

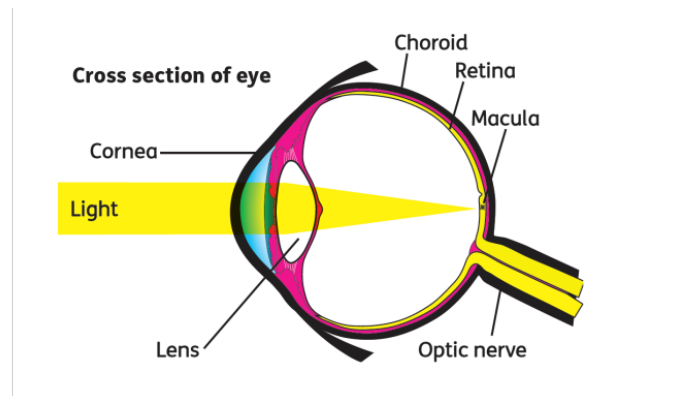
## Macular Degeneration

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Macular Degeneration (MD) is an eye health condition that affects people usually over the age of 60 and is one of the leading causes of blindness in Australia today. This modern health epidemic is expected to triple over the next 25 years so we at Buck and Todd take the time to investigate fully for any signs or symptoms of Macular Degeneration with patients of all ages. The cause of MD is unknown but it is more common among smokers, older people, women and those who have family history of MD.

### What is the Macular?

The Macular is the central portion of your retina that detects processes what you see directly in your central vision, making it a key worker of your vision. The Macular translates light passing through the eye into the images you see. This allows us to focus on small details. The macular is responsible for your central vision, letting you see what objects directly in front of you. This allows us to perform everyday activities such as reading, focus on tiny movements, recognise specific colours and see tiny the difference between faces.



Over time, the macular can deteriorate due to age and exposure to light. Once the Macular is damaged, you start to lose your central vision. Macular degeneration may occur without any symptoms, which is why you should get annual eye health check-ups to monitor any changes when you're 50 and older.

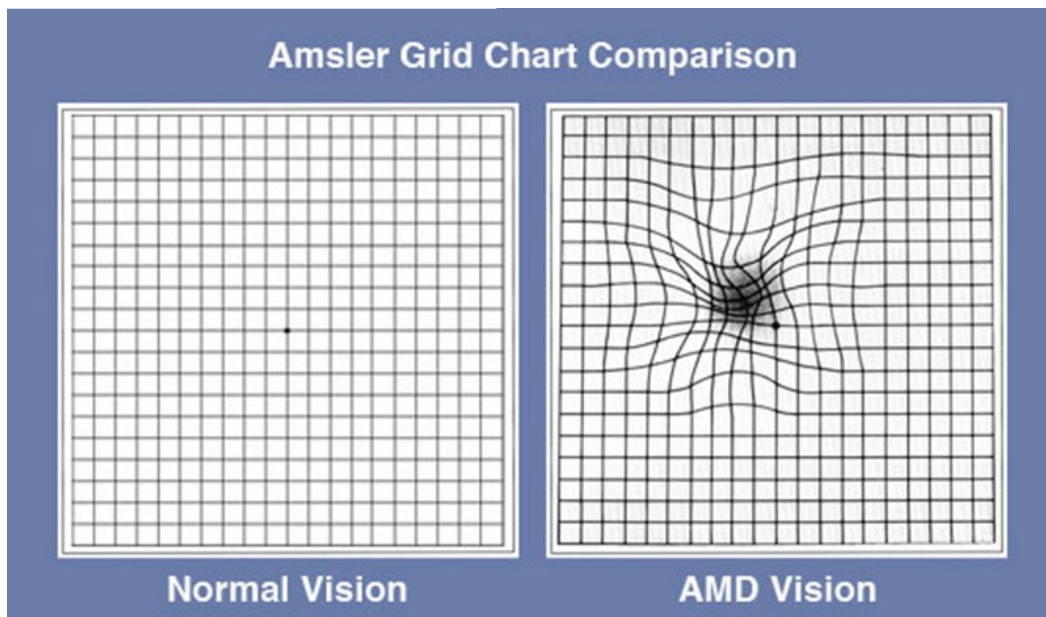
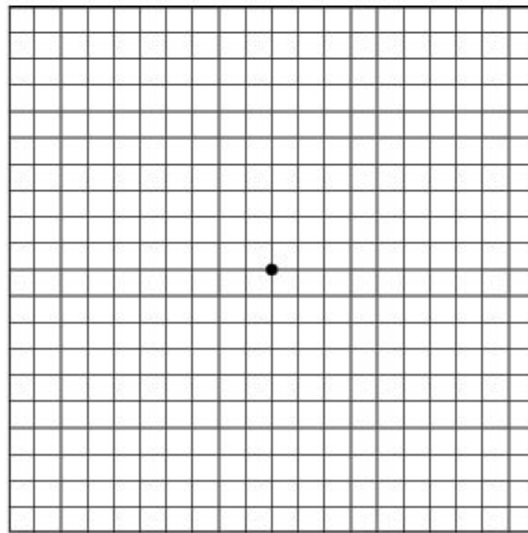
### Common symptoms of Macular Degeneration:

- Central or detailed vision is blocked by dark patches or empty spaces
- Straight lines appear wavy
- Images become blurred, needing brighter light to read
- Decreased night vision and colours become hard to distinguish

At Buck and Todd we strive to create a reliable baseline of your macular health and monitor any changes at every visit. We do this by using an Optical Coherence Tomography (OCT) to take images of your macula to measure its size, shape and to observe the quality of the layers of your retina. You can also monitor yourself at home by using the below Amsler Grid chart to test your central vision. Keeping it on the fridge is handy so you can have it directly at eye level.

