



Natural Solutions to Maintain Eye Health

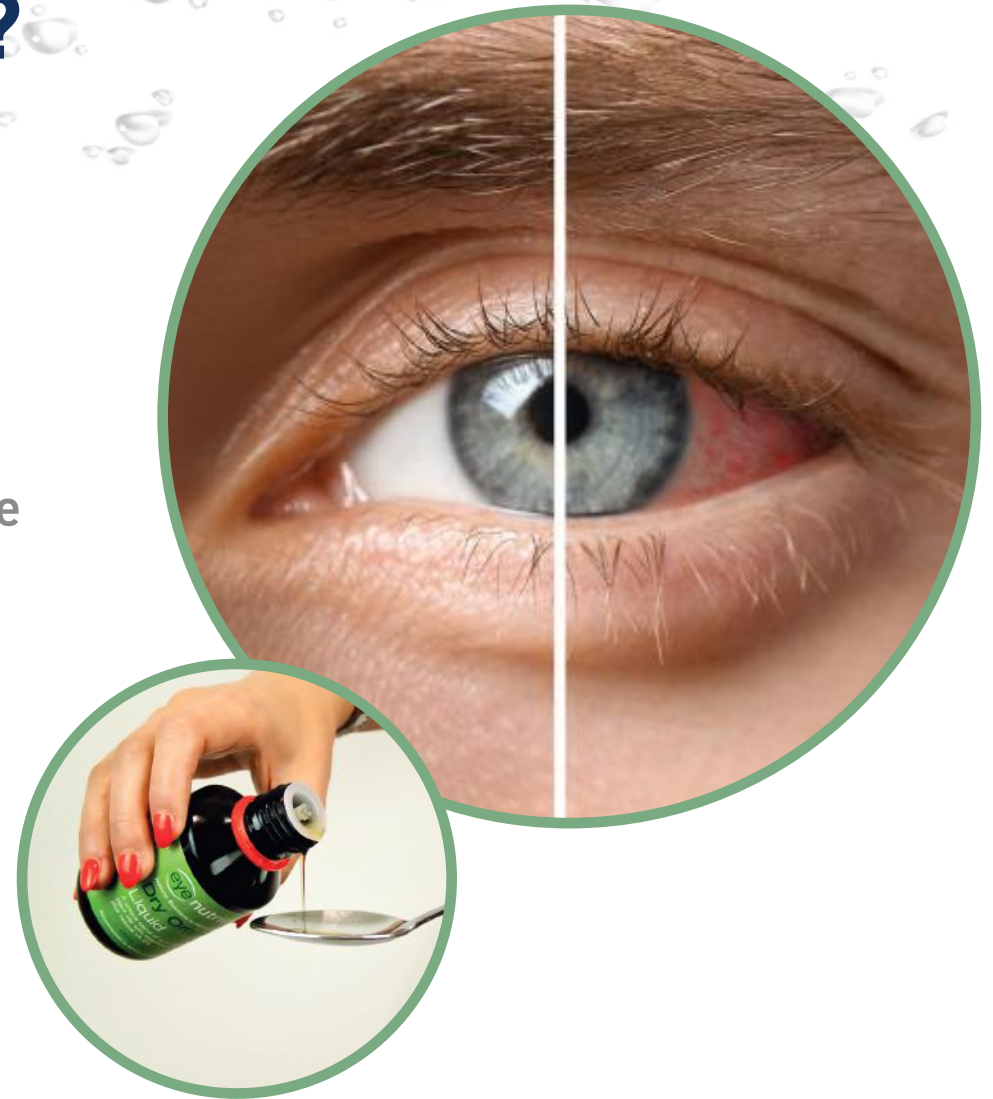


CATHEDRAL  
EYE CARE

Dry Eye

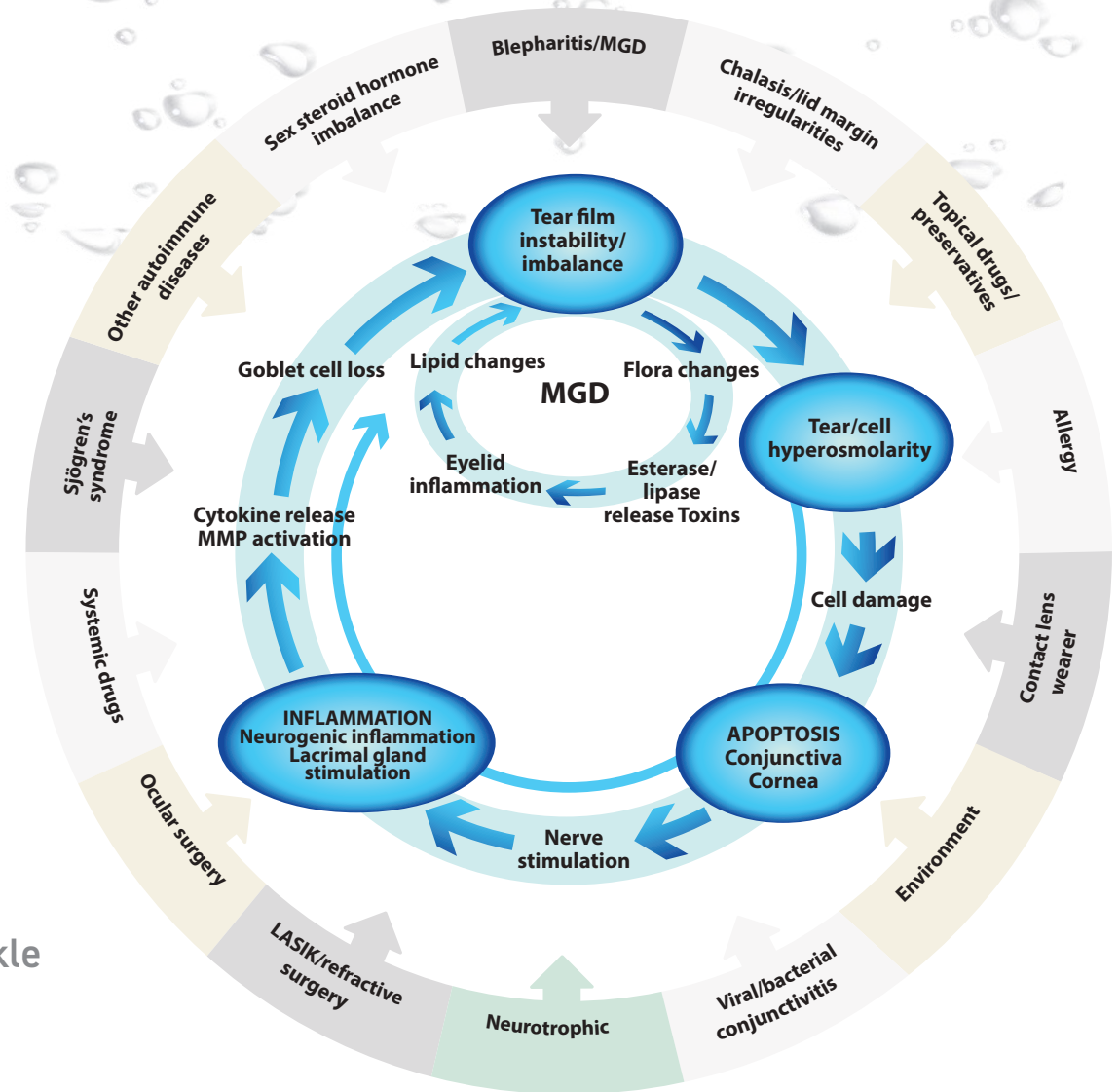
# Why Omega 3 for Dry Eye?

- 💧 Dry Eye is a multifactorial condition that results in symptoms of discomfort, visual disturbance and instability of the tear film that induce inflammation and damage of the ocular surface.
- 💧 There are many supporting publications, articles and evidence for Omega 3 as a supplement for dry eye.



# Dry Eye Vicious Cycle

- As it is multifactorial in nature, DED can arise from many related underlying causes that create a vicious circle.
- Low quality, chemically preserved omega 3 food supplements alongside drops with preservatives and wetting agents can cause further ocular toxicity with long-term use, making DED symptoms worse.
- Eye Nutrients are a NATURAL, preservative-free Omega Dry Eye supplement, that can tackle both tear film instability and inflammation to break the vicious circle of DED.





# Eye Nutrients Dry Omega for Optimum Eye Health



Eye Nutrients is a High-Quality Omega 3+7 Nutritional Food Supplement, specifically designed to combat Dry Eye by improving and strengthening your tear film and ocular surface.



Eye Nutrients unique formulation is used to combat serious consequences of nerve damage that leads to dry eye.



