidence to examine if fiscal policies can increase healthy eating and or discourage unhealthy eating has been completed and is being submitted for consideration of publication. Based on the review, a policy statement has been developed by CHAC on the topic and is in the process of being finalized for broader formalized support.

**2.5 Conflicts of Interest with the food sector**

The need for a position statement relating to the impact of conflicts of interest on healthy food policy has been supported by CHAC and a draft is being developed.

## **2.6 Call for research on diet as it relate to health and disease and for surveillance and monitoring of the food environment in Canada**

A draft call is being developed for consideration of support by CHAC

## **3 NON CHAC CANADIAN ACTIVITIES**

### **3.1 Fact sheets on Hypertension and on dietary sodium**

In partnership with Hypertension Canada, updated 2014 fact sheets for Canada on Hypertension and dietary salt were developed and are being promoted as a core resource. The fact sheets are publicly available on the HypertensionTALK and Hypertension Canada websites and will be updated annually.

### **3.2 Social Media (HypertensionTALK)**

HypertensionTALK, a website that was focused on the latest news, views, research and evidence has been realigned to the activities of CHAC, HSFC CIHR Chair in Hypertension Prevention and Control and a new project Sodium Science outlined below. The site hosts the policies of CHAC and advocacy tools for policy statement. The website is supported through other social media tools, including Twitter and Facebook. The site and twitter was used to support World Hypertension Day and World Salt Week in 2014. Since its launch, there has been a steady increase in traffic with over 21,000 hits since 2013 (~55 hits/day).

### **3.3 Sodium Reduction**

#### *Science of Salt Weekly*

With funding from the Canadian Stroke Network and the George Institute of International Health (Sydney Australia), I developed and am co-editor of a weekly med line update of clinical and population sodium science that is disseminated in the format of an e-newsletter. The weekly updates are housed on the Hypertension Chair website (<http://www.hypertensiontalk.com/science-of-salt-weekly/>). The Sodium Science project is supported by the WHO Coordinating Centre for Population Salt Reduction, the WHO Coordinating Centre for Nutrition at Warwick UK, the Pan American Health Organization WHO Salt Reduction Technical Advisory Group, The World Hypertension League and World Action on Salt and Health. Since its launch in June 2014, a total of 237 people have subscribed with an average open rate of 30%.

### **3.4 Conflicts of interest**

An analysis of representation on Federal government food policy committees with members in potential financial conflict has been published in Open Medicine and attracted media attention.

### **3.5 Outcomes Research Task Force**

During the reporting time frame I have co-chaired this Task Force for Hypertension Canada but have recently stepped down. I have ongoing discussions with the PHAC to conduct standardized analyses on national hypertension surveys and databases.

### **3.6 HSF Vascular Declaration working group**

I was a member of the group that formulated the Vascular Declaration of the Vascular Congress in 2013.

## **4 INTERNATIONAL ACTIVITIES**

### **4.1 Sodium**

#### *PAHO (Pan American Health Organization) -WHO*

On the international front, I Co-Chair a Technical Advisory Group (TAG) for PAHO-WHO on dietary salt and participate in its various subgroups. The TAG is to support countries in the America's develop and implement sodium reduction policies. I am also on the Steering committee and a member of the Salt Smart Consortium formed by PAHO of governments, non-government organizations and the private sector to accelerate salt

reduction activities in the America's. In the reporting year, the TAG has an 'in press' manuscript and a technical report on developing targets and timelines for reducing salt in food products. The TAG documents are frequently used as the standards for implementing salt reduction interventions in other WHO areas of the world. In June, I represented the TAG at the World Congress of Cardiology presenting its progress. The PAHO-WHO region has become the most advanced globally in developing policies to reduce dietary sodium although many of the policies are still very recent and in early implementation or development.

#### **4.2 Miscellaneous (WHO, government and non-governmental activities)**

I have provided consultations at governmental meetings on salt reduction in the Americas and I have been a participant and consultant to salt reduction meetings in Hong Kong where I am a member of their International Advisory Committee. I have spoken on the specific topic of the need for collaboration between iodine deficiency prevention efforts and salt reduction efforts at the WHO micronutrient meeting in Geneva (see invited presentations). I was also one of a few experts invited to attend a WHO meeting on integrating salt intake surveillance into the WHO STEPs program (STEPS is the WHO standard national surveillance program to assess non communicable diseases and risks).

