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# Diabetes Life Lines



A newsletter from your County Extension Office  
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## Continuous Glucose Monitoring: The Next Step in Diabetes Management

You may not have heard of continuous blood glucose monitoring (CBGM). It is the newest option for self-monitoring of blood glucose. CBGM records glucose levels about every five minutes. These records can help you see trends in your blood glucose readings that regular monitoring can't. These monitors also have alarms to warn you when you have high or low glucose levels.

So how does it work? First, a sensor is inserted just below the skin, much the same way as insulin pump tubing is. The sensor sends glucose readings to the monitor that records an average blood glucose value every 5 minutes. Finger sticks are still needed daily to calibrate the device.

You must also record events such as meals, exercise and any insulin or other medication taken so you can see their effect on your blood glucose. After three days, with the help of your health care provider, you can assess the patterns recorded and make any adjustments needed in your diabetes care.

The current way to assess diabetes control is your A1c value. As you probably know the A1c shows your average blood glucose level over the last three months. CBGM will help show problems with blood glucose levels more quickly and accurately than waiting for your A1c results. Frequent or daily use of CBGM will help you and your medical team to adjust your diabetes care plan to fit your individual needs. For example, CBGM may show overnight lows or early morning spikes that you would not see if you monitor only a few times a day. It may also show elevated blood glucose values between meals. Some changes that CBGM can help you make are:



- Adjusting long-acting insulin doses
- Matching insulin more closely to the carbohydrate you eat
- Taking insulin at a better time before meals and snacks

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CBGM is covered by Medicare and many private insurance plans. Check with your provider to see what they will cover. Only you and your doctor can decide if the continuous glucose monitor is right for you. If your A1c and daily blood glucose readings are pretty steady, you may not need this extra help. However, if your A1c is high and you have tried everything to get it down, CBGM may be right for you.

In the future, diabetes experts hope that CBGM will be combined with insulin pumps to deliver the right dose of insulin automatically based on your current blood glucose readings. Hopefully this next innovation will appear soon.

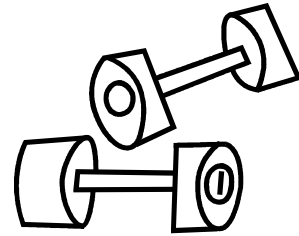
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## **Fitness Gifts for the Holidays**

You may be thinking about what to buy your friends and family for the holidays or they may be asking you what you want. Of course there is always the need for those new slippers or a flat screen TV, but you could also consider giving or getting a “gift of fitness.” These gifts range in price from just a few dollars to several thousand dollars so there is something for every price range. Here are just a few suggestions:

### **Pretty Inexpensive**

Sweat bands  
Athletic socks  
Water bottle  
Jump rope  
Exercise ball  
Exercise CDs  
Free weights  
Fitness books  
Pedometers  
Swim caps and goggles  
Exercise bands  
Yoga and pilates mats  
Bike lock  
Tennis balls  
Soccer ball, football or basketball  
Badminton set



### **Little more expensive**

Workout clothes  
Athletic shoes  
Ipod or portable CD player  
Series of exercise classes  
Dance classes  
Swim suit  
Tennis racket  
Heart monitor  
Dog to walk



### **More Expensive to Expensive**

Membership to fitness club or gym  
Bike (regular or stationary)  
Treadmill or elliptical machine  
Weight machine  
Week at a spa

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## Pneumonia and Flu Shots

September, October and November are ideal months to schedule your yearly flu shot. People with diabetes and other chronic diseases need flu shots every fall because the flu viruses change yearly. Most cases of flu occur in January or February so even getting immunized in December is still a good idea. It takes two weeks for the vaccine to protect you so getting your appointment now is smart.

More than 50% of those with diabetes do not get flu shots each year. This is sad because 10% of the deaths caused by flu happen in people with diabetes. Flu shots are very effective. One study found that the shots reduced hospitalization and death by 72% in those who had diabetes that were between the ages of 18 and 64. Another study found that both children and adults with diabetes had an 80% reduction in hospital admissions due to the flu once they got the vaccine. That is pretty impressive!

Flu shots are especially important for children over the age of 6 months. They are more likely to get the flu and spread it to other children and adults. Plus anyone living with or frequently around young children,

older adults or those with chronic diseases should get immunized.

This is also the time to get a pneumonia shot. You can get this shot any time of year, but it is easier to get both the flu and pneumonia shots at the same time. This vaccine not only protects you from pneumonia, but also from bacterial infections of the blood and brain (bacteremia and meningitis). You only need the pneumonia shot once unless you get it before the age of 65. Then you may need a booster shot 5-10 years after the first shot.



If you have a cold or other respiratory illness, don't get the vaccines until you are well. You may also want to talk to your health care provider about whether you should get immunized if you have severe allergies. Those with egg allergies definitely cannot take the flu shot since the vaccine is made in eggs.

Side effects of the shots are usually mild and last only 1-2 days. Most people only are sore where the shot is given. A few people may feel achy or have a slight fever. You may be told to wait a few minutes before leaving after the shot because allergic reactions usually happen quickly and you could be treated, if needed, immediately.

