Healthy weight – healthy blood pressure

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A Chockalingam. Healthy weight – healthy blood pressure. *Can J Cardiol* 2010;26(5):259-260.

World Hypertension Day is an initiative of the World Hypertension League. This year's theme is "Healthy weight – healthy blood pressure". According to the World Health Organization, more than one billion people worldwide are reported to be overweight and more than 300 million people are obese. Obesity is linked to hypertension, kidney diseases and other cardiovascular diseases. Through World Hypertension Day, the World Hypertension League, in partnership with national and international organizations, aims to raise the awareness of obesity and hypertension. Simple manoeuvres such as eating healthy, being physically active, and changing nutritional and dietary behaviours are recommended.

Key Words: Diet; Hypertension; Obesity; Physical activity; World Hypertension Day

The World Hypertension League (WHL) initiated World Hypertension Day (WHD) in 2005 (1,2). Every year, May 17th is designated as WHD and is celebrated throughout the world. Each year, the WHL promotes high blood pressure awareness through a selected theme. For WHD 2010, the WHL identified obesity and overweight as important risk factors for hypertension. This year's theme is "Healthy weight – healthy blood pressure".

Enough scientific evidence exists to relate increased body weight with correspondingly increased blood pressure (2-8). The progressive renal failure in obesity-related hypertension was highlighted by Rocchini et al (9) in 1989. Obesity-related hypertension in the presence of the metabolic syndrome is linked to insulin resistance and hyperinsulinemia (10-15). Therefore, increased body weight has direct and indirect relationships with hypertension via renal and metabolic pathways (16).

The global epidemic of obesity is on the rise and the World Health Organization warns that one in six people on the planet (approximately one billion) are overweight and, alarmingly, more than 300 million of them are obese (17). Table 1 gives some facts on obesity and overweight.

The relationship between adiposity and blood pressure has been shown to be linear throughout the nonobese range (18). However, the strength of association varies among different racial and ethnic populations, as well as between developed and developing countries (19-22). Studies have shown that even moderate weight gain is associated with an increased risk of developing hypertension (20,21,23).

Effective weight management for individuals and groups at risk for developing obesity involves a range of long-term strategies. Such strategies include prevention, weight maintenance, management of comorbidities and weight loss. In recent years, a number of international working groups and agencies have called for an integrated approach for the prevention of chronic diseases, with particular attention given to the problem of obesity involving a multipronged, population-based approach, including societal support for healthy diets and regular physical activity (17,24,25). Some of the key elements of these strategies are noted in Table 2.

Un poids santé, une saine tension artérielle

La Journée mondiale de l'hypertension est une initiative de la *World Hypertension League*, dont le thème cette année est « Un poids santé, une saine tension artérielle ». D'après l'Organisation mondiale de la santé, plus d'un milliard de personnes dans le monde font de l'embonpoint et plus de 300 millions sont obèses. L'obésité est liée à l'hypertension, aux maladies rénales et à d'autres maladies cardiovasculaires. Par l'entremise de la Journée mondiale de l'hypertension, la *World Hypertension League*, en partenariat avec des organismes nationaux et internationaux, vise à sensibiliser la population à l'obésité et à l'hypertension. Des mesures simples sont recommandées, comme adopter une saine alimentation, être physiquement actif et modifier ses comportements alimentaires et diététiques.

TABLE 1
Facts on obesity and overweight

Globally, there are more than one billion overweight adults, at least 300 million of them obese

Obesity and overweight pose a major risk for chronic diseases, including type 2 diabetes, cardiovascular disease, hypertension and stroke, and certain forms of cancer

The key causes are increased consumption of energy-dense foods high in saturated fats and sugars, and reduced physical activity

Adapted from reference 17

TABLE 2
Strategies for the prevention of obesity-related cardiovascular diseases

Creating supportive population-based environments through public policies that promote the availability and accessibility of a variety of low-fat, high-fibre foods, and that provide opportunities for physical activity

Promoting healthy behaviours to encourage, motivate and enable individuals to lose weight by doing the following:

- Eating more fruit and vegetables, as well as nuts and whole grains
- Engaging in daily moderate physical activity for at least 30 min
- Cutting the amount of fatty, sugary foods in the diet
- Moving from saturated animal-based fats to unsaturated vegetable oil-based fats

Mounting a clinical response to the existing burden of obesity and associated conditions through clinical programs and staff training to ensure effective support for those affected to lose weight or avoid further weight gain

Adapted from reference 17

This year, the WHL, in collaboration with national and international organizations, is mounting a campaign to increase the public awareness of hypertension and obesity under the theme "Healthy

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Received for publication February 23, 2010. Accepted February 24, 2010

weight – healthy blood pressure” throughout the world, with participation of its national member leagues and societies.

At the international level, the following organizations have joined forces with the WHL to celebrate WHD 2010:

- International Federation of Kidney Foundations
- International Society of Nephrology
- World Action on Salt and Health
- International Society of Hypertension
- International Diabetes Federation

In Canada, the following 15 societies and associations have partnered this year:

- Canadian Hypertension Society
- Blood Pressure Canada
- Quebec Hypertension Society
- Heart and Stroke Foundation of Canada
- Heart and Stroke Foundation of Ontario
- Canadian Stroke Network
- Canadian Cardiovascular Society
- Canadian Council of Cardiovascular Nurses
- Public Health Agency of Canada
- Canadian Public Health Association
- Canadian Obesity Network
- Canadian Pharmacists Association
- Canadian Institutes of Health Research – Institute of Circulatory and Respiratory Health
- Canadian Society of Nephrology
- Canadian Association of Cardiac Rehabilitation

Both overweight and hypertension can be prevented and controlled. From an individual's perspective, prevention of both of these risk factors provides a higher quality of life and extends healthy longevity. From a national perspective, such a strategy will reduce the adverse economic and population health consequences caused by overweight and obesity.

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