I am a member of the WHO Nutrition Advisory Group and review and regularly provide input on WHO nutrition policy.

#### **4.3 Hypertension**

I became the President of the World Hypertension League Sept 2013. The League is a coalition of national hypertension organizations with a mandate for global hypertension prevention and control. Under my Presidency, the League has developed a strategic outline for hypertension prevention and control (published), an annual report template for national hypertension organizations based on their activities to prevent and control hypertension, hired a new CEO, developed and published policy statements on dietary salt, and a policy statement on assessment of blood pressure using automated blood pressure monitors and finalized policy statements on standardizing analysis of hypertension surveys and developed standardized resources for establishing blood pressure screening programs in communities. Further, the League developed recognition programs for organizations and individuals active in prevention and control of hypertension and in reducing dietary salt, now has an official journal (Journal of Clinical Hypertension), launched a new website, and increased the number of member organizations the league can communicate with (was 24 now is 50). (See appendix for more details)

### **5 PROVINCIAL- REGIONAL ACTIVITIES.**

I am co-Chair of a vascular risk reduction initiative developed by 4 strategic clinical networks of Alberta Health Services. The committee has received funding and has 7 innovative projects to improve the prevention of chronic disease through vascular risk reduction. It is hoped that the projects will improve the health and wellness of Albertans and that if successful the interventions can be adopted by other provinces. The initiative was stimulated in part by the Council of Canada where the Premiers agreed to prioritize the implementation of vascular risk reduction guidelines (C-Change guidelines).

#### **5.1 Community Programs**

As part of the DREAM Global Team (A Global Alliance against Chronic Disease funded project), I lead an intervention for healthy food procurement in Aklavik (an isolated Inuit and First Nations community near the Arctic Ocean). The project involves working with community stores to make available healthier processed foods to replace less healthy processed foods. Other aspects of the grant focus on improving hypertension management through cell phone technology in First nations and African communities. I am also a (currently inactive) member of another Global Alliance Grant to enhance hypertension care through AIDS clinics in Africa.

**RELATED PROJECT IMPLEMENTATION (SEE APPENDIX FOR PRESENTATION-BRIEFINGS, PUBLICATIONS, COMMITTEES, RECOGNITION)**

- The HSF CIHR Chair program is greatly aided by Tara Duhaney Policy Director for the Chair and CHAC. Tara has facilitated and supported the policy development process by CHAC and has been instrumental in the running of CHAC including drafting of documents.
- The implementation has been greatly aided by in kind support from the CHAC member organizations. Most of the organizational members have been in direct contact with the President and Executives of their national organizations on an ongoing basis and have had full and rapid support.
- Hypertension Canada has provided financial assistance in translating the Hypertension Framework and hosting CHAC meetings.
- The Canadian Hypertension Advisory Committee is in regular communication and meets twice a year. Detailed minutes are kept and available for review on request. HAC member organizations have also assisted financially and with in-kind support.
- The University of Calgary has allowed me to reallocate \$90,000 of the overall Chair award towards operating expenses considerably assisting in the impact that I can have.

**WHAT CAN THE HSF DO TO HELP?**

- The HSF can support my realignment of activities to the international level consistent with my Presidency of the World Hypertension League (term 2013-2015)
- Sustain current levels of support including having Manuel Arango represent the HSF on the Hypertension Advisory Committee, and continuing to consider in kind support for and advocacy of Hypertension Advisory Committee Policy documents. This can include supporting media releases and other social media and/or related communication material to promote HSF policy-supported statements. Given the HSF's strong government relations activities, opportunities to advance policy areas of alignment would be greatly appreciated.
- The HSF could assist by having a HSF CIHR Hypertension Chair symposia at the Cardiovascular Congress to aid knowledge translation.
- Continue funding for the HSFC Chair in Hypertension Prevention and Control. There are only 2 years left in my final term as Hypertension Chair and preparing for a call for an open competition to ensure the Chair is sustained would be highly desirable. I support the conditions of the current HSF Chair which indicates I would not be eligible to reapply. I strongly support that the HSF Chair position has the potential to positively impact on the health of Canadians by providing leadership to reduce the burden of hypertension related disease. If at all possible having the call for applications Dec 2014 or Jan 2015 with selection by Jan 2016 for a July 2016 start would be optimal to ensure a smooth transition of the mandate to the new Chair.
- HSF priority for sustained research funding on the role of foods in health and disease would be desirable. There is a need to allocate funding for research on the impact of dietary policy on health outcomes that could achieve the greatest health benefit. Such research could include systematic reviews that would aid policy development.

