

Would you like metabolic syndrome with that?



If your busy lifestyle frequently finds you in the drive-through lane of a fast food restaurant ordering a burger, fries and a diet coke, you may be the next in line to develop metabolic syndrome according to research published online on January 22, 2008 in *Circulation: Journal of the American Heart Association*.

Metabolic syndrome is a group of cardiovascular disease and diabetes risk factors that include increased waist circumference, hypertension, high triglycerides, low levels of high-density lipoprotein cholesterol and high fasting glucose levels. Having three or more of these factors significantly increases the risk of cardiovascular disease and diabetes. The incidence of metabolic syndrome has risen in recent years, and consumption of "junk" food combined with an increasingly sedentary lifestyle has frequently been blamed.

For the current study, Pamela L. Lutsey, MPH and Lyn M. Steffen, PhD of the University of Minnesota School of Public Health, along with June Stevens, PhD of the University of North Carolina, Chapel Hill evaluated data from 9,514 participants in the Atherosclerosis Risk In Communities (ARIC) study. Dietary questionnaires completed upon enrollment were used to categorize participants' eating habits as either a Western dietary pattern, characterized by refined grains, processed meat, fried foods, red meat, eggs and soda, or a prudent pattern, which included cruciferous vegetables and carotenoid vegetables, fruit, fish and seafood, poultry, whole grains, and low-fat dairy. The subjects, who were between the ages of 45 and 64 at the beginning of the study, were followed for nine years.

At the end of the follow-up period, 40 percent of the participants had developed metabolic syndrome, not including those who had the condition at the beginning of the study. Adjusted analysis determined that greater adherence to the Western diet was associated with an increased risk of metabolic syndrome. When individual foods were examined, eating two or more servings of meat per day was associated with a 25 percent greater risk of developing metabolic syndrome compared with eating meat only per week. Fried foods and diet soda were also linked with increased risk, while dairy products appeared to provide some protection.

"Fried foods are typically synonymous with commonly eaten fast foods, so I think it is safe to say that these findings support a link between fast-food consumption and an increase in metabolic risk factors," Dr Steffen observed.

"We specifically studied food intake," Dr Steffen noted, pointing out the difference between the current study and others that have examined particular dietary components. "When making recommendations about dietary intake it is easier to do so using the framework of real foods eaten by real people."

Concerning the mechanism involved, Dr Steffen speculated that "it may be a fatty acid mechanism since saturated fats are a common link and certainly overweight and obesity are contributing to the development of metabolic syndrome." The reason for diet soda's association with metabolic syndrome was less evident.

The American Heart Association's guidelines recommend:

- Limit saturated fat, trans fat, cholesterol and sodium.
- Minimize the intake of food and beverages with added sugars.
- Eat a diet rich in vegetables, fruits and whole-grain foods.
- Select fat-free and low-fat dairy.
- Emphasize physical activity and weight control.
- Avoid use of and exposure to tobacco products.
- Achieve and maintain healthy cholesterol, blood pressure and blood glucose levels.

Health Concern

Diabetes

Type 2 diabetes, formerly known as non-insulin-dependent

Life Extension Highlight

Bio-identical Hormone Replacement Therapy (BHRT) Seminar

diabetes, occurs when the body is no longer able to use insulin effectively and gradually becomes resistant to its effects. It is a slowly progressing disease that goes through identifiable stages. In the early stages of diabetes, both insulin and glucose levels are elevated (conditions called hyperinsulinemia and hyperglycemia, respectively). In the later stages, insulin levels are reduced, and blood glucose levels are very elevated. Although few people are aware of this crucial distinction, therapy for type 2 diabetes should be tailored to the stage of the disease.

Risk factors for type 2 diabetes include aging, obesity, family history, physical inactivity, ethnicity, and impaired glucose metabolism. Type 2 diabetes is also a prominent risk of metabolic syndrome, a constellation of conditions that includes insulin resistance along with hypertension, lipid disorders, and overweight.

The high-carbohydrate, high-plant-fiber (HCF) diet popularized by James Anderson, MD, has substantial support and validation in the scientific literature as the diet of choice in the treatment of diabetes (Anderson JW et al 2004; Hodge AM et al 2004). The HCF diet is high in cereal grains, legumes, and root vegetables and restricts simple sugar and fat intake. The caloric intake consists of 50 to 55 percent complex carbohydrates, 12 to 16 percent protein, and less than 30 percent fat, mostly unsaturated. The total fiber content is between 25 and 50 g daily. The HCF diet produces many positive metabolic effects, including the following: lowered postmeal hyperglycemia and delayed hypoglycemia; increased tissue sensitivity to insulin; reduced low-density lipoprotein (LDL) cholesterol and triglyceride levels and increased high-density lipoprotein (HDL) cholesterol levels; and progressive weight loss.

