

AGE-RELATED MACULAR DEGENERATION & NUTRITION

YOUR GUIDE



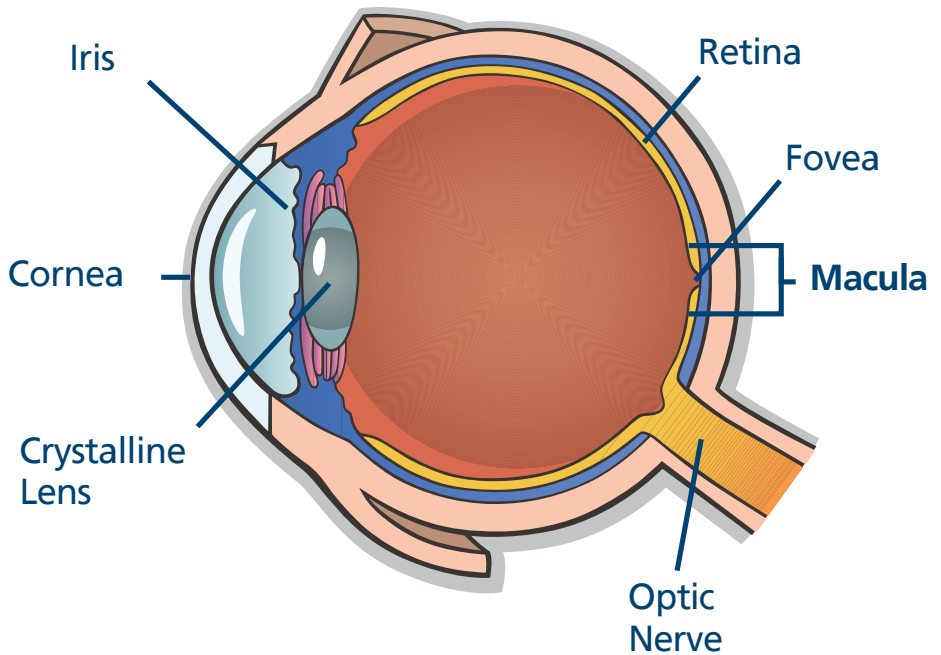


AGE-RELATED MACULAR DEGENERATION & NUTRITION

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How we age is becoming
more important...



What is Age-Related Macular Degeneration (AMD)?

What is AMD?

This condition occurs when the light sensitive cells at the macula become less effective. This leads to a build-up of waste materials at the macula, which can eventually affect central vision.

What is the macula?

The macula forms part of the retina, which is a layer of nerve cells that line the inside of the eye. The macula is located at the back of the eye and is made up of many light-sensitive cells. These cells produce our detailed vision and help us complete detailed tasks such as writing and looking at photographs.

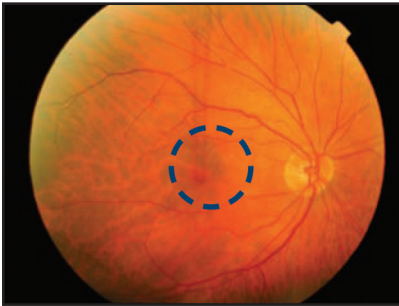
Age-Related macular degeneration is the leading cause of blindness in those over the age of 65 years in westernised countries.

Are there different types of AMD?

There are 2 main types of AMD, Dry and Wet. The main difference between the 2 types is that one involves the growth of new blood vessels behind the macula, and one doesn't.

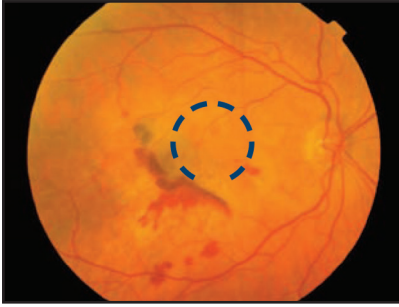


Macular Zone



Normal

If a person has dry AMD they are more likely to go on to develop wet AMD than someone who has no AMD at all.



Wet

Wet AMD occurs when new blood vessels which leak fluid develop. This can result in rapid loss of central vision. Side vision (peripheral vision) is not generally affected.



Dry

Dry AMD results from slow progressive age change. A person could have the early stages of dry AMD and not notice any problems with their vision. Gradually, over many years, the central vision may start to deteriorate, although this may not occur in both eyes.

Who is at greatest risk from AMD?