**APPENDIX (PUBLICATIONS, PRESENTATIONS, COMMITTEES, RECOGNITION, MEETINGS ATTENDED, WHL 2014 INTERIM PRESIDENTIAL REPORT FOR ISH)**

**PUBLICATIONS RELATED TO THE EFFORT JAN 2013 TO JUNE 2014 (NOTE THIS IS 1.5 YEARS AS I HAVE DIFFICULTY ASSESS WHAT WAS BEFORE JUNE AND AFTER JUNE RE I RECORD THE PUBLICATION BY YEAR NOT ½ YEAR)). ORIGINAL RESEARCH IN BOLD**

- 1) Campbell N, Legowski B, Legetic B, Ferrante D, Nilson E, Campbell C, L'Abbé M. Targets and timelines for reducing salt in processed food in the PAHO-WHO region. **J Clin Hypertension in press**
- 2) Gee ME, Campbell N, Sarrafzadegan N, Jafar T, Khalsa TK, Mangat B, Poulter N, Prabhakaran D, Sonkodi S, Whelton PK, Woodward M, Zhang X-H. Standards for the uniform reporting of hypertension in adults using population survey data: Recommendations from the World Hypertension League Expert Committee. **J Clin Hypertension in press**
- 3) Gelfer M, Mang E, Duhaney T, Campbell N. Calls for Restricting the Marketing of Unhealthy food to children: Health Care and Scientific Community is ignored by policy makers. What can we do? **Canadian Family Physician. In press**
- 4) Campbell NRC, Duhaney T, Arango M, Ashley L, Bacon SL, Gelfer M, Kaczorowski J, Mang E, Morris D, Nagpal S, Tsuyuki R, Willis K Reducing the Burden of Chronic Non-Communicable Diseases among Canadians: Healthy Food Procurement Policy. **CJC In press.**
- 5) Campbell N, Correa-Rotter R, Cappuccio F, Webster J, Lackland DT, Neal B, MacGregor GA. Proposed nomenclature for salt intake and for reductions in dietary salt. **J Clin Hypertension in press.**
- 6) Gee ME, Campbell N, Sarrafzadegan N, Jafar T, Khalsa TK, Mangat B, Poulter N, Prabhakaran D, Sonkodi S, Whelton PK, Woodward M, Zhang X-H. Standards for the uniform reporting of hypertension in adults using population survey data: Recommendations from the World Hypertension League Expert Committee. **J Clin Hypertension in press**
- 7) Campbell, N, Appel L, Cappuccio, F, Correa-Rotter, R, Hankey, G, Lackland, D, MacGregor, G, Neal B, Niebylski, M, Webster, J, Willis, K, Woodward, M. A call for quality research on salt intake and health: From the World Hypertension League and Supporting Organizations" **J Clin Hypertension. In press.**
- 8) Weber MA, Campbell NRC, Lackland DT. The Journal of Clinical Hypertension Has Become the Official Journal of the World Hypertension League. *J Clin Hypertension*. 2014;16:319.
- 9) Campbell N, Niebylski M, Lackland D. High Blood Pressure: Why Prevention and Control are Urgent and Important. A 2014 Fact Sheet from the World Hypertension League and the International Society of Hypertension. **J Clin Hypertension. In press.**
- 10) Campbell N, Niebylski M, Lackland D. 2014 Dietary salt fact sheet of the World Hypertension League, International Society of Hypertension, Pan American Health Organization Technical Advisory Group on Cardiovascular Disease Prevention through Dietary Salt Reduction, WHO Coordinating Centre on Population Centre Salt Reduction, and World Action on Salt and Health. **J Clin Hypertension. In press.**