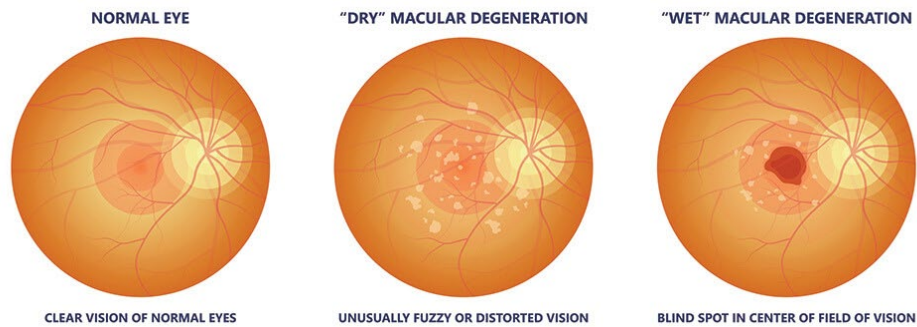
### Amsler Chart

1. View this page at eye level where light is consistent and without glare.
2. Always keep the Amsler Chart the same distance from your eyes each time you test.
3. Test each eye separately.
4. Put on your reading glasses and cover one eye.
5. Fix your gaze on the centre black dot.
6. Keeping your gaze fixed make yourself aware of the rest of the grid.
7. Check for distorted or missing lines, or any dark patches.
8. Mark the defect on the chart.
9. Call us immediately if you notice new abnormalities, or if they are getting worse.
10. Contact details and location map are overleaf.



There are two common types of age related Macular Degeneration: Wet and Dry. Dry Macular Degeneration is the more common of the two and less severe. It causes reduced or fuzzy central vision due to the breakdown of the inner layers of the macula, total blindness is rare as the sides of your vision aren't affected. Dry MD can affect one or both eyes, when only one eye is affected you may not notice any visual changes as your good eye may be compensating. There is no definite cause for dry macular degeneration but research has suggested that genetics and environmental factors

like diet and smoking are factors. Wet MD can develop in different ways. Sometimes irregular blood vessel growth can affect the macular when forming from the Choroid (white outer layer of the eye) under and into the macular. This is called Choroidal Neovascularisation. The Choroid is the layer blood vessels between the outer firm coat of the eye. Vision loss can occur when these blood vessels leak fluid or blood into the Macular. Due to this leaking, the symptoms can come on quite suddenly even within a few days you can notice your vision deteriorating.



Some preventative measures include:

- Quit smoking
- Wear sunglasses when outside, driving etc.
- Annual eye health check up with your regular optometrist
- Supplementing your diet with Antioxidants and Zinc
- Diet changes

Some helpful changes you can make to your diet to benefit your eye health are maintaining your recommended 5 serves of vegetables and 2 serves of fruit a day. When cooking, avoid using vegetable oils rather try pure virgin oil as it's regarded as the lowest risk cooking oil. Avoiding any hydrogenated fats like margarine is also recommended. Fish and fish oils are very beneficial to your eye health, adding fish to your diet as little as once a week will almost half your risk of developing MD. Taking fish oil capsules are highly recommended as well.

Sources of anti-oxidants

Vitamin C: Citrus fruits, broccoli, potatoes, tomato and capsicum

Vitamin E: Nuts (peanuts, hazelnuts, almonds), Wheat germ, Green leafy vegetables, corn and sunflower seeds

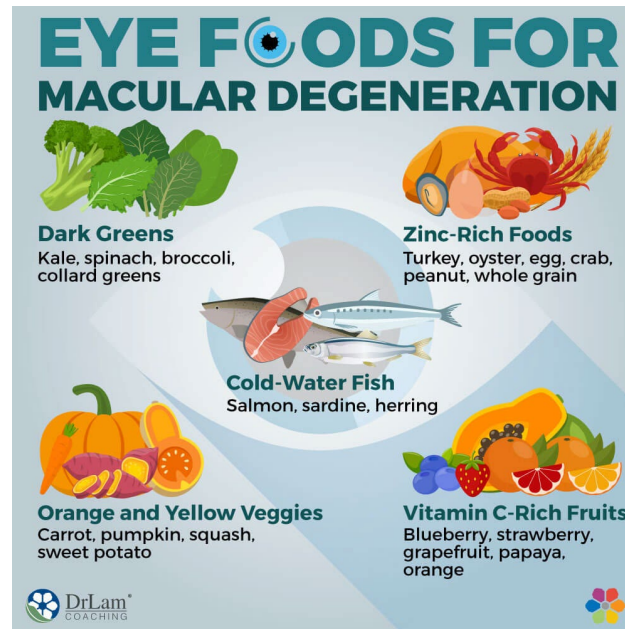
Zinc: Meat, seafood, oysters, seeds, nuts and whole grains

Selenium: Brazil Nuts, seafood, meat, grains and seeds

Lutein & Zeaxanthin: Corn, Capsicum, Spinach and Egg Yolks

Beta-carotene: Carrots, Apricots and green leafy vegetables

Bioflavonoids: blueberries, strawberries, raspberries, fruits, vegetables, citrus pith, tea, broccoli and tomato



Overall, Macular degeneration is a bit of a mystery eye condition with no definite cause. With easy preventatives like diet changes, wearing sunglasses, supplements and annual eye check-ups MD can be managed and monitored to maintain your central vision and macular health. If you notice a change in your vision and notice wavy or distorted vision when looking at the Asmler chart call our friendly team and book an eye test. At Buck and Todd Optometrists we pride ourselves on macular health monitoring and taking time to fully investigate your eye health.