Eye Nutrients Dry Omega provides nutritional support through uniquely stabilised and effective long chain fatty acids (healthy fats) including:

- Omega 3 EPA, DHA, and DPA, 3 potent anti – inflammatories + promote cell membrane growth and increase tear production
- Omega 3 DHA improves nerve regeneration after refractive surgery
- Omega 7 - maintains healthy mucous membranes (healthy level of red blood cells in water line of the eye)



# Oral Omega 3 Treatment for Dry Eye Contact Lens Wearers

- 💧 Dietary supplementation of Omega 3 for 6 months improved dry eye symptoms and lens wear comfort in contact lens wearers.
- 💧 Significant increase in tear film stability (TBUT)
- 💧 Tear production also increased.
- 💧 Omega 3 significantly improved epithelial cell morphology.



Ref: Cornea, Vol 0, Number 0, Month 2015 "Oral Omega 3 Fatty Acid Treatment for Dry Eye in Contact Lens Wearers" Bhargava, Kumar

# Oral Omega 3 treatment Computer Vision Syndrome related Dry Eye

- 💧 Dietary consumption of Omega 3 causes significant improvement in Dry Eye symptoms
- 💧 After 3 months use, Omega 3 supplementation helped decrease tear evaporation
- 💧 Cell morphology and goblet cell density improved significantly (Nelson Grade)

Ref: "Oral Omega 3 fatty acids treatment in computer vision syndrome related dry eye" Bhargava, Kumar et al. Contact Lens & Anterior Eye 38 (2015) 206 - 210.



# Omega 3 in Dry Eye & Corneal Nerve Regeneration after Refractive Surgery

- 💧 Omega 3 EPA, DHA and DPA decrease inflammation and increase tear production
- 💧 Omega 3 DHA improves nerve regeneration after refractive surgery
- 💧 After surgery, Omega 3 could have a therapeutic value.
- 💧 Helping to prevent serious consequences of nerve damage such as dry eye, epithelial erosions and corneal ulceration



Ref: "Omega-3 fatty acids in dry eye and corneal nerve regeneration after refractive surgery" Jiucheng He, Haydee E.P. Bazan. Department of Ophthalmology and Neuroscience Center of Excellence, Louisiana State University Health Sciences Center, New Orleans, LA, USA.



# The Expert's Advice - Treatment Algorithm for MGD

Stage	Clinical Description		Treatment
	Symptoms	Clinical Signs	
1	No symptoms of ocular discomfort	Clinical signs of MGD based on gland expression	Inform patient of MGD, potential impact of diet and work / home environments.
			Consider eyelid hygiene - warming & expression.
2	Minimal to Mild symptoms of ocular discomfort	Minimal to Mild MGD clinical signs	Advise patient on improving environment, <b>increase dietary intake of Omega 3.</b>
			Institute eyelid hygiene with warming and massage
3	Moderate symptoms of ocular discomfort	Moderate MGD clinical signs: lid margin plugging	All of the above
			Oral tetracycline
4	Marked symptoms of ocular discomfort	Severe MGD clinical signs	All of the above
			Anti-inflammatory therapy for dry eye

Ref: The International Workshop on Meibomian Gland Dysfunction: Report on the Subcommittee on Management and Treatment of Meibomian Gland Dysfunction. IOVS, Special Issue 2011, Vol.52, No.4.



# Dry Omega Advantage

- Contains Omega 3, Omega 7 + Vitamin D3.
- Designed to help nourish, bathe, protect and lubricate the mucous membranes of the ocular surface, keeping them moist.
- Omega 3 - EPA, DHA, DPA 3 potent anti-inflammatories + promote cell membrane growth.
- Omega 7 – maintains healthy mucous membranes.
- Naturally Stable, not oxidised = full nutritional value.



# Eye Nutrients Natural Stability- Why is it so important?

- ✓ Eye Nutrients uses a unique process, blending quality natural sourced Omega 3 oils with natural anti oxidants found in specific Olive Oils, thus bringing together the health benefits of the Artic and Mediterranean diets.
- ✓ The blend of natural oils used by Eye Nutrients have significantly greater effect on maintaining the stability of the Omega 3 Molecules and also impart additional benefits to health.
- ✓ Eye Nutrients leads the field in therapeutic levels of Omega 3 with much higher stability, proven to be 155% more stable than ordinary Omega 3 products.



