

# Healthy Eating for Prevention of the Metabolic Syndrome

Sununta Youngwanichsetha\*

Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla, Thailand

## Editorial

Metabolic syndrome is known to be a metabolic health problem among people worldwide. It is composed of abdominal obesity, insulin resistance, elevated blood glucose and dyslipidemia. These manifestations cause several organs and systems dysfunction. Many chronic diseases are associated with the metabolic syndrome including diabetes, cardiovascular disease, hypertension, stroke, renal failure and its complications.

Dietary pattern is the main cause of the metabolic syndrome. Overeating and unhealthy eating leads to accumulation of body fat and visceral fat resulting in insulin resistance. Reduction of insulin sensitivity impaired glucose tolerance. As a result, elevated of blood glucose occurs. Prolonged hyperglycemia causes endothelial cell damage of both macros vascular and micro vascular. Moreover, excess consumption of high-calorie diets containing sugar, high fructose corn syrup, trans-fat, animal fat, and saturated fat is associated with dyslipidemias and atherosclerosis. Elevated triglyceride, LDL-cholesterol, total cholesterol, and reduction of HDL-cholesterol occur among overweight and obese. Research evidences reveal that healthy diet can prevent the metabolic syndrome. Many dietary patterns are considered healthy including Dietary Approaches to Stop Hypertension (DASH), Mediterranean diet, and traditional Thai food. DASH diet guidelines suggest meal plan including 6 serving per day of lean protein; 6-8 serving per day of grain; 4-5 serving per day of legumes, nuts and seeds; 4-5 serving of each per day of fresh fruits and vegetable; 2-3 serving per day of low-fat dairy; limited of fats and sweets. For Mediterranean diet daily meal plan is composed of rice, breads, grains, potatoes, vegetables, fruits, beans, legume, nut, olive oil, cheese and yoghurt. Fish, poultry and eggs are suggested a few times per week [1]. Sweets and red meat should have a few times per month. Healthy diet is educated among population worldwide both

in school and social media. However, advertising and marketing of processed food and fast food take over consideration of healthy food. Therefore, health literacy on healthy food choices should be promoted. Traditional Thai food is rich in local vegetables and grains. It is cooked by steaming, boiling, and yumming. Examples of healthy Thai food include steamed brown rice, yellow curry, chicken stew with turmeric, steamed fish with curry paste, rolling roaster with pork or chicken, hot and sour soup of shrimp or chicken [2,3]. Each country has their own dietary pattern and styles which are good for health and can prevent the metabolic syndrome. However, since globalization, some western food comprising fast food, processed food containing trans fat and high fructose corn syrup are on sale widespread. Overeating of these high calorie foods are shown that they might cause the metabolic syndrome. Therefore, promoting of all healthy diet should be addressed worldwide to raise awareness of metabolic syndrome prevention. Additionally, modification of healthier eating behaviors can improve the metabolic syndrome manifestations and prevent its complications [4].

## References

1. Jarbol DE, Larsen PV, Gyrd-Hansen D, Sondergaard J, Brandt C, et al. (2017) Determinants of preferences for lifestyle changes versus medication and beliefs in ability to maintain lifestyle changes: a population-based survey. *Prev Med Rep* 6: 66-73.
2. Teixeira FC, Pereira FEF, Pereira AF, Ribeiro BG (2017) Metabolic syndrome's risk factors and its association with nutritional status in school children. *Prev Med Rep* 6: 27-32.
3. Van Wormer JJ, Boucher JL, Sidebottom AC, Sillah A, Knickelbine T, et al. (2017) Lifestyle changes and prevention of metabolic syndrome in the heart of new ulm project. *Prev Med Rep* 6: 242-245.
4. Youngwanichsetha S, Phumdoung S, Cersosimo E (2015) Effects of a metabolic syndrome self-management programme for women with pre-diabetes. *Focus Altern Complement Ther* 20: 74-80.

\*Corresponding author: Sununta Youngwanichsetha, Assistant Professor, Faculty of Nursing, Prince of Songkla University, Hat Yai, Songkhla, Thailand, Tel: +66-074-286537; E-mail: [sununta.y@psu.ac.th](mailto:sununta.y@psu.ac.th)

Received April 06, 2018; Accepted April 08, 2018; Published April 15, 2018

Citation: Youngwanichsetha S (2018) Healthy Eating for Prevention of the Metabolic Syndrome. *J Nutr Food Sci* 8: e143. doi: [10.4172/2155-9600.1000e143](https://doi.org/10.4172/2155-9600.1000e143)

Copyright: © 2018 Youngwanichsetha S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.