## **Abstract Title**

Improving the Mediterranean diet score and fitness levels in practice: A preliminary look at the effects of the CHANGE lifestyle program in primary care

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## Abstract

Introduction: Metabolic Syndrome (MetS) greatly increases the risk of developing cardiometabolic diseases. An efficacious diet and exercise program aimed at reducing MetS is needed. However, the uptake of lifestyle modification programs in primary care is inconsistent and evaluation on clinically relevant outcomes is lacking.

Objectives: To report on the effects of a team-based diet and exercise program designed for primary care (The CHANGE Program) on the incidence of MetS, its components, changes in Mediterranean Diet Score (MDS; 14-point scale) and exercise fitness at 3 months.

Methods: As part of the implementation of the CHANGE program into practice, patients from two Ontario Family Health Teams (FHTs) were identified as having MetS by the Family MDs and were referred to the FHT Registered Dietitian (RD) and an Exercise Specialist (ES) for implementation of an individualized diet-exercise plan. Each patient was followed weekly X 12 weeks by the RD and ES and saw the Family MD for review of blood work at 3 months.

Results: Twenty-four patients were enrolled in the CHANGE Program. Compared to baseline, at 3 months the average rate of MetS reversal (defined as less than 3/5 components) was 17% (95% CI 5%-35%), with 33% (95% CI 16%-55%) of patients showing improvement in at least one component. MDS improved by 2.8 points from 4.8 to 7.6 (p=0.007). RD and ES visit attendance was 82% and 86%.

Conclusions: Participation in the CHANGE program was associated with a significant reduction in the incidence of MetS, improvements in MetS components, MDS and fitness levels at 3 months. Attendance at the weekly visits was not considered a barrier.

Significance to the field of dietetics: Through the CHANGE Program, RDs in primary care teams can support patients to incorporate components of the Mediterranean diet and contribute to reducing the risk of cardiometabolic diseases.