

## The Upcoming 2005 Dietary Guidelines:

# Fruits and Vegetables: Chronic Disease Fighters

*The information source for this fact sheet is the 2005 Dietary Guidelines Advisory Committee Report; the official Dietary Guidelines for Americans will be released in early January 2005. Quotes from the report are noted in italics below.*

Together, cancer, heart disease, high blood pressure, type 2 diabetes, and stroke account for more than 75% of all deaths in the U.S. The latest scientific evidence provides even greater support for the role fruits and vegetables play in helping to protect against all of these diseases.

*Adults who increase their fruit and vegetable consumption to meet recommended nutrient intakes will also be consuming amounts of fruits and vegetables that are associated with a decreased risk of such chronic diseases such as stroke, perhaps other cardiovascular diseases, type 2 diabetes, and cancer in certain sites.*

### **Cardiovascular Disease**

Fruits and vegetables are linked to a reduction in cardiovascular disease in a variety of ways:

1. First, they provide nutrients, such as fiber, folate, potassium, and carotenoids and other phytochemicals that may directly reduce cardiovascular disease risk.
2. Second, certain nutrients may directly improve established, diet-related cardiovascular disease risk factors, such as blood pressure, hyperlipidemia, and diabetes.
3. Third, the consumption of fruits and vegetables may lead to a reduced intake of saturated fat and cholesterol.

### **Type 2 Diabetes**

The role of fruits and vegetables in prevention of type 2 diabetes tends to be associated the fiber found in fruits and vegetables. Dietary fiber helps slow the release of sugar into the bloodstream, helping keep blood sugar levels normal.

*"Current recommendations from the American Diabetes Association and the World Health Organization for the prevention of type 2 diabetes encourage the consumption of carbohydrate-containing foods such as whole grains, fruits, vegetables, and low-fat milk."*

## Certain Cancers

Greater consumption of fruits and vegetables is linked to a reduced risk of certain cancers (oral, pharynx, larynx, lung, esophagus, stomach, colon, and rectum).

*"The World Health Organization International Agency for Cancer Research has estimated that low fruit and vegetable intake contributes to 5 to 12 percent of all cancers and up to 20 to 30 percent of upper gastrointestinal cancers that may be otherwise preventable."*

- Phytochemicals in fruits and vegetables possess anti-cancer properties that reduce DNA damage and help repair DNA, thus reducing mutations that lead to cancer. These phytochemicals include carotenoids, vitamin C, flavanoids, minerals, and other bioactive compounds.
- Fruits and vegetables provide fiber, which helps move food and carcinogens through the intestines faster, reducing the amount of time they have to damage cells and contribute to cancer.

## Bring Down High Blood Pressure with Potassium-Rich Fruits and Vegetables

Diets rich in potassium can lower blood pressure and help blunt the effects of salt on blood pressure. Health authorities recommend increasing intake of fruits and vegetables rich in potassium to lower high blood pressure or keep blood pressure within normal range. Less than 10% of adult men and 1% of adult women get adequate potassium needed for healthy blood pressure.

- 90% of Americans have a lifetime chance of developing high blood pressure and nearly 1 in 3 Americans already have it.
- By increasing potassium intake, many Americans could avoid high blood pressure altogether or lower high blood pressure if they already have it.
- Great sources of potassium are spinach, cantaloupe, Brussels sprouts, mushrooms, bananas, oranges, grapefruit, and potatoes.
- Blood pressure is directly related to the balance of sodium and potassium in the blood. Americans may be consuming more sodium than they think because 75% of sodium consumed comes from processed foods and only 5 to 10% comes from added salt.

*"It has been estimated that a population-wide reduction in blood pressure could reduce stroke incidence by 27 percent and coronary heart disease by 15%. Further reduction in heart disease might be anticipated from changes in blood fats and homocysteine that come with a heart healthy diet that emphasizes fruits, vegetables, and low-fat dairy products; includes whole grains, poultry, fish, and nuts; and is limited in red meat, sweets, and beverages with added sugars."*

*"It's important to get potassium from food sources rather than supplements due to the likelihood that potassium works synergistically with other nutrients found in fruits and vegetables."*

*"A diet rich in potassium benefits blood pressure throughout the range of sodium intake and the range of blood pressure. Most people will benefit from increased potassium intake even if their salt intake is low and their blood pressure is within normal range."*

## **African Americans Can Reduce Their Blood Pressure Even More With Potassium-Rich Fruits and Vegetables**

A potassium-rich diet causes even greater blood pressure reductions for African Americans compared to non-African Americans. Such diets emphasize fruits, vegetables, whole grains, and low-fat dairy; include fish, poultry and nuts; and are limited in red meat, sweets, and beverages that contain sugar.

*"Eighty percent of African American men are blood pressure-sensitive to salt, but this number is reduced to twenty percent when a diet rich in potassium is consumed. This fact emphasizes the great benefit African Americans can achieve through increased fruit and vegetable consumption, who have a higher prevalence of high blood pressure and salt-sensitivity and a lower intake of potassium than non-African Americans."*

## Fiber Fights Heart Disease & Type 2 Diabetes

*"Diets rich in fiber have a number of important health benefits including helping to promote healthy laxation, reducing the risk of type 2 diabetes, and decreasing the risk of coronary heart disease. Health authorities recommend increased fiber intake through fruits and vegetables, including beans, and whole grains."*

Most adult Americans need about 30 grams of fiber a day to meet the anticipated new recommendations. Currently, Americans get only half that.

How does fiber work?

1. Fiber slows down the absorption of food in the gut resulting in better blood sugar control, which may help prevent diminished blood sugar control and type 2 diabetes later on.
2. Fiber lowers blood triglyceride levels. High triglycerides can damage arteries and increase risk for heart disease.
3. Fiber-rich fruits and vegetables are rich in potassium, which helps lower blood pressure, one of the biggest risk factors for heart disease.
4. Fiber-rich fruits, vegetables, and whole grains are rich in phytochemicals that may have heart-disease fighting properties.

---

*The Dietary Guidelines for Americans is a report issued by law every 5 years from the secretaries of Health and Human Services and Agriculture that "shall contain nutritional and dietary information and guidelines for the general public." The recommendations are based on the preponderance of scientific and medical knowledge on food and health current at the time of publication of the committee's report. By law, the Dietary Guidelines form the basis of Federal food, nutrition education, and information programs.*