# Eye Nutrients Natural Stability- Why is it so important?

- ✗ Omega 3 is chemically unstable and oxidizes rapidly to a complex chemical soup of lipid peroxides + secondary oxidation products.
- ✗ Oxidative degradation is undesirable and leads to loss of shelf-life, functionality and nutritional value as well as lower consumer acceptability (fishy smell and after taste).
- ✗ Oxidised oils may have altered biological activity making the min effective or even harmful.

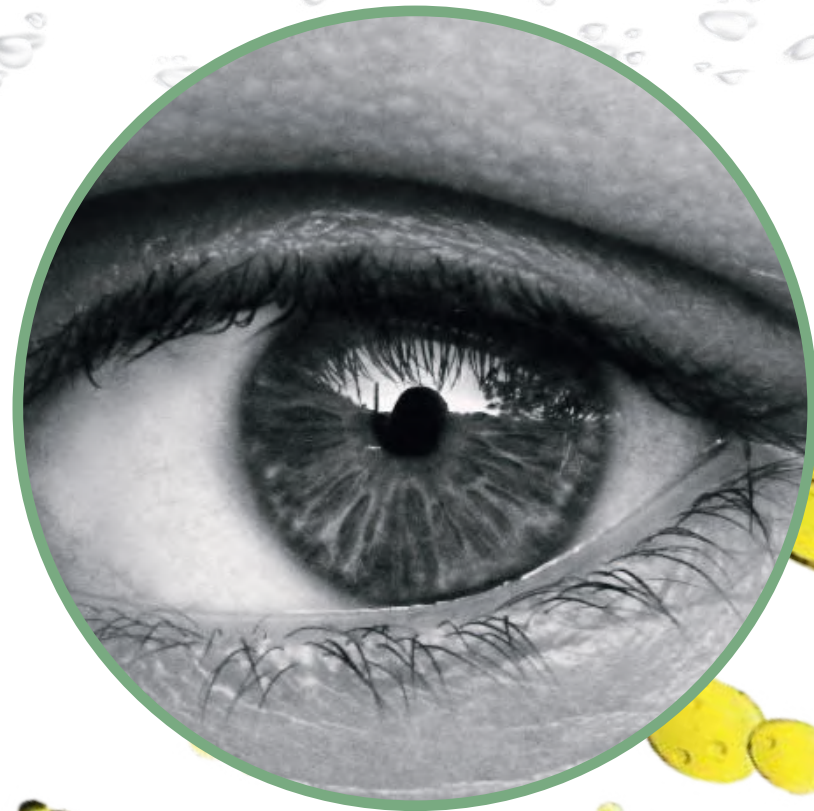




# Eye Nutrients Dry Omega

## Omega 3 - EPA

- 💧 C20:5(n-3) cis Eicosapentaenoic acid.
- 💧 An Omega 3 essential polyunsaturated fatty acid.
- 💧 EPA assists, from a physiological perspective, as an anti-inflammatory agent.
- 💧 Reduces inflammation in dry eyes.

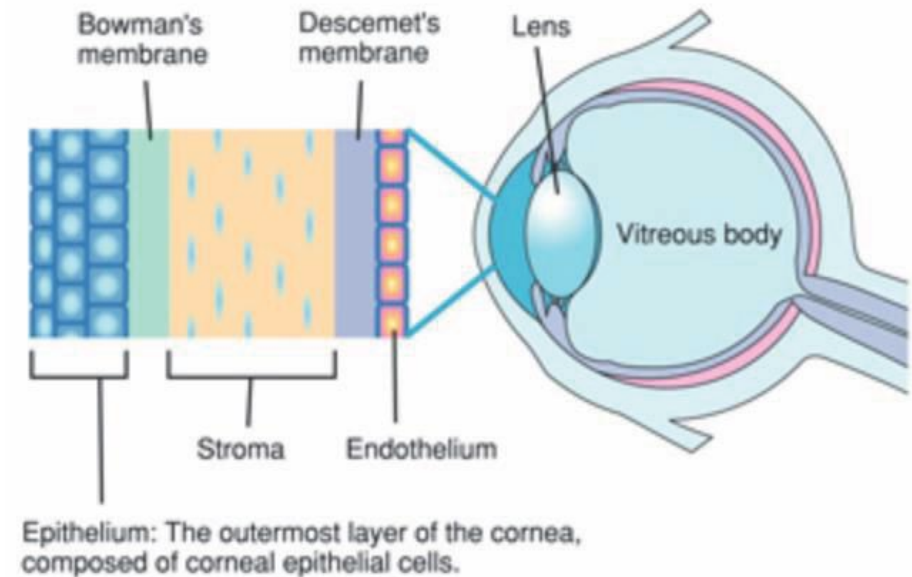


# Eye Nutrients Dry Omega

## Omega 3 - DHA

- 💧 C22:6(n-3) cis Docosahexaenoic acid.
- 💧 An Omega 3 essential polyunsaturated fatty acid.
- 💧 DHA helps with cell membrane growth and development.
- 💧 Helps rebuild cell structure on ocular surface after damage due to evaporative dry eye. Critical for cell development, growth and maintenance.

