News Release  
For Immediate Release

Potential Benefits of Dietary Fiber in Type 2 Diabetes

Dietary fiber is the structural part of the plant that human body cannot digest, so it does not contribute any energy. Dietary fiber sources include vegetables, fruits, grains, nuts, beans and legumes.

Dietary fiber contains soluble fiber and insoluble fiber. Soluble fiber dissolves in water. Food sources of soluble fiber include oats, fruits, barley, flaxseeds, legumes, and vegetables. Insoluble fiber does not dissolve in water. Food sources of insoluble fiber include wheat, corn, and oat bran; whole grain breads and cereals; fruit skins; root vegetables, such as carrots, beets, and turnips; green beans; the cabbage family, such as broccoli, Brussels sprouts, or cauliflower; and white or sweet potatoes.

Dietary fiber is beneficial for health. It can bind other food to prevent their absorption. Some dietary fibers ferment and generate various materials, such as short-chain fatty acids, which contribute to change the composition of the intestinal bacteria. Soluble and insoluble dietary fiber lowers blood glucose by slowing glucose absorption in the bowel. Evidences have shown that dietary fiber increases insulin release which increases capacity of body to use glucose and resulting in a slow and steady release of glucose from absorption in the body after eating. Dietary fiber is also found to lower the level of hemoglobin A1c which is used to identify the average plasma glucose level over prolonged periods of time, compared to blood glucose meter which just tells you what your blood sugar level is at any one time. Fiber also increases a feeling of fullness and satisfies after eating which is very helpful for losing weight. Excess weight is believed to play a role in the risk and development of type 2 diabetes. Therefore, people who eat more fiber are less at risk of developing type 2 diabetes in the first place.

For people with diabetes who are using insulin for treatment, carbohydrate counting, which is a meal planning technique for managing your blood glucose levels, helps to control blood glucose better. Fiber, which does not contribute calories and can slow glucose absorption in the bowel, can be subtracted from total carbohydrate, which is the major energy source and raise blood sugar after eating, when you are reading the food labels. Fiber saves quota for carbohydrates when people with diabetes count the carbohydrates for their meals. Increasing intake of fiber is a smart way to control glucose for people with diabetes.

Contact ______________________, Texas A&M AgriLife Extension Service ____________ County agent at _______________________, for more information.

Resources:


http://www.diabetesselfmanagement.com/Blog/Amy-Campbell/carb_counting/

Prepared by Xin (Cindy) Guo, MS, Dietetic Intern, Texas A&M University and Mary Kinney Bielamowicz, PhD, RD, LD, Regents Fellow, Professor and Nutrition Specialist, Department of Nutrition and Food Science, Texas A&M AgriLife Extension Service, Texas A&M University System. January 2013.