



MetSC
METABOLIC SYNDROME CANADA

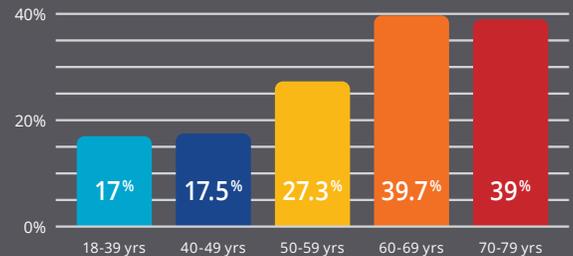
Metabolic Syndrome

is a health crisis hiding in plain sight





1 in 5 Canadians has Metabolic Syndrome (MetS)^{1,2}



Metabolic Syndrome (MetS)

is diagnosed when a patient has **3** of the following **5** conditions⁵:

High blood pressure

(\geq 130/85 mm Hg, or receiving medication)

High blood glucose levels

(\geq 5.6 mmol/L, or receiving medication)

High triglycerides

(\geq 1.7 mmol/L, or receiving medication)

Low HDL-cholesterol

(< 1.0 mmol/L in men or < 1.3 mmol/L in women)

Large waist circumference

(\geq 102 cm in men, 88 cm in women; ranges vary according to ethnicity)



The prevalence of metabolic syndrome steadily rises in older demographics^{3,4}



There is a higher incidence of diabetes, dyslipidemia and chronic kidney disease — both diagnosed and undiagnosed — in patients with MetS¹

5x

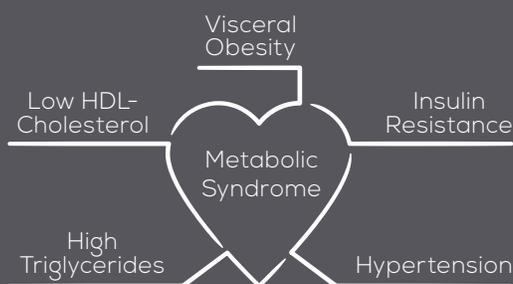
There is a 5 time increase in the risk for developing type 2 diabetes in those with MetS^{5,6}

2x

Those with MetS have twice the risk of cardiovascular disease, cardiovascular disease mortality, stroke and a 1.5 fold increase in the risk of all-cause mortality⁷



Most physicians do not use the term MetS, and most patients are unaware that they have MetS



1) Rao DP et al. Chronic Dis Inj Can 2014; 34 (1):36-45

2) Riediger ND et al. CMAJ 2011; 183(15):E1127-34.

3) Ervin RB. Natl Health Stat Report 2009;(13):1-7

4) Cameron AJ et al. Endocrinol Metab Clin North Am 2004;33(2):351-75

5) Alberti KGMM et al. Circulation 2009;120(16):1640-5

6) Ford ES et al. Diabetes Care 2008 ;31(9):1898-904

7) Mottillo S et al J Am Coll Cardiol 2010; 28;56(14):1113-32



CHANGE

Canadian Health Advanced by
Nutrition and Graded Exercise

The CHANGE Program

The CHANGE Program, created by leading health professionals at Metabolic Syndrome Canada is an innovative, **evidence-based** diet and exercise program that reverses metabolic syndrome and prevents progression to serious conditions such as diabetes, hypertension, and cardiovascular disease.



Simple intervention with a big impact

According to a national feasibility study of the CHANGE program in 3 Primary Care Clinics across Canada:

- Program was feasible with great compliance of scheduled visits
- At baseline, approximately 60% of patients had components of metabolic syndrome that were not adequately managed with medication

At 12 months:

- 25% of patients experienced a reversal of MetS, while 50% of patients demonstrated an improvement in the components of MetS
- Healthy eating index, mediterranean diet scores and VO2 max scores improved greatly
- Most patients successfully reduced their 10-year risk of heart disease

Five reasons why CHANGE works



Family Doctor

The family doctor plays an active role at the entry point of the CHANGE Program by identifying the patients' risks for MetS, assessing their suitability, encouraging them to adopt a credible diet and exercise program and by motivating them to comply with the program. The family doctor will see patients at baseline/screening, followed by visits every 3 months to monitor progress over 12 months of the program.



Developed for Busy Clinics: A Team Approach

The dietitian and kinesiologist will work closely with the family doctor to monitor the patients' progress, address challenges and offer solutions. The dietitian and kinesiologists will assess each patient at baseline and this will be followed by weekly visits for the first 3 months and then monthly visits for the remaining 9 months of the program.



Personalized Plan

The dietitian and kinesiologist will design a diet and exercise plan to fit each patient's current lifestyle, income, physical abilities and preferences, while aiming to improve the components of MetS. Compliance to the plan will be assessed throughout the 12 months and modifications will be made to ensure long term changes.



Gradual Steps

Bad habits die hard. The health care team, i.e. the family doctor, dietitian and kinesiologist, will guide each patient through the incremental steps needed to achieve their goals.



Close Follow Up

Changes take time. The health care team will provide ongoing consistent support over 12 months so that patients may overcome setbacks and achieve the goals for a healthier life.

A diet-exercise intervention is the most effective treatment for so many conditions I see on a daily basis, but it's hard to get patients to change their behaviour. In 15 years of practice, rarely have I been able to stop medication for a patient, but with the CHANGE Program, I did it several times. As a family doctor, seeing such positive outcomes is hugely rewarding.

Dr. Doug Klein, Family Physician,
Edmonton Oliver Primary Care Network

The CHANGE Program has helped physicians in our clinic successfully manage patients with deteriorating cardio-metabolic profiles. Some participants no longer have hypertension and metabolic syndrome, others have reduced diabetes or dyslipidemia medication. Patients that for 20 years hadn't reduced their waist circumference saw improvement and found the health benefits of lifestyle intervention. The team approach provides patients with the motivation to do regular physical activity and eat well with pleasure, and physicians are more confident to recommend a non-pharmacological treatment. I think that all family medicine clinics should manage chronic disease with the CHANGE Program model.

Dr. Caroline Rhéaume and Dr. Marie-Josée Filion,
Family Physicians, GMF-UMF Laval-Québec



Introduce CHANGE to your family clinic

Metabolic Syndrome Canada can help you implement the CHANGE Program in your clinic by providing you the following:

- Family doctor, dietitian and kinesiologist toolkits
- Protocol to integrate the roles of clinic team members
- Ongoing training/assistance related to the program for your staff
- Connect you with other family clinics that have implemented the program
- Options to maximize your existing funding to enable long-term lifestyle changes for your patients
- Methods of evaluating the reversal of MetS in your clinic's patients



MetSC
METABOLIC SYNDROME CANADA

For more information about
The CHANGE Program or Metabolic Syndrome Canada

**email info@metsc.ca
or visit MetSC.ca/learn**