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# Diabetes Life Lines



A newsletter from your County Extension Office  
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## More on Medicare Diabetes Coverage

Medicare covers 80% of the cost of some diabetes supplies after your deductible is met. These supplies include blood glucose strips, blood glucose monitors, lancet devices and lancets. Each month you can get 100 test strips if you are on insulin and 100 lancets. Every 6 months, you may also get a new lancet device if needed. If you only take diabetes pills, you may only get 100 strips every three months. You may be able to get more strips and lancets if your doctor documents that they are *medically necessary*. Your pharmacy must submit the claim for your supplies. Make sure your pharmacy takes Medicare and accepts what is called the Medicare assignment. The assignment is the price that Medicare

will pay. If they do not, you may pay more money than you should.

Medicare does not cover insulin unless you use it in an insulin pump. It also does not cover supplies to inject insulin unless these are covered by the Medicare prescription drug coverage program you have selected. Insulin pumps can be covered as durable medical equipment.

A foot exam is covered every six months if you have peripheral neuropathy and loss of sensation in your feet unless you have seen a foot care professional for another reason between visits.

Medicare will cover therapeutic shoes and inserts if you have severe diabetic foot disease. The doctor who treats your diabetes must certify your need for these special shoes or inserts. A podiatrist or other qualified doctor must prescribe the shoes or inserts provided by a podiatrist, ortho-tist, prosthetist or pedorthist.



For more information about your Medicare coverage, go to [www.medicare.gov](http://www.medicare.gov) or call 1-800-MEDICARE (1-800-633-4227). On

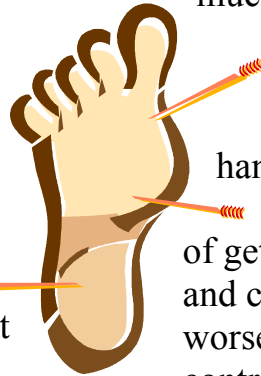
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the Medicare Web site, you can download the publication titled, *Medicare Coverage of Diabetes Supplies and Services* if you want more details.

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## Painful Diabetic Neuropathy

One of the most frustrating diabetic complications to manage is neuropathy. Diabetic neuropathy is not easy to diagnose. The pain differs for each person but most describe it as a tingling, numbing, stabbing, electrical, burning or deep aching pain. Often the pain is worse with touch and peaks at night. Many people often cannot stand even having a sheet touch their skin. Usually the feet and lower legs are affected, but it can involve the hands.



Sadly with Type 2 diabetes, neuropathy may occur within a few years of diagnosis. For people with Type 1, it often does not appear until they have had diabetes for many years. Up to 50% of people with diabetes are affected.

Since neuropathy is so common, your doctor should screen for it every year. There are three ways to check for it, but your doctor may only use one of them:

- Pushing something called a monofilament (mono-fil-a-

ment) until it bends at several spots on the bottom of your feet. The filament looks like the straw from a wisk broom.

- Touching the bones on the top of your big toes with a vibrating tuning fork.
- Pricking your skin with a small pin.

The doctor will then ask you whether you feel anything. If you do not feel much, that may show you have neuropathy.

Prevention is the best way to handle neuropathy. Tight blood glucose control may reduce risk of getting neuropathy by up to 60% and can slow how quickly it gets worse by 57%. But even with great control, you may still get diabetic neuropathy.

If you have it, what can be done? First, control your blood glucose, blood pressure, cholesterol levels and triglycerides. Also check your feet every day for any wounds, bruises, red spots or sores that need treatment. Then your doctor may try several drugs, but rarely do any of them give complete relief. Doctors often feel the medicine is successful if it reduces pain by 50% in a few weeks.

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For many years neuropathy has been treated with various antidepressants and drugs for treating epilepsy. Now there are two drugs approved by the Food and Drug Administration specifically for treating neuropathy, duloxetine and pregabalin. Also some pain relievers have been used. A unique drug is capsaicin, which is a cream that is made from chilies that is applied to the painful area. All have side effects so these drugs have to be used carefully. The doctor may need to watch blood pressure, heart, kidney and liver function, eye and skin health, changes in mental alertness and weight gain.

Since painful neuropathy is so hard to treat, you will need to work closely with your doctor. He will carefully instruct you on how to use the drugs, watch for side effects and control your diabetes. You will need to get your blood glucose under control and take the drugs as instructed. You will also have to be patient since many of these drugs take time to work.

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## **Resistance Training: Good for Your Health?**

For years, diabetes experts have recommended aerobic exercise like walking for diabetes control. Now more research summarized in the

journal, *Clinical Diabetes* indicates that resistance training may be just as good or better than aerobic training for blood glucose control.

Resistance training uses free weights or weight machines to exercise major muscle groups like your arms and legs. Usually you do 8-10 exercises 10-15 times each with the most weight you can handle about 2-3 times a week. Having a rest day between training sessions is



important because that is when the muscle repairs itself and gets stronger.

Studies using resistance training alone show that A1C levels are reduced about one percent after several months. Muscle strength, lean muscle mass, and bone density increase. The trained muscle also stores glucose better as glycogen in the muscles. Researchers believe that the increase in lean tissue and the decrease in fat tissue cause the blood glucose to improve.