If you want more information, contact your doctor's office or health department or call the Centers for

Disease Control at 1-800-232-4636 or visit their website at [www.cdc.gov/flu](http://www.cdc.gov/flu)

## Sleep Apnea

Add another complication to diabetes – sleep apnea. Seems like everyone over the age of 40 is being diagnosed with this disorder. What is it? *Apnea* is a Greek word that means “without breath.” Most people have “obstructive sleep apnea” where the tissues in the mouth and nose prevent the air from flowing into your lungs during sleep. This can be caused by

- throat muscles and tongue that relax more than normal;
- tonsils and adenoids that are too large;
- being overweight;
- bones of the head and neck that make the airway too small.

Sleep apnea and Type 2 diabetes share one common cause – overweight and obesity. To see if you might have this disorder, answer these questions adapted from the American Sleep Apnea Association Web site:

1. Do you snore loudly every night?  
 Yes  No
2. Do you feel tired and groggy

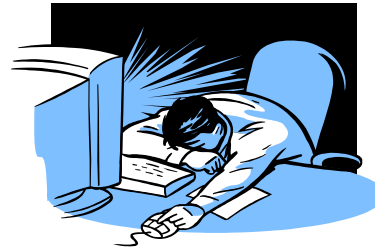
when you wake up?  
 Yes  No

3. Are you often sleepy during waking hours and/or can you fall asleep quickly?  
 Yes  No

4. Are you overweight and/or do you have a large neck?  
 Yes  No

5. Have others told you that you choke, gasp, or hold your breath during sleep?  
 Yes  No

If you answer yes, to any of these questions, talk to your doctor. He will do a physical and check your mouth, nose and throat for too much tissue. He may also order a sleep test



done at a sleep center. Many hospitals now have sleep centers

where they will record your brain activity, eye movements, muscle activity, breathing and heart rate while you sleep. They will also measure your lung function during sleep and the amount of oxygen in your blood.

If you have health insurance, check before you have the sleep test

to see whether your policy will cover it and the treatments for sleep apnea. Some insurance may want you to only use certain sleep centers or will only cover certain treatments or equipment.

If you do have sleep apnea, your treatment will depend on how severe it is.



Mild cases sometimes can be treated with a special mouth piece worn at night made by a dentist

trained to treat the disorder. However moderate to severe cases usually are treated with a CPAP machine. This machine uses air pressure to keep your airway open during sleep. If the machine does not work, you may need surgery to remove excess tissue in the throat and mouth. Nasal strips to stop snoring cannot treat sleep apnea.

You also may be referred to a dietitian for help losing weight. Other ways to control symptoms are to:

- Not smoke or drink alcohol;
- Limit the use of antidepressants and sleeping pills;
- Go to bed at regular times.

You must use the CPAP machine every day or your symptoms will return. Some people also need

treatment for allergies that may cause breathing problems.

Sleep apnea is serious. It can cause high blood pressure, heart failure, heart attack, stroke, weight gain, falling asleep during the day, accidents, memory problems, morning headaches, frequent need to urinate at night, and problems with your job and relationships. If you or your bed partner suspects you have it, see a doctor. You will be amazed how much better you feel and sleep once you are treated.

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## Recipe Corner

### Pumpkin Roll

#### You'll Need -

#### CAKE INGREDIENTS

¾ cup egg substitute  
1 cup granulated artificial sweetener  
1 cup canned pumpkin  
1 teaspoon lemon juice  
1 cup self-rising flour  
2 teaspoons ground cinnamon  
1 teaspoon ground nutmeg

#### FILLING

4 ounces reduced fat cream cheese,  
softened  
1 ½ cup frozen, light whipped  
topping, thawed  
2 tablespoon granulated  
artificial sweetener

1. Preheat oven to 350 degrees.
2. For cake, beat egg sub and 1 cup granulated artificial sweetener for 5 minutes in mixing bowl on medium speed of mixer.
3. Stir in pumpkin and lemon juice.
4. Blend in flour and spices until well combined.
5. Line jelly roll pan with waxed paper. Spread batter evenly in pan. Bake for 5-8 minute until wooden pick comes out clean. Cool 3 minutes in pan and turn out onto clean cloth and roll up from the narrow end.
6. Chill in refrigerator until completely cool.
7. For filling, beat cream cheese, whipped topping and 2 tablespoons of granulated artificial sweetener in mixing bowl on medium speed until smooth and spreadable.
8. Unroll pumpkin roll and remove from cloth. Spread with filling and re-roll. Cover and refrigerate until ready to serve. Slice into pinwheels.

#### **8 servings**

Adapted from a recipe on [www.equal.com](http://www.equal.com)

Calories: 148    Carbohydrates: 22 grams    Fat: 5 grams    Protein: 6 grams  
Sodium: 284 milligrams    Fiber: 1 gram    Cholesterol: 8 milligrams

Exchanges: 1 ½ starches, 1 fat

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The University of Georgia

# Cooperative Extension

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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

Connie Crawley, Principal Writer

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Scott Angle, Dean and Director

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