
Diabetes Life Lines



A newsletter from your county Extension office
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The High Protein Diet Controversy

Is weight loss one of your New Year's resolutions? With all the recent media hype about high protein diets, perhaps you've considered this approach. Many people try to lose weight for health reasons. But, if you decide to go with a high protein diet, will you be improving your health or jeopardizing it?

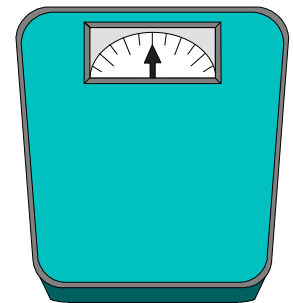
The recent publicity about high protein diets has many people confused. These diets generally allow unlimited protein and fat including large amounts of high-protein foods like meat and cheese. Prohibited are carbohydrates rich in fiber, vitamins, and minerals such as whole grains, fruits, milk, and starchy

vegetables. A typical meal might include a steak, eggs fried in butter, bacon, and cheese.

Part of the confusion stems from the media response to a recent news article published in the New York Times Magazine blaming the epidemic of obesity on low-fat diets. The article stated that carbohydrates, not fats, cause obesity. Adding fuel to the fire, results of several small weight loss studies were also published recently comparing a high protein diet with a low-fat diet. Dieters on the high protein diets actually lost more weight and their cholesterol levels didn't increase as many expected. This has many people really confused about these types of diets.

Because of the popularity of the high-protein diets, researchers have just recently began putting the diets to the test. The American Heart Association has several concerns with the initial studies:

- C So far the studies have been small, involving only 60 individuals on each type of diet
- C The studies are short-term, following dieters for only 6 months



- C There is no evidence that the weight loss could be maintained long-term
- C There is no evidence that the diet improves health long-term.

An important point is that to lose weight, you must eat less. Whether or not you eat more protein or more carbohydrate is not the primary issue. Americans are overweight because we eat too much. Our portions are too large and we are too inactive. We don't get enough physical activity to offset the amount of food we eat. Experts don't yet know the best way to lose weight. A low-fat diet doesn't work if you eat too much other food. On the other hand, you can lose weight on a high-protein diet if you eat fewer calories.

The second point is that of your health. What you do eat is important. A high-protein diet excludes lots of fruits and vegetables and other carbohydrate-containing foods that contain many of the nutrients known to help prevent diseases like heart disease and cancer. High protein diets also contain a lot of saturated fat, known to contribute to heart disease. The American Heart Association still recommends a diet based on whole grains, with plenty of fresh fruit and vegetables and a small amount of lean meat and low-fat dairy products.

American Heart Association president Dr. Robert Bonow stated that over a period of years high protein diets can be

expected to raise cholesterol levels and increase the risk of not only heart, but kidney disease. Experts say that it can also raise the risk of cancer.

Here are some suggestions to help you decide what approach to use to reduce your weight:

- C Look for a weight loss plan that works for you. We don't yet know what types of diets make it easier to lose weight and maintain it.
- C Reduce saturated and trans fats. Experts agree that we should replace fat from meat, dairy products, french fries, and ice cream with unsaturated fats.
- C Include plenty of fruits and vegetables.
- C Limit portion sizes of all foods. Think moderation.
- C Regular physical activity helps you lose weight and is important in maintaining weight loss.

There is no magic combination of carbohydrate versus fat versus protein that will cause you to lose weight quickly and keep it off. Lifestyle changes are important - develop healthy eating habits along with regular exercise to lose weight and keep it off.

Diabetes and Thyroid Disease

People with diabetes are nearly twice as likely to develop diseases of the



thyroid gland than the general population. Thyroid diseases can affect diabetes control and increase the risk of heart disease or worsen existing heart disease.

Thyroid hormones, T3 and T4, are released from the thyroid gland in the neck when the pituitary gland in the brain releases thyroid-stimulating hormone (TSH). These hormones help regulate many normal body functions and control how the body uses food for energy. Thyroid disorders can result when the thyroid produces too much thyroid hormone (hyperthyroidism) or when it does not produce enough (hypothyroidism).

Hypothyroidism is the most common thyroid disorder and is more common in older women. It is often the result of an autoimmune disease, therefore it is more common in type 1 diabetes.

Hypothyroidism increases triglycerides and LDL cholesterol, thereby increasing the risk of heart disease. Symptoms of hypothyroidism can include:

- C Fatigue
- C Depression
- C Sensitivity to cold
- C Dry, itchy skin
- C Constipation
- C Puffiness in the face
- C Decrease in insulin requirements

Hypothyroidism is treated with a thyroid hormone replacement.