- 11) Campbell NRC, Berbari AE, Cloutier L, Gelfer M, Kenerson JG, Khalsa TK, Lackland DT, Lemogoum D, Mangat BK, Mohan S, Myers MG, Niebylski ML, O'Brien E, Stergiou GS, Velludo Veiga E, Zhang X-H. Policy Statement of the World Hypertension League on non-invasive blood pressure measurement devices and blood pressure measurement in the clinical or community setting. *J Clin Hypertension*. 2014;16:320-322.
- 12) Houle SKD, Rosenthal M, Campbell N, Duhaney T, Tsuyuki RT, Why pharmacists should care about the marketing of unhealthy foods – A call to action for an increased role for pharmacists in public health policy. **Can Pharmacists Journal. In press.**
- 13) Clement FM, Chen G, Khan N, Tu K, Campbell NRC, Smith M, Quan H, Hemmelgarn B, McAlister FA, for the Hypertension Outcome and Surveillance Team. Primary care physician visits by patients with incident hypertension. *Can J Cardiol*. 2014;30:e653-660.
- 14) Tu K, Anderson LN, Butt DA, Quan H, Hemmelgarn BR, Campbell NR, McAlister FA, on behalf of the Hypertension Outcome and Surveillance Team Antihypertensive drug prescribing and persistence among new elderly users in Ontario, Canada. *Can J Cardiol* 2014;30:647-52
- 15) Campbell NR, Niebylski ML, World Hypertension League Executive. Prevention and Control of Hypertension. Developing a global agenda. *Curr Opin Cardiol*. 2014; Current Opinion Cardiol. 2014, 29:000–000, DOI:10.1097/HCO.0000000000000067
- 16) Niebylski M, Lu T, Campbell NRC, Arcand J, Schermel A, Hua D, Yeates K, Tobe S, Twohig P, L'Abbé M, Liu P. **Healthy Food Procurement Policies and their Impact. *Int. J. Environ. Res. Public Health* 2014, 11, 2608-2627; doi:10.3390/ijerph110302608.**
- 17) Campbell N, Pipe A, Duhaney T. Calls for Restricting the Marketing Unhealthy food to children: Canadian Cardiovascular, Health Care and Scientific Community get ignored by policy makers. What can they do? *Can J Cardiol*. 2014;30:479-81.
- 18) The Executive Board of the World Hypertension League (Campbell NRC, Lackland D, Chockalingam A and Lisheng L), and the Executive Committee of the International Society of Hypertension (Schiffirin EL, Harrap S, Touyz RM, Burrell L, Ramirez A, Schmieder R, Schutte A, Prabhakaran D). The World Hypertension League and International Society of Hypertension call on governments, non governmental organizations and the food industry to work to reduce dietary sodium. *J Hypertension* 2014;Feb;32(2):446-7 and *J Clin Hypertension*. 2014;16(2):99-100.
- 19) Mozheyko M, Eregin S, Vigdorichik A, Chazova I, Tobe S, Campbell N, Riahi F, Hughes D. **Changes in Hypertension Treatment in the Yaroslavl Region of Russia: Improvements Observed Between 2 Cross-sectional Surveys. *J Clin Hypertension*. 2013; Dec;15(12):918-24.**
- 20) Campbell N, Willis KJ, Arthur G, Jeffery B, Robertson HL, Lorenzetti DL. **Federal government food policy committees and the financial interests of the food sector. *Open Medicine*. 2013;4:107-11.**
- 21) Joffres M, Falaschetti E, Gillespie C, Robitaille C, Loustalot F, Poulter N, McAlister FA, Johansen H, Baclic O, Campbell N. **Hypertension prevalence, awareness, treatment and control in national surveys from England, the USA and Canada, and correlation with stroke and ischaemic heart disease mortality:**



