

# Diabetes Newsletter



1600 North Second Street

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## Tips and Solutions for Diabetic Retinopathy and Low Vision

### Andre Hardy

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Diabetic retinopathy is the most common diabetic eye disease and a leading cause of severe vision loss and even blindness in American adults. It is caused by changes in the blood vessels of the retina.

"I think I'm the only blind principal in Los Angeles," stated Connie Gibson after she developed diabetic retinopathy, which later led to sudden vision loss after complications from laser surgery. Now age 59, Gibson is currently legally blind, but has been able to move forward with her life. She continues working and living an active lifestyle despite her disability.

Vision-threatening diabetic retinopathy affects one in every 12 people with diabetes who are 40 or older. According to the National Eye Institute, it is one of the most common eye diseases among Americans age 40 and over that leads to some form of visual impairment like low vision, along with age-related macular degeneration, glaucoma, and cataracts.

What is diabetic retinopathy?

Diabetic retinopathy is the most common diabetic eye disease and a leading cause of severe vision loss and even blindness in American adults. It is caused by changes in the blood vessels of the retina. In some people with diabetic retinopathy, blood vessels may swell and leak fluid. In others, abnormal new blood vessels grow on the surface of the retina. The retina is the light-sensitive tissue at the back of the eye. A healthy retina is necessary for good vision.

With diabetic retinopathy, at first you may not notice changes to your vision. But over time, diabetic retinopathy can get worse and cause vision loss, affecting both eyes.

What are the four stages of diabetic retinopathy?

**Mild Nonproliferative Retinopathy.** At this earliest stage, microaneurysms occur. They are small areas of balloon-like swelling in the retina's tiny blood vessels.

**Moderate Nonproliferative Retinopathy.** Some blood vessels that nourish the retina become blocked.

**Severe Nonproliferative Retinopathy.** Many more blood vessels are blocked, depriving several areas of the retina with their blood supply. These areas send signals to the body to grow new blood vessels for nourishment.

**Proliferative Retinopathy.** At this advanced stage, the signals sent by the retina for nourishment

trigger the growth of new eye blood vessels. These new blood vessels are abnormal and fragile. By themselves, they do not cause symptoms or vision loss. However, they have thin, fragile walls that can leak, causing severe vision loss and even blindness.

### **Who is at risk for diabetic retinopathy?**

All people with diabetes-both type 1 and type 2-are at risk. That's why everyone with diabetes should get a comprehensive dilated eye exam at least once a year. The longer someone has diabetes, the more likely it is that he or she will get diabetic retinopathy. Between 40 to 45 percent of Americans diagnosed with diabetes have some stage of diabetic retinopathy. If you have diabetic retinopathy, your doctor can recommend treatment to help prevent its progression.

In addition, diabetic retinopathy may be a problem during pregnancy. To protect vision, every pregnant woman with diabetes should have a comprehensive dilated eye exam as soon as possible. Your doctor may recommend additional exams during your pregnancy.

What can I do if I have already lost some vision from diabetic retinopathy?

There are solutions! If you have lost some sight from diabetic retinopathy, ask your eye care professional about low vision services and devices that may help you make the most of your remaining vision, and even a referral to a low vision specialist. Many community organizations and agencies offer information about low vision counseling, training, and other special services for people with visual impairments. A nearby school of medicine or optometry may provide low vision services.

**Companies such as Optelec US Inc., and its subsidiary sister companies ShopLowVision.com and Low-Vision.com, provide eye care professionals and consumers with an all-inclusive and always accessible source for low vision products and educational needs.**

### **What can I do to protect my vision?**

If you have diabetes, it is important to get a comprehensive dilated eye exam at least once a year. If you have diabetic retinopathy, you may need more frequent exams. People with proliferative retinopathy can reduce their risk of blindness by 95 percent with timely treatment and appropriate follow-up care. However appropriate treatment will not cure diabetic retinopathy.

Does diabetic retinopathy have any symptoms?

Often there are no symptoms in the early stages of the disease, nor is there any pain. Because of that, it is important that those with diabetes don't wait for symptoms before having their eyes checked.

How is diabetic retinopathy treated?

During the first three stages of diabetic retinopathy, no treatment is needed unless you have macular edema. To prevent progression of diabetic retinopathy, people with diabetes should control their levels of blood sugar, blood pressure, and blood cholesterol.

Proliferative retinopathy is treated with scatter laser surgery. Two or more sessions usually are required to complete treatment. Although you may notice some loss of your side vision and slight reduction in your color and night vision, scatter laser treatment can save the rest of your sight. If the bleeding is severe, you may need a surgical procedure called a vitrectomy, in which blood is removed from the center of your eye.

Gibson said two things have helped her to continue working and functioning despite her disability: the helpful staff at her elementary school and technology that has allowed her to continue to read. Her investigation of available vision aids led her to a company called Optelec, which offers solutions ranging from desktop electronic video magnifiers and USB video magnifiers to hand-held portable and compact video magnifiers- all designed to improve the quality of life and mobility for its users.

"It [Optelec low vision aid] allows you to be independent, and that's what you want when your vision is impaired," she says. "I would tell anyone with impaired vision to get a low vision aid, whether it's for reading or for a hobby. Why give up something you love?"

**Sources:** Optelec US Inc., and National Eye Institute, National Institutes of Health (NEI/NIH)

For more information, call 800-335-7970 and visit [www.optelec.com](http://www.optelec.com) and [www.lowvision.com](http://www.lowvision.com)

## Clinton Support Group

### TOPIC

New diabetes products and medication

### DATE

Thursday,  
August 13, 2009

### TIME

10:30—11:30 a.m.

### PLACE

GVMH Medical Plaza Classroom

### Presented By:

**Jamie Ketterman, RN, BSN, CDE**

## Windsor Support Group

### TOPIC

New diabetes products and medication

### DATE

Tuesday,  
August 11, 2009

### TIME

11:30 am—12:30 p.m.

### PLACE

Windsor GVMH Medical Clinic Wellness Center

### Presented By:

**Jamie Ketterman, RN, BSN, CDE**

## Frozen Strawberry Shortcake Square

This recipe is sponsored, and provided by **Kraft®**.

Preparation time: 10 minutes, Total time: 3 hrs. 10 minutes

How To Thaw COOL WHIP:

Place unopened 8 oz. tub in refrigerator for 4 hours. Do not thaw in microwave.

Number of Servings: 12      Serving Size: 1/12th of recipe

### Ingredients:

1 8 oz tub Cool Whip Lite Whipped Topping, thawed

2 cups Strawberry frozen nonfat yogurt, softened

1 pkg (4 serving size) Jell-o Brand Strawberry Flavor Sugar Free Low Calorie Gelatin, or any red flavor,

4 cups Cubed fat free pound cake

### Nutrition Information : Amount per serving

Calories	160	Sodium	140 mg
Calories From Fat	27	Total Carbohydrate	31 g
Total Fat	3 g	Dietary Fiber	1 g
Saturated Fat	2 g	Sugars	20g
Cholesterol	0 mg	Protein	3 g

### Preparation Instructions

Stir whipped topping, yogurt and gelatin in large bowl until smooth. Stir in cake cubes. Spoon into 8-inch square pan.

Freeze 3 hours or until firm. Cut into squares. Store leftover dessert in freezer.