

A PREVENTABLE HEALTH CRISIS

By Jan Provis*

It is time Australians got serious about losing their eyesight. This potentially preventable problem affects most of us as we age, and is a large part of the \$10 billion-a-year national cost of vision impairment. For thousands of people it means spending as much as one seventh of their lives in a state of near or complete blindness, with the loss of freedom and dependency that can entail.

Most people have no problem with taking preventative measures, like regular brushing and flossing, to save their teeth from rotting. Why most of us do little or nothing to prevent our sight from failing in older age is therefore something of a puzzle. It probably has to do with the lack of public education about vision, and how to protect it.

The bitter truth is that many people are now outliving their eyeballs. From the age of about 55 on the risk of irreversible degeneration of the macula – the small central area in the eyeball that performs almost all our useful vision – rises by five per cent a decade. By age 75 around one in three people are ‘having trouble seeing’, and consult a clinician only to be told there is little or nothing that can be done for them. With age-related macular degeneration (AMD) it’s a one-way street – there are as yet no therapies which can reliably prevent or reverse it.

The trouble with our eyes begins when we are young – and the good news is that, if we act early enough, it can be prevented or at least slowed. The bad news is that not many people seem to know this.

It all has to do with the capillaries, delicate hair-fine blood vessels that supply oxygen to the dense collection of light-sensitive nerve cells in the macula of our eye. Humans, along with other primates, have exceptional vision – but the evolutionary trade-off we have made is that we have gained in sharpness and clarity at the expense of long-term stability. So we enjoy excellent vision early in life, and tend to lose it as we age.

This loss is brought about by accumulated damage to the capillaries, which are among the first blood vessels to fail when our vascular system as a whole is deteriorating. That, in simple terms, is why smoking can send you blind – because it damages the vascular system as a whole. These capillaries in our eyes, our kidneys and elsewhere are like the proverbial canary in the coal mine, providing early warning of circulatory dangers ahead.

Damage to these fine blood vessels and the oxygen starvation that results causes the light-sensitive cells in our macula to die at an increasing rate. By the time this loss affects the fovea, the critical inner region of the macula, it's too late to do anything about it.

However there is a great deal that can be done, much earlier in life, to preserve our vision in age. We can, for example eat a diet richer in fish oils and fresh fruit and vegetables, and with less fat, salt, sugar and so on. We can take regular exercise. We can do all the things which medical experts recommend we do in order to keep our vascular system in good shape. This will keep our capillaries healthy and so preserve our sight. Evidence of the protective effects of a diet rich in fish on staving off macular degeneration are particularly strong. A diet rich in fish can even protect against the negative effects of predisposing genes.

But the evidence from the current boom in both child and adult obesity is that Australians are doing the opposite. We are laying the ground not only for an epidemic of premature death, but also an epidemic of vision loss among the survivors. The evidence that today's highly-processed diets and fast foods are responsible for ill-health on an international scale is mounting by the day and around 1.4 billion humans, almost a quarter of the population of the planet, are overweight or obese. There is a very real danger that hundreds of millions of these will suffer increased vision impairment or blindness in older age – and the world will find itself supporting the equivalent of an entire continent of the blind.

Australia has an outstanding record in preventative health care – examples being the quit smoking campaign, slip slop and slap to prevent skin cancer, and campaigns to prevent heart disease, various cancers, AIDS and diabetes. However as a culture we remain stubbornly negligent of our sight, apparently accepting vision loss as one of the unavoidable concomitants of old age.

It need not be. We understand enough about the causes of AMD to develop a major public health campaign, on a par with any of the others, to prevent it. For a few tens of millions of dollars we could potentially limit a problem that will inevitably cost our economy tens of billions – and avert loss of independence and quality of life for hundreds of thousands of ageing Australians. The time has come for Australian governments to focus on vision.

Cigarette packs already carry a warning that smoking damages sight. Maybe supermarkets, ice creameries and fast food outlets should display a similar warning that poor dietary choices can send you blind. It's a message that virtually everyone, including the young, should be capable of taking on board.

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