- a cross-sectional study. *Br Med J Open*. 2013;3(8):e003423 doi:10.1136/bmjopen-2013-003423.
- 22) **Gee ME, Pickett W, Janssen I, Campbell NRC, Birtwhistle R. Validity of self-reported blood pressure control in people with and without diabetes attending a primary care centre. *Blood Pressure Monitoring*. 2014;19:19-25**
- 23) Campbell NRC, Lackland DT, MacGregor GA. Dietary Sodium. A perspective on recent sodium evidence, its interpretation and controversies. *J Clin Hypertension*. 2013 Nov;15(11):765-8.
- 24) **Gee ME, Pickett W, Janssen I, Johnson JA, Campbell NR. Health Behaviors for Hypertension Management in People With and Without Coexisting Diabetes *J Clin Hypertens*. 2013;15(6):389-96.**
- 25) **Walker RL, Chen G, McAlister FA, Campbell NR, Hemmelgarn BR, Dixon E, Ghali W, Rabi D, Tu K, Jette N, Quan H; Hypertension Outcome and Surveillance Team. Hospitalization for uncomplicated hypertension: an ambulatory care sensitive condition. *Can J Cardiol*. 2013 Nov;29(11):1462-9.**
- 26) Cloutier L, Morris D, Bruneau J, McLean D, Campbell N. World Health Organization Celebrates World Health Day, April 7, 2013—Focusing on Hypertension. *Can J Cardiovascular Nursing*, 2013; 23(2), 9– 11.
- 27) **The Food Monitoring Group (N Campbell, Contributor). Progress with a global branded food composition database. *Food Chemistry*. 2013;140:451–457.**
- 28) Morris D, Cloutier L, Bruneau J, McLean D, Campbell N. Bringing focus to hypertension. *Canadian Nurse* (feedback). April 2013.
- 29) Campbell N, Tsuyuki RT. Hypertension: Silent and/or Ignored. *Can Pharmacists Journal*. 2013;146:61-62.
- 30) Gelfer M, Drouin D, Dawes M, Campbell N. World Health Day. Focusing on hypertension in 2013. *Canadian Family Physician*. 2013;59:341-2.
- 31) Mohan S, Campbell N, Chockalingam A. World Health Day: Time to Effectively Address Hypertension in India. *Indian J Med Res*. 2013;137:1-5.
- 32) **Jones CA, Nanji A, Mawani S, Davachi S, Ross L, Vollman A, Aggarwal S, King-Shier K, Campbell N. Feasibility of community-based screening for cardiovascular disease risk in an ethnic community: The South Asian Cardiovascular Health Assessment and Management Program (SA-CHAMP). *BMC Public Health*. 2013,13:160.**
- 33) **Quan H, Chen G, Walker RL, Wielgosz A, Dai S, Tu K, Campbell NRC, Hemmelgarn BR, Hill MD, Johansen H, McAlister FA, Khan N for Hypertension Outcome and Surveillance Team. Incidence, cardiovascular complications and mortality of hypertension by sex and ethnicity. *Heart*. 2013;99:10 715-721.**
- 34) Campbell NRC, Feldman R, Kaczorowski J, Larochelle P. High blood pressure selected as the theme for World Health Day April 7 2013: Cup half full or half empty? *Can J Cardiol*. 2013;29:415-17.
- 35) **Quan H, Chen G, Tu K, Bartlett G, Butt DA, Campbell N, Hemmelgarn BR, Hill MD, Johansen H, Khan N, Lix LM, Smith M, Svenson L, Walker RL, Wielgosz A, McAlister FA for Hypertension Outcome and**

Surveillance Team Outcomes among 3.5 million newly diagnosed hypertensive Canadians. *Can J Cardiol.* 2013;29:592-97.

36) McAlister FA, Robitaille C, Rao D, Gillespie C, Yuan K, Loustalot F, Grover S, Joffres M, Campbell, N. The Impact of Cardiovascular Risk-Factor Profiles on Blood Pressure Control Rates in Adults From Canada and the United States. *Can J Cardiol.* 2013;29:593-605.

37) Bienek AS, Gee ME, Nolan RP, Kaczorowski J, Campbell NRC, Bancej C, Gwadry-Sridhar F, Robitaille C, Walker RL, Dai S. Methodology of the 2009 Survey on Living with Chronic Diseases in Canada – hypertension component. *Chronic Diseases and Injuries in Canada.* 2013;33:267-76.

38) Campbell NRC, McAlister FA, Quan H, for the Hypertension Outcomes Research Task Force. Monitoring and evaluating efforts to control hypertension in Canada. Why, how and what it tells us about current care gaps? *Can J Cardiol.*2013;29:564-70.

