

Does Diabetes affect the eye?

About four percent of the Australian population have Diabetes. Of these, more than 70 per cent will develop some changes in their eyes within 15 years of diagnosis.

OPTOMETRISTS play a fundamental role in diagnosing these conditions in their early stages, when they respond best to treatment.

Eye changes in people with Diabetes

Diabetes sometimes causes fluctuation or weakening of the focusing ability of the eye. Generally, blurred unstable vision is noticed for both long distance viewing as well as close up vision. This characteristic has also led to optometrists diagnosing diabetes in their patients. The problem eases when blood sugar levels are controlled by a doctor. Diabetes can also cause more dangerous changes in the eyes, primarily through its effects on the blood vessels in the retina.

Diabetic Retinopathy

After Diabetes has been present for some years, changes may occur at the back of the eye – the retina. Your optometrist uses an instrument called an ophthalmoscope to check for these changes. The

most thorough examination is conducted when the pupil of the eye is dilated with drops. These changes to the eye are known as Diabetic Retinopathy. Diabetic Retinopathy occurs when tiny blood vessels inside the retina are damaged. The damage can block off small blood vessels, starving areas of the retina of blood, or make the vessels leak, causing swelling and bleeding. There are two main types of retinopathy: Non-proliferative (sometimes called background) retinopathy and Proliferative retinopathy. The risk of developing retinopathy increases with the length of time you have had Diabetes. The risk is also increased when there is poor control of blood sugar levels.

Non-proliferative Retinopathy

This condition rarely causes any vision to be lost and therefore does not require treatment. Occasionally a swelling of the retina may cause hazy vision or straight lines to appear bent. Your optometrist may instruct you in a simple procedure to carry out at

home so that you can test your eyes for this condition. If your vision is affected in this way, your optometrist can confirm its cause and will refer you for appropriate treatment.

Proliferative Retinopathy

This condition is more serious and requires early treatment to prevent serious vision loss. Your optometrist can recognise signs that this condition might develop, or detect it in its early stages. Once proliferative retinopathy has been diagnosed, your optometrist will refer you to an eye specialist for further examination and probable laser or surgical treatment. Treatment of this condition has a better chance of success if it is applied very early.

Managing Diabetic Retinopathy

There is little known about prevention of any these complications, so the best management is to have regular eye examinations so that changes can be detected and treated early. It is advisable for all people with Diabetes to have yearly eye examinations. People who have been diagnosed as having retinopathy should have eye examinations more frequently than once a year. Also, regular visits to the general practitioner

and/or the endocrinologist may help to control blood sugar levels.

Diabetes and other vision conditions

• **Double Vision** This is a distressing but rare complication of diabetes. The condition is usually temporary but it may last for a few months. An optometrist can help treat it while it has effect. Diabetes is not the only cause of double vision.

• **Glaucoma** Glaucoma is more common in diabetic people than in the general community. Glaucoma is a condition in which the nerve cells which transmit information from the eye to the brain become damaged, often caused by increased pressure of the fluid in the eye. If untreated, glaucoma can cause blindness.

• **Cataract** Cataracts are more likely to occur in diabetic people at an earlier age than in non-diabetic people. A cataract is a cloudiness that can form in the lens inside the eye. If present, glaucoma and cataract will be readily detected at your regular eye examination. Your optometrist will advise the best management strategy for the condition.

At Menai Eye Care, our standard of care for all patients diagnosed with Diabetes is to check the retina thoroughly using drops to

dilate the pupil of the eye. This allows a more thorough examination. The retina is then photographed with our digital camera, which we forward on to your g.p or endocrinologist along with a report of the eye examination.

For further information about Diabetes, visit the Diabetes Australia website. www.diabetesaustralia.com.au

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Diabetes Awareness Week 2010

Commencing 11 July 2010, Diabetes Australia-NSW will take a close look at the relationship between diabetes and kidney disease during Diabetes Awareness Week. Events will take place the week of 11 July until 17 July 2010. Full details at www.diabetesaustralia.com.au/News-Events/Events_New/National-Diabetes-Week/!