

## Global Metabolic Health Problems

Youngwanichsetha S\*

*Faculty of Nursing, Prince of Songkla University, Thailand*

\***Correspondence:** Sununta Youngwanichsetha, Faculty of Nursing, Prince of Songkla University, Thailand

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### Editorial

Metabolic health problems are considered global public health because population worldwide have overweight, obesity and associated metabolic health problems that include metabolic syndrome, diabetes, hypertensive disorders, cardiovascular disease, stroke, Alzheimer's disease, cancer and others. Its known risk factors are genetic and unhealthy behaviors.

Many research evidences show the effect of overconsumption of sugar, fructose, trans fat, animal fat, and processed foods on overweight, obesity, metabolic health and its associated diseases. These unhealthy behaviors result in hyperglycemia, dyslipidemia, mitochondrial dysfunction, advanced glycation end products, oxidative stress, free radicals, cytokines disturbances. Then, cellular and systemic pathogenesis occur that include accumulation of extra fatty acid, insulin resistance, endothelial cell dysfunction, pre-inflammatory state, and atherosclerosis. It is a trajectory of pathogenesis across the lifespan; from childhood, adolescent, adult, elderly; affecting all human body systems.

It affects many organs and body systems causing several chronic diseases and complications. For example, cardiovascular system manifestations are coronary heart disease, hypertensive disorders, and chronic kidney disease. Neurological symptoms include stroke, Alzheimer's disease, dementia, Parkinson's disease, and multiple sclerosis. Endocrine, digestive, and immune system pathological conditions are diabetes, metabolic syndrome, hyperthyroidism, hypothyroidism, systemic lupus erythematosus, fatty liver, carcinoma of prostate gland and colon. Reproductive system manifestations are polycystic ovary syndrome, breast cancer, and endometrial cancer. Musculoskeletal system symptoms are back pain, osteoarthritis and rheumatoid arthritis.

Clearly understanding and wisely modification of dietary patterns and physical activities are strongly recommended to prevent and manage this situation. Metabolic health literacy should be educated for all. Effective program for promotion of healthy dietary pattern and doing regular exercise are the best strategies to implement worldwide in order to minimize the global metabolic health problems.

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