## PRESENTATIONS AND BRIEFINGS RELATED TO THE MANDATE (JULY 2013 TO JUNE 2014)

### International

2014

- April 3 Task Shifting: Who diagnoses? Who prescribes? 10 minutes + questions Expert Consultation on Population Approaches to Reducing High Blood Pressure, Bloomberg Philanthropies, New York.
- April 2 Evaluating Salt Policy Impact, 15 minutes + questions Expert Consultation on Population Approaches to Reducing High Blood Pressure, Bloomberg Philanthropies, New York.
- May 5 Hypertension as a model for NCD prevention and control. In CDC session - The global standardization of hypertension treatment project. World Congress of Cardiology, 2014, Melbourne Australia.
- May 5 Regional action on salt reduction: Case study from the Americas. National Heart Foundation of Australia- Half the salt, self the sugar, scrap the fat:saving lives through reformulation of food. World Congress of Cardiology, 2014, Melbourne Australia.
- May 6 Role of national and international organizations in prevention and control of hypertension. In a global view of what we need to know. Hypertension. World Congress of Cardiology, 2014, Melbourne Australia.
- May 7 Case study: The Canadian Hypertension Education Program (CHEP), putting evidence into practice. Iranian Heart Association - Getting high blood pressure under control in low and middle income countries. World Congress of Cardiology, 2014, Melbourne Australia.
- May 17 Hypertension and the World Hypertension League. Opening address for World Hypertension Day, and opening of the World Hypertension League regional office in Beijing. Chinese Hypertension League and guests.
- May 21 Update on salt and health, International Advisory Panel (IAP) on Reduction of Dietary Sodium and Sugars in Hong Kong, Food Safety Agency of Hong Kong
- June 14 The World Hypertension League. International Society of Hypertension International Partners Forum. Athens Greece.
- June 15 The role of health care professionals and scientists in salt reduction. Symposia on dietary salt. International Society of Hypertension. Athens Greece
- June 24 Salt iodization and salt reduction strategies: making policies coherent. WHO guideline development group meeting - nutrition actions, Geneva SZ

**2013**      **None in the time frame July –Dec 2013**

**National  
2014**

- June 7      Death by food. Council of Cardiovascular Nurses Spring meeting, Calgary
- June 1      The role of the Pharmacist in Hypertension, Canadian Pharmacists Journal Lecture, Canadian Pharmacy Association Annual General meeting, Saskatoon.
- June 1      Canadian Hypertension Education Program Recommendations. Concurrent session. Canadian Pharmacy Association Annual General meeting, Saskatoon.
- April 21     The development of a public policy and research agenda regarding HTN / salt. Krescent program, (Kidney Foundation and Canadian Society of Nephrology). Vancouver
- April 22     Food Policy for the nephrologist. Canadian Society of Nephrology, Vancouver

**2013**

- Aug 13      Death by Food. Canadian Association of Hospital Pharmacists. Plenary Speaker. Summer educational session. Calgary
- Oct 17      Reducing dietary sodium is healthy. Debate. Canadian Nurse Practitioners. Montreal

**Local/Regional  
2014**

- Jan 24      Death by food, The Department of Community Health Sciences and the Institute for Public Health. University of Calgary.
- Feb 11      Food Policy and Hypertension. 2<sup>nd</sup> year nursing class (Community health course), Mount Royal University
- Feb 12      Food Policy and Hypertension. 2<sup>nd</sup> year nursing class (Community health course), Mount Royal University
- March 18    Death by food. Wellness coordinators, City hall, City of Calgary.
- March 29    You and the food around you. Genesis Centre (YMCA), Calgary

**2013**

- Sept 10      Knowledge translation for cardiovascular risk reduction' to the VRR Screening and Prevention in Primary Care Working Group Meeting of Alberta Health Services.
- Sept 16      Knowledge translation for cardiovascular risk reduction' to the Cardiovascular Strategic Clinical Cardiovascular Network Core meeting of Alberta Health Services
- Oct 15.      Integrating health promotions into clinical practice. Rocky Mountain Internal Medicine Conference. Banff AB. 1 hour plenary talk

**RELATED COMMITTEES**

**Alberta Health Services. Cardiovascular Health and Stroke Strategic Clinical Network, member 2012-**  
Vascular Risk Reduction Initiative co-lead

