

Australian Oilseed Federation

Nutrition Fact Sheets



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Vegetable Oils and Macular Degeneration

Imagine trying to read a newspaper using only your peripheral or side vision because there is blackness in the centre of your vision, having to “listen” to television or no longer being able to recognise your loved ones’ faces. Macular Degeneration of the eyes is becoming increasingly more common in older Australians so it’s no wonder that media reports of a link between vegetable oils and Macular Degeneration caused concern for all those “listening”.

Rest assured these sensational media reports lacked the conclusive scientific evidence necessary to support their claims. And no authoritative health organisation in Australia supports these claims either.^{1,2,3} But still what is Macular Degeneration, who is at risk and how does diet affect it?

What is Macular Degeneration (MD)?

The macula is the sensitive central part of the retina (the lining of the eye inside). Responsible for fine central vision, the macula allows us to read, recognise faces and drive.

With age, changes to the macula can result in blurred vision, straight lines appearing wavy, letters missing when reading sentences and at worst a black emptiness in the centre of vision.

How common is MD?

The impact of MD continues to grow as the size of the elderly population increases. Among people over 75 years of age, about 25 per cent have some signs of MD.⁴

Who is at risk of MD?

If you have a parent with MD then you have a 50 per cent risk of suffering the condition⁵. Smokers have six times greater risk compared with someone who doesn’t smoke⁶. Those with high blood pressure⁷, overweight and inactivity⁸ or high blood cholesterol⁹ also appear to be at greater risk of MD, although more research is required to confirm these associations.

What about diet?

Recent media reports have linked vegetable oils to an increased risk of MD. Exactly what causes MD is still not fully understood. But when you look at all the research published to date, at this early stage, there is no consistent association between either total fat or any type of fat or cholesterol and MD. So there is no plausible explanation of how vegetable oils may increase risk.²

Those studies linking vegetable oils to MD have been conducted in the US where the type of fats eaten in the diet are different to those consumed by Australians - soybean oil is used extensively in the US and many of their margarines are high in trans fats. The only Australian study - The Blue Mountains Eye Study - found no connection between dietary fat and MD.¹⁰

Some studies positively report that eating fish^{10,11,12} and nuts¹¹, containing good sources of monounsaturated and polyunsaturated fats and some antioxidants, are protective against the development and progression of MD, but again more research is needed.

Anyone concerned about their eye health should speak with an ophthalmologist before altering their diet.

There is overwhelming evidence that replacing saturated fats with monounsaturated and polyunsaturated fats lowers blood cholesterol levels and therefore reduces the risk of developing heart disease. All responsible health organisations such as the Heart Foundation currently recommend replacing saturated fats with unsaturated fats, including many vegetable oils.³

Summary

So it makes sense to continue following current health recommendations from Australian organisations such as the National Health and Medical Research Council, CSIRO, National Heart Foundation and the Dietitians Association of Australia.

- ◆ Enjoy a wide variety of nutritious foods including plenty of different coloured fruits and vegetables for natural antioxidants,
- ◆ Consume vegetable oils rich in monounsaturated and polyunsaturated fats, while limiting your intake of saturated fats and reducing your total fat intake.
- ◆ Enjoy nuts and fish which may offer protection.
- ◆ Combine a healthy diet with exercise each day to achieve and maintain a healthy body weight and blood pressure.
- ◆ And finally - stop smoking.

For more information

- ◆ Speak to your local Accredited Practising Dietitian (www.daa.asn.au)
- ◆ Refer to the CSIRO website (www.csiro.au)
- ◆ Call the National Heart Foundation on 1300 362 787

References

- 1) CSIRO Media release July 2004 (www.csiro.au)
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- 10) Smith W *et al.* Dietary fat and fish intake and age related maculopathy. *Arch Ophthalmol* 2000;118:401-4.
- 11) Seddon JM *et al.* Progression of age related macular degeneration: association with dietary fat, transunsaturated fat, nuts and fish intake. *Arch Ophthalmol* 2003b;121:1728-37.
- 12) Cho E *et al.* Prospective study of dietary fat and the risk of age related macular degeneration. *Am J Clin Nutr* 2001;73:209-18.

Acknowledgment

Some material on Macular Degeneration written by Bill Shrapnel, nutritionist and author, has been included here.