Hyperthyroidism (too much thyroid hormone) can worsen diabetes control and increase insulin requirements. Once the condition is treated, by either antithyroid medications, radioactive iodine therapy, or surgery, blood glucose levels are lowered. Symptoms of hyperthyroidism can include:

- C Nervousness and shakiness
- C Irritability
- C Weight loss
- C Fast heart rate
- C Weakness
- C Worsening of blood glucose control

Because the symptoms of thyroid disease can be caused by other medical conditions, it is difficult to diagnose the disease based on symptoms. A blood test called a TSH assay is the best way to diagnose thyroid disease. If you have the symptoms listed above, ask your doctor if he or she recommends a TSH test.

How Many Diabetes Medications Do You Need?

For many years doctors had a limited number of oral medications available to treat diabetes that all worked in a similar way. Now, there are many choices of diabetes medications that work in different ways. In fact, your doctor may recommend two or three different types to



get your blood glucose under the best control possible.

There are two major problems in type 2 diabetes that cause your blood glucose



to increase - insulin resistance and not enough insulin. Years before diabetes is diagnosed, your body starts becoming resistant to its own insulin, while your liver releases more

glucose into your bloodstream. Generally, blood glucose levels first begin to increase after meals, while your fasting blood glucose remains normal. As time goes on, your body becomes unable to keep up with the increased need for insulin and your fasting blood glucose levels increase.

Oral diabetes medications lower blood glucose primarily in one of the following ways:

- 1) cause the pancreas to produce more insulin (sulfonylureas, nateglinide and repaglinide)
- 2) prevent the liver from making as much glucose (metformin)
- 3) improve insulin resistance by allowing the body to use the insulin more effectively (rosiglitazone and pioglitazone)
- 4) slow absorption of carbohydrate at meals (miglitol and acarbose)

Some types of medications (nateglinide, repaglinide, miglitol and acarbose)

are designed to prevent the large increases in glucose after meals. Others work primarily to reduce the fasting glucose levels.

Although one type of medication may have worked for you for many years, it is very likely that you will require more than one type of medication to maintain blood glucose levels close to the normal range. The type of medication combination that your doctor suggests will be based on several factors such as possible side effects, your blood glucose levels, and cost of the medication.

Recently three types of combination medications have become available in a fixed combination tablet. These all include metformin with either glyburide (Glucovance), glipizide (Metaglip), or rosiglitazone (Avandamet). The metformin works to decrease glucose production by the liver; the glyburide and glipizide increase insulin production; and the rosiglitazone makes your body more sensitive to insulin.

If your A1C is not staying below 6.5-7%, you may need to add another oral medication and/or insulin. The important thing to remember is that the major goal is to keep the blood glucose levels as close to normal as possible to delay or prevent the complications of diabetes.



Broccoli Pasta Pilaf

This tasty side-dish offers a nutritious alternative to rice pilaf.

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| 2 tablespoons olive oil | 2 cups low-sodium chicken broth |
| ½ cup sliced shiitake mushrooms | 1 tablespoon Dijon-style mustard |
| ½ cup sliced portabella mushrooms | 2 cups frozen broccoli florets |
| 1/3 cup chopped onion | 1 tablespoon slivered almonds, toasted |
| 2 medium carrots, peeled and finely chopped | 1 tablespoon ground Parmesan cheese |
| 2/3 cup orzo pasta | Fresh ground pepper to taste |

1. Heat the oil in a sauce pan over medium-high heat. Add the onion and mushrooms and sauté for about 5 minutes. Add the orzo pasta and cook about 2 minutes until orzo is lightly browned.
2. Add chicken broth and chopped carrots and bring to a boil. Simmer, covered, about 15 minutes or until orzo and carrots are tender.
3. Stir in Dijon-style mustard and slivered almonds. Add ground pepper to taste. Sprinkle with Parmesan cheese.

Serves 6. Serving size: 2/3 cup

Carbohydrate Choices: 1½ Exchanges: 1 starch, 1 vegetable, 1 fat

Calories: 168	Carbohydrate: 21 grams	Fat: 7 grams
Sodium: 68 milligrams	Cholesterol: 1 milligrams	Fiber: 5 grams

Suggested Menu

<u>Menu Item</u>	<u>Exchanges</u>	<u>Carbohydrate</u>
Lettuce and tomato salad	free	†
1 tablespoon Italian dressing	1 fat	0
2/3 cup <i>Broccoli Pasta Pilaf</i> *	1 starch, 1 vegetable, 1 fat	21 grams
1 whole wheat roll	1 starch	15 grams
2 teaspoons reduced-calorie margarine	1 fat	0
3 ounces roasted pork tenderloin	3 lean meat	0
½ cup orange/grapefruit segments	1 fruit	15

* *This issue's featured recipe* † insignificant
 Note: Portion may need to be adjusted for your meal plan.

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Dear Friend,

Diabetes Life Lines is a bi-monthly publication sent to you by your local county Extension agent.

It is written by Food and Nutrition Specialists at the University of Georgia, College of Family and Consumer Sciences. This newsletter brings you the latest information on diabetes, nutrition, the diabetic exchange system, recipes, and important events.

If you would like more information, please contact your local county Extension office.

Yours truly,

County Extension Agent

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