**HSF Vascular Declaration working group** Member 2013

**Canadian Hypertension Advisory Committee**

Inaugural Chair 2011-

**Hypertension Canada**

Outcomes Research Task Force; co-chair

Representative to the World Hypertension League

**Canadian Society of Internal Medicine**

2006-2011 Representative to Canadian Hypertension Advisory Committee

2007-2014 Health Promotion Committee member

**Canadian Stroke Network**

2006- Policy & Priorities Committee

**Health Canada**

2011- Food Expert/Regulatory Advisory Committee

**World Hypertension League**

Executive Board member, 2012-

President 2013-

**Directorate of Food and Environmental Hygiene, Hong Kong**

International Advisory Panel (IAP) member. 2014-2017

**World Health Organization**

World Health Organization, Nutrition Advisory Group Non Communicable Disease, (NutNCD group) 2012-2016

**Pan American Health Organization/ World Health Organization**

Technical Advisory Group to mobilize cardiovascular disease prevention through dietary salt control policies and interventions. 2012-2015, Co-Chair

Education-advocacy subgroup 2012- Member,

Science subgroup 2012-, Co-chair

**Salt Smart Consortium**

Steering committee member, (Consortium of private sector, government and non government organizations to reduce dietary salt in the America's led by the Pan American Health Organization). 2012-

**Centre for Science in the Public Interest**

Scientific Advisory board member for Nutrition Action Health Letter, 2012-

**RECOGNITION**

2014 Order of Canada

2014 Fellow of the Canadian Academia of Health Sciences

2014 Dr. Howard N. Segall Award of Merit (Canadian Cardiovascular Society)

2014 Confederation of Alberta Faculty Associations Distinguished Academic Award

2013 Guenter Award for International Health from the Faculty of Medicine, University of Calgary.

#### **PARTICIPANT AT MEETINGS**

2013 Canadian Association of Hospital Pharmacists Aug  
2013 Vascular Congress Oct  
2013 Rocky Mountain Internal Medicine Conference Oct

2014 Bloomberg Philanthropies meeting on hypertension and dietary salt March  
2014 Canadian Society of Nephrology April  
2014 Reduction of Dietary Sodium and Sugars meeting in Hong Kong, Food Safety Agency of Hong Kong May  
2014 Opening of World Hypertension League regional office in Beijing. May  
2014 World Congress of Cardiology May  
2014 Canadian Pharmacist Meeting June  
2014 Canadian Council of Cardiovascular Nurses meeting June  
2014 International Society of Hypertension June  
2014 World Health Organization meeting on micronutrients, June

#### **THE WORLD HYPERTENSION LEAGUE. 2014 UPDATE**

The World Hypertension League (WHL), a coalition of national hypertension organizations is the public health counterpart to the International Society of Hypertension (ISH). The mission of the WHL is to lead and enhance efforts to prevent and control hypertension. The importance of the WHL mission is emphasized by the recent United Nations Global Health Summit on non-communicable diseases (NCDs) which agreed to 9 health targets to be achieved by 2025. The targets included a 25% reduction in hypertension prevalence and a 30% reduction in dietary salt. Further, the Global Burden of Disease Study estimated that 18% of premature deaths and 7% of global disability are related to increased blood pressure placing particular importance on the work of the WHL. Critical to the mandate of the WHL is strong collaboration and working relations with the ISH and the World Health Organization (WHO).

The WHL executive has recently published a strategic approach to hypertension prevention and control that it will be encouraging national organizations to follow (1). It has also recently conducted a needs assessment of national member organizations. The WHL will be prioritizing: 1) reductions in dietary salt, 2) improving the awareness rate of hypertension and 3) promoting the integration of hypertension management into chronic non-communicable disease programs (specifically the WHO Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings (PENs) program (2).

The WHL (with the ISH and other organizations) has developed a policy statement on dietary salt (3), and an action oriented fact sheet related to dietary salt (4). To address an emerging issue that low quality research is creating controversy and undermining efforts to reduce dietary salt (5), the WHL has responded by leading a call for quality research and the setting of research standards (6). An international coalition is currently being formed by the WHL to develop standards for the conduct of clinical and population research on dietary salt, regular systematic reviews of evidence and if required updating of dietary salt recommendations. The WHL will further aid national organizations to promote the WHL policy on dietary salt and will be developing standardized power point slides to aid knowledge translation efforts. An expert group under the WHL has also developed suggested terminology to describe dietary salt intake and reductions in dietary salt to promote the use of common terminology (manuscript under review). Individuals and organizations active in efforts to reduce dietary salt can be nominated for certificates of notable achievement or awards of excellence with the inaugural recognition being granted in 2014.

