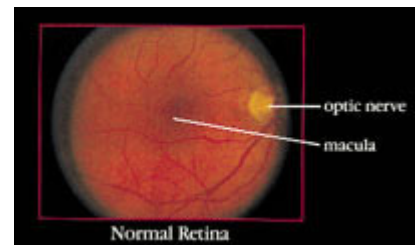


## DIABETES

Diabetes can cause serious eye problems and in extreme cases, may even lead to blindness. Regularly scheduled eye exams lead to early detection of diabetic eye disease. Effective treatment can then be initiated resulting in better long-term results.

Diabetes Mellitus is a condition which causes a person's blood sugar levels to be elevated. Over time, these elevated blood sugar levels can affect a number of organs throughout the body. These include the heart, nerves, blood vessels, kidneys and the eyes.

The eyes can be affected in different ways. Diabetes can cause transient blurred vision when a person's blood sugar levels fluctuate wildly. Too high or too low blood sugar levels will change the amount of water in the eye's lens, in turn causing a change in one's vision. Stabilizing the blood sugar will prevent this.



This is a normal retina.

Diabetes also can cause cataracts. A cataract is a cloudy or opacified lens inside the eye. This cloudiness or opacification leads to blurred vision. As a rule, people with diabetes develop cataracts earlier and faster than people who do not have diabetes.

People who have diabetes also have a higher chance of developing glaucoma. Glaucoma is a condition in which the pressure inside the eye is too high. The nerve in the back of the eye becomes affected over time, and loss of vision can result.

Diabetes can cause "strokes" affecting the nerves which are responsible for movements of the eye. When this occurs, the patient will have double vision.



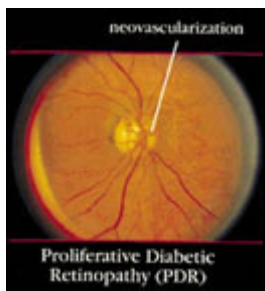
Nonproliferative diabetic retinopathy. Due to diabetes, the retinal blood vessels have become "leaky" causing bleeding and swelling.



Laser surgery is performed in order to reduce the bleeding and swelling.

Most importantly, diabetes can affect the retinal blood vessels. The retina is the tissue in the back of the eye which is responsible for processing light into vision. The blood vessels become abnormal, leading to leakage, swelling and bleeding in the retina. Also, new abnormal blood vessels can grow, leading to bleeding in the posterior chamber of the eye, as well as retinal detachments. All of these retinal problems can cause significant loss of vision.

Many of the diabetic eye problems described above can be treated effectively if diagnosed early enough. Although a person with diabetes may be unaware of having any problems with his or her eyes, one may be developing. It is imperative for a diabetic patient to get a yearly eye examination. Problems will be diagnosed before vision is affected, increasing the chances of a successful treatment.



#### Proliferative Diabetic Retinopathy (PDR)

There are several effective treatments for problems such as cataracts, glaucoma and diabetes retinopathy. Cataracts can be removed surgically. Glaucoma can be treated with drops, pills or laser surgery. Diabetic retinopathy can be treated with laser surgery. This is an example of proliferative diabetic retinopathy. New abnormal blood vessels have grown. These in turn bleed and may cause a retinal detachment.

With the doctor and patient working together, the majority of potential visual loss can be avoided. For more information about Diabetes, visit: [www.diabetes.org](http://www.diabetes.org) and [www.geteyesmart.org/eyesmart/diseases/diabetic-retinopathy.cfm](http://www.geteyesmart.org/eyesmart/diseases/diabetic-retinopathy.cfm).