February 28-March 2, 2008, Harrah's Las Vegas, Nevada

The International Hormone Society & the American Academy of Anti-Aging Medicine is proud to present "A Practical Application of Treating Adult Hormone Deficiencies"- (Advanced course). If you are interested in learning more about the use of Hormone Replacement in age management using bio-identical hormone replacement for yourself and your patients, we highly recommend this course!

This seminar will present the data behind current treatments of aging, and will offer practical treatment programs for your patient, as well as for your own personal health. The program will be presented by David Brownstein MD, Ron Rothenberg MD, Thierry Hertoghe MD, a fourth generation practicing endocrinology physician from Belgium, and Jonathan Wright MD, America's top physicians in bioidentical hormone replacement will share the stage in the latest treatments in nutrition and hormone therapy. All physicians are practicing physicians and considered some of the leading bio-identical hormone specialists who are currently treating thousands of patients with these current treatments at their own clinics.

This course will cover:

FDA approved human growth hormone replacement in the adult GH deficient patient
Testosterone replacement for men and women.

Oxytocin, iodine and thyroid comprehensive presentations
Nutraceuticals and hormone advanced therapies
Bioidentical estradiol-estriol and progesterone replacement.
DHEA, cortisol, thyroid, melatonin, parathyroid
Hormones and disease states- sexual health-heart hormones-
osteoporosis-cancer-sleep disorder
Live consultations of audience participants
Question and answers for your problem patients

To register, call 1-866-444-9475 or visit www.ucprx.com
<http://www.lef.org/event.htm>



Featured Products

Natural Appetite Control



A recently published study in the Journal of the American Medical Association found that overweight adults who followed a program of modest caloric restriction achieved significant reductions in body fat mass in just six months, while improving the ability of cells to normally utilize insulin.

A natural plant extract discovered in Europe has been found to dramatically suppress appetite without stimulatory effects. Extracted from the nuts of the Korean pine, (*Pinus koraiensis*), pinolenic acid stimulates the release of two of the body's most powerful hunger suppressing hormones: CCK (cholecystokinin) and GLP-1 (glucagon-like peptide-1). This not only helps the body digest fats better, but also sends a feeling of satiety or "fullness" to the brain, decreasing the desire to eat and helping to control excessive

[add to cart](#)

Fucoxanthin-Slim™



Japanese and Russian scientists recently discovered a novel compound in marine vegetables that could be the best strategy to counter the growing weight problem experienced by modern societies. Fucoxanthin (FU-CO-ZAN-THIN), a natural carotenoid, possesses strong thermogenic and visceral fat reducing properties that may support a normal metabolic rate and contribute to healthy weight management.

Fucoxanthin also appears to stimulate the liver to produce DHA, a type of omega-3 fatty acid, which helps support already normal cholesterol levels, and can be used to protect against weight gain and heart problems.

[add to cart](#)

News Archive

Life Extension Update

- Diet and exercise work (here's how)
- Reduced plasma vitamin C levels linked with greater body mass index and waist circumference

What's Hot

- EPA reduces newly recognized cardiovascular disease risk factors
- Increased magnesium intake associated with lower risk of developing metabolic syndrome

Life Extension magazine

- Metabolic syndrome: the twenty-first century epidemic
- Phenotypic nutrition: a new strategy for preventing metabolic syndrome

If you have questions or comments concerning this issue or past issues of *Life Extension Update*, send them to ddye@lifeextension.com or call 954 202 7716.

For longer life,



Dayna Dye
Editor, Life Extension Update
ddye@lifeextension.com
954 766 8433 extension 7716
www.lef.org

All Contents Copyright © 1995-2009 Life Extension Foundation All rights reserved.

LifeExtension[®]

These statements have not been evaluated by the FDA. These products are not intended to diagnose, treat, cure or prevent any disease. The information provided on this site is for informational purposes only and is not intended as a substitute for advice from your physician or other health care professional or any information contained on or in any product label or packaging. You should not use the information on this site for diagnosis or treatment of any health problem or for prescription of any medication or other treatment. You should consult with a healthcare professional before starting any diet, exercise or supplementation program, before taking any medication, or if you have or suspect you might have a health problem. You should not stop taking any medication without first consulting your physician.