

LIPID CLINIC NEWS

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Does Red Meat Intake Increase Risk of Breast Cancer?

We already know that eating too much red meat may be harmful to our health. From past studies, we know that eating styles that include large amounts of red meat may increase risk of such diseases as colon cancer and heart disease. Research has suggested that it may increase risk of breast cancer as well. While most studies have focused on midlife or later, researchers from Brigham and Women's Hospital and Harvard decided to examine the correlation in premenopausal women in the Nurses Health Study II.

In order to understand this study, we must first explain that breast tumors are often classified by hormone receptor status (estrogen and progesterone). In the US, while the incidence of hormone receptor negative breast tumors has remained fairly constant, the incidence of hormone receptor *positive* tumors has been on the rise. Why is this important? Dietary factors may play a role in this type of cancer. In a previous analysis of the Nurses Health Study II, investigators found a positive correlation between animal fat intake and premenopausal breast cancer, as well as a positive association with red meat intake. The present study strengthened that data by adding 4 more years of follow-up with more than 300 breast cancer cases. They also added different categories of red meat, including bacon and hot dogs.

Methods

The Nurses Health Study II included approximately 100,000 female nurses ages 26 to 46. Diets were analyzed every four years for 1991 and 1999, and subjects were followed up through 2003. Self-reported breast cancer incidence was measured and verified by pathologic reports.

The Results?

Investigators correlated intake of various categories of red meat with breast cancer incidence. They found positive associations between the following: beef or lamb as a main dish; pork as a main dish; beef, pork or lamb as a sandwich or mixed dish; hamburger; hot dogs and other processed meats such as sausage, salami or bologna. In other words, the more subjects ate of these foods, the higher the chances of getting breast cancer.

Conclusion

High red meat intake may be a risk factor for a particular type of cancer (hormone receptor-positive breast cancer). When broken down into different types of red meat, these positive associations existed throughout most of these categories. This study confirms what we have believed for years, that a diet rich in plant foods and lower in animal products is ideal for our health. Just how much red meat is acceptable? Research has not given us a definitive answer to this question, but we generally recommend limiting red meat to 2 servings a week, and to use very lean cuts. *Arch Intern Med 2006; 166 (2253-2259)*

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Can a Vegan Diet Reduce Heart Disease Risk and Control Blood Sugar?

Diabetes incidence is relatively low among people eating vegetarian diets. Research studies involving vegetarian subjects have found improved blood sugar control, reduced heart disease risk factors and better weight management. However, most previous studies also included exercise as a component, making it difficult to filter out the effects of diet versus physical activity.

In this study of people with type 2 diabetes, subjects were randomized to receive either a low-fat vegan diet (which includes no animal products) or a diet based on the American Diabetes Association (ADA) guidelines for 22 weeks. The vegan diet consisted of 10% fat, 15% protein and 75% carbohydrate; the ADA diet consisted of 15 to 20% protein, <7% saturated fat, 60-70% carbohydrate and monounsaturated fat and cholesterol ≤ 200 mg/day. Physical activity remained constant to rule out the possibility of exercise affecting the results.

The Results: With both the vegan diet and the ADA diet, there were significant improvements in glucose control, body weight and plasma lipid concentrations. However, for participants who did not change lipid-lowering medication during the study, the LDL cholesterol fell twice as much on the vegan diet (21%) as on the ADA diet (10%). Changes were also greater for hemoglobin A1C, weight and waist circumference.

You may be wondering why the vegan diet, with its high carbohydrate composition, would improve diabetic control. This is because the vegan diet was low in fat and high in fiber, which resulted in both reduced energy density and reduced caloric intake. With decreased calorie intake, weight loss occurred which improved all of these risk factors. However, reducing dietary fat and saturated fat intake, independent of weight loss, is also known to improve insulin sensitivity.

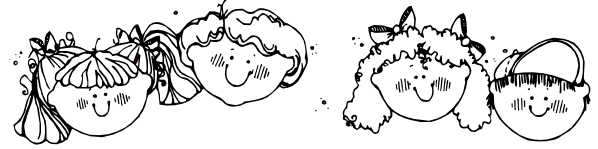
The Conclusion: A low-fat vegan diet may be a way to help control blood sugar and cardiovascular risk factors in patients with type 2 diabetes.