The WHL has also been active in assisting standardization and promotion of screening programs for blood pressure. A WHL work group has just developed a resource to aid blood pressure screening programs develop (soon to be on [www.whleague.org](http://www.whleague.org)). The workgroup was successful in obtaining a grant to field test the resource in Brazil, Cameroon and Canada. The resource will be revised in 2015 based on field test results and comments from end users. A separate workgroup has developed standards for analyzing blood pressure surveys (manuscript under review). The latter effort is to aid the tracking of efforts to prevent and control hypertension over time and in different jurisdictions as often surveys are analyzed using non comparable methods. With the ISH, the WHL has developed an action oriented fact sheet for hypertension and will be aiding national organizations develop similar fact sheets (7). Individuals and organizations active in efforts to prevent and control hypertension can also be nominated for certificates of notable achievement or certificates of excellence with the inaugural recognition being granted in 2014. A policy statement to support integration of hypertension management into chronic disease management programs and a work group to aid national hypertension organizations assist in that integration is in an early planning phase.

Extensive efforts have been made to increase communications from the WHL. A regular newsletter is being promoted with plans to increase its circulation and the WHL has a new website ([whleague.org](http://www.whleague.org)). A long range congress planning committee has been developed to facilitate prevention and control of hypertension with member organizations and individuals. Perhaps most importantly, the WHL now has an official journal "The Journal of Clinical Hypertension" that provides global access to high quality peer reviewed literature (8). The WHL encourages all people interested in hypertension to sign up for free access ([http://onlinelibrary.wiley.com/journal/10.1111/\(ISSN\)1751-7176](http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1751-7176)).

The WHL currently faces financial challenges but believes its future is bright and that through collaborative action the burden of blood pressure disease can be markedly reduced. ISH members are encouraged to support the WHL, especially if asked to join and support its work groups.

Norm Campbell MD President, World Hypertension League

Mark Niebylski PhD Chief Executive Officer, World Hypertension League

### **Reference List**

- (1) Campbell NRC, Niebylski M. Prevention and control of hypertension: developing a global agenda. *Curr Opin Cardiol* 2014; 29(4):324-330.
- (2) World Health Organization. WHO Package of Essential Noncommunicable (PEN) Disease Interventions for Primary Health Care in Low-Resource Settings. Report , 1-65. 2010. Geneva, Switzerland, WHO Press, World Health Organization.
- (3) Campbell N, Lackland D, Chockalingam A, Lisheng L, Schiffrin EL, Harrap S et al. The World Hypertension League and International Society of Hypertension Call on Governments, Nongovernmental Organizations, and the Food Industry to Work to Reduce Dietary Sodium. *J Clin Hypertens (Greenwich )* 2014; 16(2):99-100.
- (4) Campbell NRC, Niebylski M, Lackland DT. 2014 Dietary salt fact sheet of the World Hypertension League, International Society of Hypertension, Pan American Health Organization Technical Advisory Group on

Cardiovascular Disease Prevention through Dietary Salt Reduction, WHO Coordinating Centre on Population Centre Salt Reduction, and World Action on Salt and Health. *J Clin Hypertens*. In press 2014.

- (5) Cobb LK, Anderson CA, Elliott P, Hu FB, Liu K, Neaton JD et al. Methodological Issues in Cohort Studies That Relate Sodium Intake to Cardiovascular Disease Outcomes: A Science Advisory From the American Heart Association. *Circulation* 14 A.D.; 129(10):1173-1186.
- (6) Campbell N, Appel L, Cappuccio F, Correa-Rotter R, Hankey G, Lackland D et al. A call for quality research on salt intake and health: From the World Hypertension League and Supporting Organizations. *J Clin Hypertens*. In press 2014.
- (7) Campbell N, Niebylski M, Lackland D. High Blood Pressure: Why Prevention and Control are Urgent and Important. A 2014 Fact Sheet from the World Hypertension League and the International Society of Hypertension. *J Clin Hypertens*. In press 2014.
- (8) Weber MA, Campbell NR, Lackland DT. The journal of clinical hypertension has become the official journal of the world hypertension league. *J Clin Hypertens (Greenwich)* 2014; 16(5):319.