- People over 65
- People who smoke
- People who don't have a balanced diet
- People who are obese

These are only general guidelines, and so it is important for everyone to have regular eye tests. When you go for an eye test, your eye care practitioner will check the health of your eyes, including the retina and macula. He or she will be able to pick up signs of age-related changes and let you know about them.

People between the ages of 18 and 70 should have an eye test every 2 years. People aged over 70 should have an eye test annually. Your eye care practitioner will let you know if you need to have your eyes examined more frequently than this.

If your eye care practitioner does see signs of age-related changes, you may then be referred to your local eye clinic to see an Ophthalmologist who is medically qualified to diagnose and treat eye conditions.

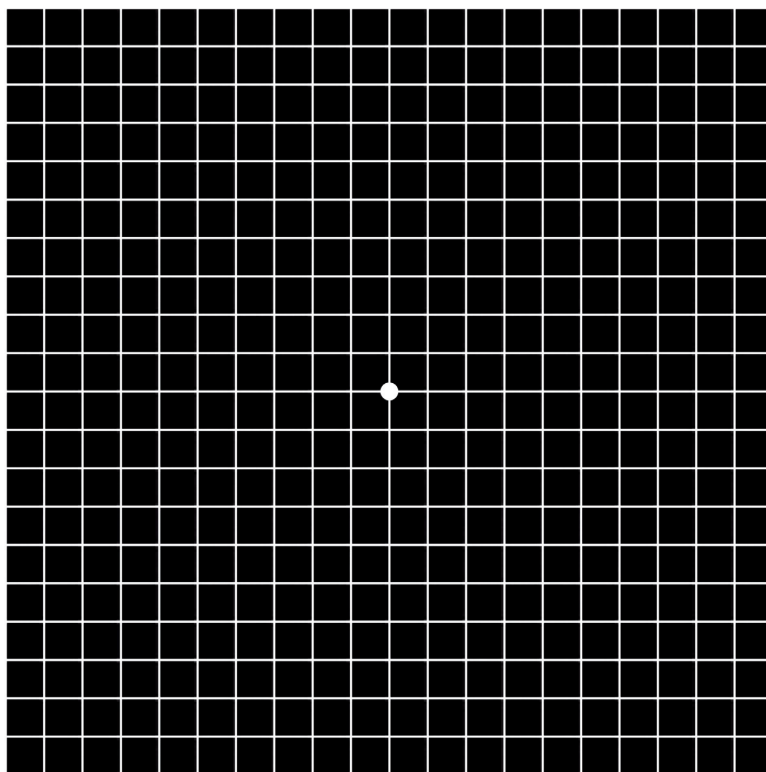
Spotting the early signs

The Amsler Grid

This Amsler grid allows you to test your vision at home so you can spot the early signs. Just follow these simple instructions...

1. If you need to wear glasses for close work, including reading, put them on.
2. Hold the grid at around 30cm (roughly 12 inches) from your eyes and look at the dot at the centre of the grid with one eye closed.
3. Adjust the position of the grid, so that when you are looking at the central dot, you can also see all 4 corners of the grid.
4. Keep looking at the central dot but check that all lines of the grid appear straight and even, and that none of the lines are missing.
5. Repeat with the other eye.

6. Check the Amsler grid in this way every few weeks. If you notice that the lines have become distorted, wavy, or broken, contact your Optometrist or eye care practitioner straight away.





What can I do to reduce my risk of developing AMD?

- Do not smoke.
- Protect your eyes from exposure to too much light by wearing brown tinted sunglasses or a wide brimmed hat on sunny days.
- Eat at least 5 portions of a variety of fruit and vegetables every day.
- Eat more beans and pulses, 2 portions of fish a week, one of which is oily and eat less red and processed meat.
- Adopt a healthy lifestyle by taking regular physical activity and maintaining a healthy weight.
- Increase your intake of anti-oxidants, especially from leafy green vegetables, or consider taking a daily food supplement in addition to following a balanced diet, to bridge any dietary gaps in eye-friendly micronutrients.

Why is vitamin D so important?



Vitamin D is essential for good health. Most vitamin D in our body is made in our skin from exposure to sunlight. It can also be obtained from foods such as eggs, some mushrooms, oily fish or from supplements.

You may be familiar with vitamin D as being good for the bones and teeth, working with calcium to build strong bones and muscles. However, several studies suggest that a lack of vitamin D increases the risk of AMD¹.

Vitamin D may protect against inflammation, a key underlying cause of AMD and it may also prevent the formation of new blood vessels and scar tissue that occur in late AMD².