Structure of cornea



# Eye Nutrients Dry Omega

## Omega 3 - DPA

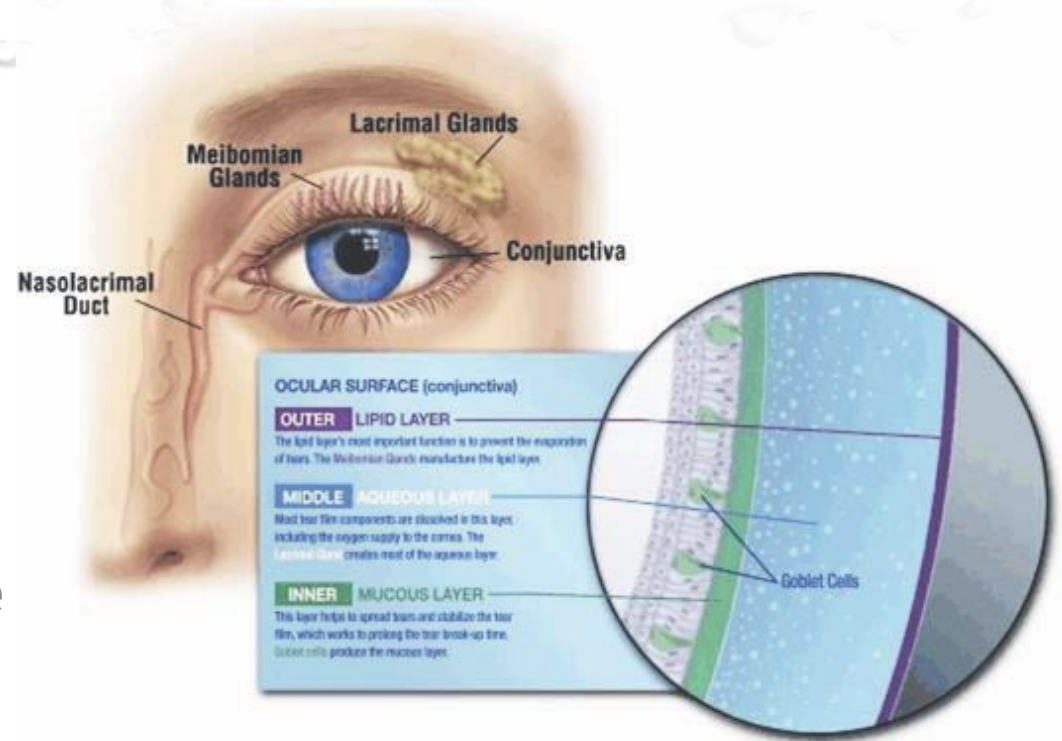
- 💧 C22:5(n-3) cisDocosapentaenoic acid.
- 💧 Unique to Eye Nutrients Dry Omega, DPA is an Omega 3 essential polyunsaturated fatty acid.
- 💧 It's a new and very potent Omega 3 fatty acid. This is due to its strong anti-inflammatory properties, even stronger than EPA and DHA.
- 💧 Reduces inflammation in dry eyes.





# Eye Nutrients Dry Omega Omega 7

- 💧 Omega 7 is another essential polyunsaturated fatty acid
- 💧 Unique to Eye Nutrients Dry Omega
- 💧 Emerging science on Omega 7 fatty acids is promising, specifically in regard to lipid metabolism and the maintenance of mucous membranes. Helps cells retain moisture.
- 💧 Maintains mucous membranes + reduces inflammation in dry eyes



**Mucous layer – coats the ocular surface and allows the aqueous and lipid layers to form.**

# Eye Nutrients Dry Omega

## Omega 7

- Enhances tear film parameters
- Reduces ocular surface inflammation
- Reduces retinal inflammation
- Reduces retinal macrophage numbers (white blood cells)

