Studies benefit community

A diet low in glycemic index, consisting of more wholegrains and less processed food, reduces your risk of developing macular degeneration.

I know this because I was a part of the first longitudinal study in the world to show the connection between a low GI diet and serious eye disease.

The study, known as the Blue Mountains Eye Study, has been following the eye health of older people in the Blue Mountains at regular intervals since 1992. It is a cohort study which has contributed significantly to our understanding of the lifestyle factors that may prevent, or cause, serious eye disease.

Associate Professor Vicki Flood

A cohort study looks at a population group, usually over a significant period of time, and gathers information about lifestyle and health outcomes. It follows the regular habits of individuals at specific intervals and analyses how those habits may have affected the participants’ health outcomes.

For example, the Blue Mountains Eye Study also found that people who eat fish once to twice a week are much less likely to develop macular degeneration. We can say this with confidence because we have information about the diets of people in the study and were able to compare the dietary differences between those who had, or had developed, eye disease and those who did not.

Another successful and well-known cohort study is the Dunedin Multidisciplinary Health and Development Study. It began studying a group of more than 1000 babies at birth between 1972 and 1973. These individuals have been followed at regular intervals ever since.

There have been hundreds of research publications detailing findings from this study. One of the most recent looked at young children’s self-control skills — such as self-discipline and perseverance — which predicted their health, wealth and criminal history in later life, regardless of IQ or social background.

These are just a few examples of the value of cohort studies, which provide us with a great deal of information about how our lifestyle affects our life outcomes. Yet there are a number of factors that are critical to successful cohort studies such as these.
Firstly, the population group involved should be broadly representative of the entire population in that age group.

Secondly, these studies need to be focused on a research question relevant to the population group. This can assist in attracting and maintaining funding over the long term. It is rare that a cohort study will be funded for its entirety when it begins.

Finally, the region that the cohort study is based in generally needs to be stable to ensure ongoing access to participants.

One of the biggest challenges for cohort studies is keeping participants in the study over time – there are often drop-outs due to people moving away or changes in circumstances.

The Illawarra is an ideal location for a cohort study. Its demographic profile broadly represents the nation, it has a stable and cohesive population, and it has a mix of urban and regional environments.

There are several potential projects in the wings for this region and the benefits that a cohort study can bring to the region are many, such as consolidating the region’s reputation for excellence in health and medical research.

The Illawarra Health and Medical Research Institute is providing seed funding to a trial of a birth cohort study in the Illawarra region, and pregnant women will be asked to participate in this cohort study. Stay tuned for updates.

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