The UK recommended vitamin D intake for most people is 10mcg a day. But because the sun isn't strong enough for the body to make vitamin D during autumn and winter and it's difficult to get enough vitamin D from food alone, Public Health England recommends that everyone over the age of five takes a 10mcg supplement from October to March, and all year round if they're in a group at risk of deficiency.

1. Annwelier et al (2016) Maturitas SS: 101-1 12.

2. Kim EC et al (2014) Invest Ophthalmol Vis Sci. 55(8):4823-31.

Foods containing high levels of lutein

The images below show the amount of lutein in milligrams (mg) per 100 grams (g) of food.
1000mg = 1g.



COOKED
8.9mg²

Kale



RAW
6.6mg¹
COOKED
12.6mg¹

Spinach



3.8mg¹

Romaine Lettuce



1.4mg²

Broccoli



COOKED
0.1mg³

Sweetcorn



0.07mg³

Leek



1.1mg³

Peas



COOKED
0.4mg³

Sprouts



0.2mg³

Carrots



0.14mg³

Tangerines



0.1mg³

Tomatoes



BOILED
0.6mg³

Eggs (in one large yolk)

1. Perry A. et al. (2009) Xanthophyll (lutein, zeaxanthin) content in fruits, vegetables and corn and egg products. Journal of Food Composition and Analysis (2009) 9-15

2. USDA United States Department of Agriculture. National Nutrient Database for Standard Reference Legacy. Available at: <https://ndb.nal.usda.gov>

3. Public Health England (PHE) McCance and Widdowson's composition of foods integrated dataset. Updated 25 March 2019 Available at: <https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid>

If you already have AMD, here are some useful tips

1

Protect your eyes from exposure to too much light by wearing tinted sunglasses or a wide-brimmed hat on sunny days.

2

Ask your bank, gas and electricity suppliers if they can send you large print bills.

3

When carrying out detailed tasks, make sure that you have a portable lamp that you can angle directly at the area you are working on. Lighting will make it much easier to perform these tasks, but the light source must be very close to the task itself.

- 4 If your friends and family write letters to you, ask them to use a large print size if they use a computer, or to use a thick black pen if they write by hand.
- 5 Ask your Optometrist or Ophthalmologist if they can refer you for a low vision assessment. You will then be advised about aids that may help you carry out everyday tasks.
- 6 Help improve your low vision with magnifiers and vision aids from companies such as Vision Enhancers, visit www.visionenhancers.co.uk or telephone 0800 1123 691.
- 7 The Macular Society is the national charity for anyone affected by central vision loss. You can contact them by visiting www.macularsociety.org or call 0300 303 0111.

Nutrof® Total

Supporting Eye Health

Your sight is one of your most important senses... Are you doing everything you can to look after it?

- Nutrof Total contains antioxidant vitamins and minerals, Omega-3 (EPA and DHA), essential fatty acids, macular pigments (lutein and zeaxanthin) and Resveratrol.
- Once daily capsule - easy to swallow.
- Formulation updated in line with studies.
- Suitable for smokers.

If you would like more information on Nutrof® Total please visit www.youreyehealth.co.uk or alternatively telephone 0345 521 1290.

	Each Nutrof® Total capsule contains	How it supports eye health
One-a-day formula		Convenient daily nutrition to support the eye
Resveratrol	Resveratrol 1mg	Powerful antioxidant found in blueberries, dark chocolate and red wine
Lutein and Zeaxanthin	Lutein 10mg Zeaxanthin 2mg	Essential carotenoids to enrich macular pigment in the eye
Pharmaceutical grade Omega-3 fish Oils	Omega 3 231mg • EPA 132mg • DHA 66mg • DPA ≤16.5mg	Essential fatty acids known to be beneficial for eye health
Vitamins C & E plus Zinc and Copper	Vitamin C 60mg Vitamin E 10mg Zinc 10mg Copper 500µg	Excellent antioxidant and mineral combination to support eye health
Selenium	Selenium 25µg	Key antioxidant and supports action of Vitamin E & Zinc
Vitamin D	Vitamin D3 5µg	Sunshine vitamin known to have anti-inflammatory and anti-angiogenic properties

Pharmaceutical grade ingredients

One-a-day

Ingredients specifically for eye health

Easy to swallow

Blister packaging

Ingredients within safe levels (NRV)

No 1 in Europe

Recommended by experts

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T R I

T I O N





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