One study also found that triglycerides (blood fats) and LDL-cholesterol (the bad kind of cholesterol) levels decreased after 5

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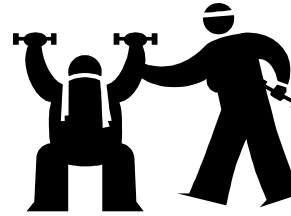
months of resistance training. When resistance training is combined with weight loss, more muscle mass is retained. In contrast, when people only lost weight, the blood glucose did not improve as much and muscle mass was lost.

In another study comparing a group doing high intensity resistance training versus a group not doing any training, 72% of the trained group reduced their diabetes medicine while only 3% of the untrained group did. In contrast, only 7% of the trained group increased diabetes medicine while 42% of the untrained group did.

The most health benefits seem to occur when resistance training is combined with aerobic training. Improvements occur in oxygen uptake, muscle strength, fasting blood glucose, circulation and insulin sensitivity. Some of this may be due to the fact that fat in and around the organs in the abdominal area decrease. LDL-cholesterol and total cholesterol go down and HDL-cholesterol, the good kind, goes up.

If resistance training and aerobic training lower A1C levels about 1% that could mean a reduction of about 48% in risk for complications like diabetic eye disease and kidney disease.

This research is promising, but more is needed to determine the right intensity for the resistance training to get the best results. Also unlike aerobic exercise like walking, most



people need some instruction and equipment to get started with resistance training. People also seem to stick to a resistance training program better if they do it in a gym or with a trainer rather than alone at home. Exercise experts will need to develop the right resistance programs that will keep people motivated without causing injury.

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## **Vegan Diet May Help Diabetes Control**

A recent study in the journal, *Diabetes Care* shows that a vegan diet helps lower blood glucose better than a usual diabetic meal plan. What is a vegan diet? It is a meal plan that excludes all animal foods including dairy foods, meat, poultry, fish and eggs. The usual diabetic meal plan includes controlled portions from all food groups with restrictions on calories, carbohydrates and fats.

In this study, the vegan meal plan only restricted the type of food consumed, not the amount consumed. The participants with diabetes who

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followed this meal plan also were told to choose *lower glycemic index foods*



like cooked dried beans and peas and green vegetables. These are carbohydrate foods that do not raise your blood glucose as much. Both

groups did not change activity levels.

People who followed both meal plans cut calories, fat, saturated fat and protein, but the vegan diet cut them the most. The vegan diet actually increased carbohydrate by about 50 grams, but the diabetes control was still better than the traditional diabetic meal plan. This may be due to the fact that the people on the vegan diet lost more weight and they doubled their fiber intake.

People on the vegan diet had their A1C values go down about 1% while those on the usual diabetic meal plan had about a half a percent drop. People on vegan meal plans may be more sensitive to their insulin because they eat much less fat (10% of calories in this study) and cholesterol. Also they consume and absorb less iron which may also improve insulin sensitivity.

People may follow the vegan meal plan more easily since they do not have to limit portions. However not all people will be willing to give up all animal foods. For them, the traditional diabetic meal plan is still a good choice. If you want to try a vegan meal plan, see a dietitian. You will need to learn what foods to consume and will need advice on how to get enough Vitamin B12, Vitamin D and calcium.



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## Recipe Corner

### Strawberry Crème Pie (adapted from www.equal.com)

#### **Filling:**

1 quart fresh strawberries  
1 tablespoon granulated artificial sweetener  
12 ounces reduced fat cream cheese, Softened  
½ cup sugar free, non-fat vanilla yogurt  
5 tablespoons granulated artificial sweetener  
1 ½ tablespoon lemon juice

#### **Glaze (optional)**

2/3 cup unsweetened apple juice  
1 tablespoon lemon juice  
2 teaspoon cornstarch  
2 tablespoons granulated artificial sweetener  
¼ teaspoon almond extract (optional)  
Few drops red food coloring

1 single baked pie crust

1. Stem and slice enough strawberries to equal one cup. Toss with 1 tablespoon of artificial sweetener. Set aside.
2. Beat cream cheese, yogurt and 5 tablespoons of artificial sweetener and 1 ½ tablespoons of lemon juice with electric mixer in medium bowl until well-blended and smooth.
3. Spread half of cheese mixture over bottom of prepared crust. Top with sliced berries, then the remaining cheese mixture.
4. Remove stems for all of remaining strawberries except one. Slice the stemmed berries in half. Place, cut side down, around the edges of the pie, with pointed ends toward the middle. Put several small slits in the remaining berry from the tip to the stem and fan. Place in the middle of the pie as a garnish.
5. For glaze if desired, combine apple juice and 1 tablespoon cornstarch in small pan. Cook and stir over medium heat until thickened and bubbly. Cook and stir 2 minutes more. Remove from heat.
6. Stir in remaining granulated artificial sweetener, almond extract and food coloring. Spoon over strawberries and top of pie. Refrigerate before serving.

#### **8 servings**

**Calories:** 255   **Carbohydrate:** 23 grams   **Fat:** 16 grams   **Protein:** 6 grams  
**Sodium:** 427 milligrams   **Fiber:** 2 grams   **Cholesterol:** 27 milligrams

**Exchanges:** 1 starch, ½ fruit, 3 fats

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**The University of Georgia**

## **Cooperative Extension**

College of Agricultural and Environmental Sciences / Athens, Georgia 30602-4356

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

Connie Crawley, Principal Writer

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Scott Angle, Dean and Director

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