



## DIET SODA & YOUR HEALTH

### Ask Your Pharmacist

If you think you're making a healthier choice by drinking diet instead of regular soda, think again. A new study of 9,000 observations of middle-aged men and women reports that you could be putting yourself at risk for other serious health problems. In the *Journal Circulation* published by the American Heart Association, scientists reported that those who drink one or more soft drinks a day have a higher risk of developing metabolic syndrome, a heart disease and diabetes precursor, than people who drink less than one soda a day. The research is part of the multi-generational heart study following residents of Framingham, Massachusetts.

At the start of the study, those who reported drinking one or more soft drinks a day had a 48 percent increased prevalence of metabolic syndrome compared to those who drank less soda. Of participants who initially showed no signs of metabolic syndrome, those who drank one or more sodas a day were at 44 percent higher risk of developing it four years later.

Ramachandran Vasan of the Boston University School of Medicine and the senior author of the study reported, that the type of soda - regular or diet - seemed to be of little significance as far as the results were concerned.

*The Center for Science in the Public Interest* states that the average American gulped down about 50 gallons of soda every year. Last year, as a nation on average, we consumed 814 servings of eight ounces each. This is a jump of 24 percent over the last two decades. Soda is the single biggest liquid product being consumed across America. The number for beers were 349 servings, while milk and coffee were 312 and 261 respectively.

Doctors say this is a great reminder that everything is best in moderation, and while it may not always be the most enticing choice, a glass of water may always be your best drink.

#### WHAT IS METABOLIC SYNDROME?

Metabolic syndrome is a phrase used to describe a

cluster of conditions including high blood pressure, high cholesterol, abdominal obesity, and high blood sugar (pre-diabetes). This syndrome affects at least one out of every five overweight people. A study published in the October 2004 issue of *Diabetes Care* suggests that metabolic syndrome is increasing among American adults and could lead to further increases in diabetes and heart disease. Once detected, all of the conditions associated with metabolic syndrome can be managed or reversed.

The metabolic syndrome (also referred to as "insulin resistance syndrome" and "syndrome X") is serious, because its components can lead to complications including hardening of the arteries and an increased risk for cardiovascular and kidney disease.

According to a report issued by the Centers for Disease Control in Atlanta, the number of Americans with chronic kidney failure more than doubled during the 1990's, mainly due to soaring rates of diabetes and high blood pressure. Diabetes itself is the seventh leading cause of death among Americans, and in addition to kidney failure, it can also lead to other complications like heart disease, blindness, and amputations.

#### MEASURES FOR METABOLIC SYNDROME

Experts agree that a healthy diet in combination with regular exercise is the best way to go.

*Diet.* People who have metabolic syndrome must pay close attention to their diets, restricting refined sugars and eating a healthy balance of proteins, whole-grain breads, fruits and vegetables.

*Exercise.* Regular exercise promotes proper function of all body systems and stimulates weight management, both of which are important for diabetic patients. While most doctors recommend 30 minutes of daily aerobic exercise like walking, researchers now think that strength-training, in addition to regular aerobic exercise may be more effective in controlling insulin levels than walking alone.

*Weight Management.* Overweight diabetic patients should talk to their doctor or pharmacist about a weight loss program, since studies show that even modest amounts of weight loss can help to lower

for your best health

**Visit our pharmacy or website to learn more about diet sodas and your health.**

# DIET SODA (continued)

blood sugar levels in patients with type 2 diabetes.

## SUPPLEMENTS FOR METABOLIC SYNDROME

Along with lifestyle changes, a medically supervised intake of nutritional supplements may be helpful for support in maintaining healthy blood sugar and cholesterol levels. Our pharmacists may be able to offer you a complete multivitamin and mineral supplement with added health specific ingredients designed to deliver many of the nutrients, herbs, and antioxidants known to support a healthy lifestyle:

*Chromium* is an essential trace mineral that plays a significant role in sugar metabolism and insulin function. The most absorbable form of chromium is GTF (Glucose Tolerance Factor); chromium combined with glycine, glutamic acid, cysteine, and niacin.

*Gymnema Sylvestre* is an Ayurvedic herbal supplement that may also support healthy blood sugar levels.

*Bitter Melon* (*momordica*) is another herb found to be useful in supporting healthy blood sugar levels.

*Lipoic acid and Coenzyme Q10* play important roles as antioxidants in preventing oxidative damage due to improper sugar metabolism. Alpha lipoic acid is known as the "master antioxidant" because it not only acts as an antioxidant itself, but also restores other spent antioxidants such as vitamin C, vitamin E, and aids in the conversion of sugar into energy, thus improving metabolic fitness and energy levels.

*Magnesium, zinc, manganese, vanadium, and selenium* are minerals that play essential roles in activating enzymes which are used in the metabolism of glucose and other carbohydrates.

*Niacin* (vitamin B3) and its complement *niacinamide*, play an important role in fat, cholesterol, and carbohydrate production. It is one of the essential GTF factors.

*Vitamin C* is an important antioxidant which may help prevent some eye complications by decreasing a sugar-like substance called sorbitol which tends to accumulate in the cells of diabetics.

*Vitamin E* prevents oxidation of cholesterol, and may therefore be useful for preventing the harmful effects of high cholesterol.

*Marine Fish Oils* contain omega-3 fatty acids, the "good" fats that

maintain cell function and may help to improve cholesterol.

*Multivitamin and Mineral Supplements* contain many essential vitamins and minerals that maintain overall health, so that all parts of the body work together in harmony, free from the buildup of harmful agents like excess cholesterol.

*Garlic* has been proven to effectively lower total cholesterol by improving the "good" HDL cholesterol, and lowering the "bad" LDL cholesterol.

### CRITERIA FOR METABOLIC SYNDROME

You will likely be diagnosed with metabolic syndrome if three or more of the risk factors listed below are present.

*Abdominal obesity* (waist circumference)

Men: Greater than 40 inches (101.6 cm)

Women: Greater than 35 inches (88.9 cm)

*Triglycerides*: Greater than 149 mg/dL

*High-density lipoprotein* (HDL) cholesterol:

Men: Less than 40 mg/dL

Women: Less than 50 mg/dL

*Blood pressure*: Greater than 129/84 mm Hg

*Fasting blood glucose*: Greater than 109 mg/dL