Research Highlights

Thickening of the Arteries Seen in Children

We tend to associate hardening of the arteries with adulthood, but a new study presented at the 2006 American Heart Association meeting indicates that this condition is seen in children as well. In a comprehensive examination of 26 earlier studies of more than 3,600 children, ages 5 to 18, there were indeed some children who exhibited a “subclinical form of atherosclerosis”, which means that they already had thickening of the arteries. These children were at a higher risk for heart disease later in life, with such conditions as obesity, high blood pressure, diabetes and hypercholesterolemia. The researchers emphasized the need for doctors to be sure and check the cholesterol levels in children with family histories of heart disease.



Blood Pressure on the Rise

The number of American adults with high blood pressure is literally “on the rise”. According to a report in *Hypertension: Journal of the American Heart Association*, the number of American adults with high blood pressure has increased to almost 1 in 3, up from 1 in 4 a decade ago (this is a 30 percent increase). These figures were derived from census data and a 1999-2000 National Health and Nutrition Examination Survey.

To make matters worse, only 2 out of 3 people who have high blood pressure actually know that they do. Only 1 in 3 has managed their blood pressure successfully. One of the reasons for this is that there are no symptoms; that’s why it’s referred to as the “silent killer”.

While this report did not examine the reason behind the rise, experts have suggested that our aging population and the growing number of overweight/obese Americans are probably contributing factors.

So how can a person lower their blood pressure? Aside from medication, a number of lifestyle modifications can reduce blood pressure. For most people, the first thing that comes to mind is reducing sodium intake. While this is certainly an important step, an eating style high in potassium (fruits and vegetables) and calcium (low-fat dairy products), low in alcohol, and lifestyle factors such as exercising more and losing weight, are also quite effective.



New Product Review

"0 Grams Trans Fat Crisco"

Since the FDA began requiring food manufacturers to list trans fat content on nutrition labels in January 2006, an increasing number of food products have been appearing on store shelves claiming to be "trans fat-free". One that we discovered and have had success with is *Crisco 0 Grams Trans Fat*. While some manufacturers are replacing partially hydrogenated oils (the source of trans fats) with palm or coconut oil, both sources of unhealthy saturated fats, this new Crisco product uses predominantly sunflower oil and soybean oil. Because it still contains some fully hydrogenated oil, it does have some saturated fat. In fact, each tablespoon contains 12 grams total fat, with 3 of those being saturated fat. This is certainly no diet food at 110 Calories, with 12 grams total fat and 3 grams saturated fat per tablespoon, but it is healthier than typical shortenings.

Trader Joe's Greek Style Nonfat Plain Yogurt

A new favorite yogurt in our office is called *Trader Joe's Greek Style Nonfat Plain Yogurt*. It has a thick, creamy texture that is hard to describe -- you'll just have to experience it yourself. One staff member adds a little honey and fresh or frozen berries for a quick and easy snack or breakfast. Our Greek dietitian, Nitza, uses it as an accompaniment to many savory dishes such as roasted vegetables, rice dishes or a variety of meat dishes. She loves to make Tzaziki sauce, a traditional Greek recipe that includes Greek Style plain yogurt, finely chopped seeded cucumber, white onion and garlic, along with white vinegar and a tiny amount of salt and dill. (If you've ever had a Greek gyro, it was probably topped with Tzaziki Sauce). It's always fun to try new food products, and this is one we think you'll enjoy.

Melissa's Steamed Lentils

We recently spotted these in the supermarket and just had to buy them! *Melissa's Steamed Lentils* are packaged ready-to-eat; all you have to do is heat and serve. Loaded with fiber (a whopping 16 g fiber per 1 cup, oh my!) and folate (1 serving provides 90% of the Daily Value), these steamed lentils are a nutritional powerhouse.

But what about flavor? The sky's the limit as to what you can do with them. Serving suggestions on the package recommend adding them warm or cold to salads with chopped shallots, parsley and vinaigrette. Another suggestion is to heat, season and serve as a side dish with meats, poultry or seafood. Of course, you could always search your favorite websites for enticing lentil recipes. One word of caution: ½ cup of these lentils contains 235 mg sodium, so be sure that the rest of the ingredients in your dish are low in salt. Otherwise this is a great way to increase your intake of legumes!!!

Is There a New Seasons in Your Neighborhood?

One of our dietitians recently attended a grocery store tour of a New Seasons Market. She was so impressed with this service (along with a variety of health-related classes) that she wanted to share it with you. If you're unfamiliar with New Seasons, it is a locally owned and operated chain of seven grocery stores that are committed to promoting sustainable agriculture in the Portland metro area. Want a unique experience in food sampling? Visit a store on the weekend for special food tastings . . . you might try a new variety of squash and be surprised how well you like it.

A few of the New Seasons Market classes are taught by Registered Dietitians. You might learn about food items to have on hand for meals in minutes at an "Extreme Pantry Makeover" store tour. The "DASH Diet Dynamics" class focuses on dietary guidelines that have been shown to lower blood pressure (this goes beyond just "low sodium" diets). Or, learn how to prevent heart disease by choosing healthier fats, cholesterol-lowering fiber and protective antioxidants at the "Eat Smart for Your Heart" class.

Looking for some new recipes to spice up your dinner menu? Visit their Solutions Desk and choose from a "zillion recipes" (according to dietitian Jenny). Or just enjoy a unique shopping experience with a variety of locally grown foods at "the friendliest store in town". Visit www.newseasonsmarket.com for more information.



Liven Up Your Sandwiches with a Panini Grill

Looking for a simple way to put some pizzazz back into that ordinary turkey sandwich? One of our dietitians is very excited about her recent purchase of a panini grill. Normally shying away from gadgets that clutter up the pantry shelves, Cindy "splurged" after a recent weekend getaway during which a friend brought along her own panini grill. They enjoyed hot, delicious sandwiches all weekend that took only minutes to prepare.

They are simple to use — heat up for a few minutes, lightly cover the bread with olive oil spray, press and serve. Her favorite is turkey breast, light provolone cheese, thinly sliced tomatoes, and a small amount of low-fat mayonnaise mixed with a dab of pesto sauce spread on sourdough bread (although any bread works well). Another staff member enjoys garden-fresh tomatoes, fresh basil and fresh mozzarella cheese. Next on the list to try: roasted vegetables such as eggplant and bell peppers! We're getting hungry already! Look for panini grills at any store that sells home appliances (she bought hers at Target).

Holiday Butternut Squash and Potato Bake

Add this flavorful dish to your holiday menu; it is sure to be a hit. Don't let the preparation time scare you—it is worth the wait.

Nonstick cooking spray
4 cups thinly sliced onions (about 1 pound)
1 ¼ pounds butternut squash, peeled, seeded and cut into ¼ inch slices (4 cups). Can be purchased at Trader Joe's.
1 ¼ pounds Yukon Gold potatoes, peeled and cut into ¼ inch slices (4 cups)
1 cup fat-free half-and-half
1 teaspoon (or less) Lite Salt
½ teaspoon freshly grated black pepper
2 cups breadcrumbs
1 cup (4 ounces) freshly grated gruyere cheese
1 ½ tablespoons chopped fresh sage (or 1 teaspoon crumbled dried sage or ½ teaspoon ground dried sage)

Directions:

Preheat oven to 350°. Spray a 9-X-13 inch baking dish with nonstick cooking spray.

Meanwhile, heat a large nonstick skillet and spray with nonstick cooking spray. Add onions and sauté until they are deeply caramelized (about 20 to 30 minutes). Alternate layers of squash and potatoes in pan. Layer cooked onions on top. In small bowl, combine half-and-half, Lite Salt and pepper. Pour over onions. Cover tightly with foil and bake 90 minutes.

Increase oven temperature to 400°. Mix breadcrumbs, cheese and sage in medium bowl. Sprinkle over the potato-onion mixture. Bake, uncovered until top is crisp and golden brown (15-20 minutes). Makes 12 servings.

Per Serving:
Calories 195
Sodium 279 mg
Fiber 4 gm

Total Fat 4 gm
Saturated Fat 2 gm
Cholesterol 11 mg

