Lecture – **Nutritional Support for Dry Eye**

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Visionary Kitchen: A Cookbook for Eye Health

1. What is dry eye? And, who is affected?

   Symptoms and prevalence of dry eye

   Patients with: advancing age, hormonal imbalances, diabetes, autoimmune disease, rosacea, pharmacological side effects, ocular trauma

2. Tears and their function

   Basal tears, reflex tears, emotional tears

   Tear film: inner mucin, middle aqueous, outer lipid

3. Dry eye categories

   A. Aqueous tear production deficiency

      Autoimmune disease: rheumatoid arthritis, lupus, Sjogren's syndrome

      Medications: antihistamines, beta blockers, diuretics, sleep aides, some pain relievers

      Decreased corneal sensation: herpes zoster, refractive surgery, diabetes

      Systemic dehydration: drink water!

   B. Excessive tear evaporation

      Meibomian gland dysfunction (MGD)

      Lipid layer: decreased lipid production or excessive production

      Scarring: ocular pemphigoid, trauma

4. Nutritional goals for dry eye

   Tamp down ocular and systemic inflammation

   Improve tear film composition

   A "dry eye" diet should include:

- Omega-3 fatty acids: ALA, EPA, DHA
    - Improve tear film stability and lid inflammation
    - Especially important for MGD
    - Food sources of omega-3 fatty acids
- Omega-6 fatty acids: GLA
    - Tamps down inflammation
    - How to include GLA in your diet
- Omega-7 fatty acids
    - Improves tear osmolarity
    - How to include omega-7 fatty acids in your diet
- Vitamins A, C, D, E, phytonutrients
    - Support of ocular surface and tear film
    - Anti-inflammatory, antioxidant effects
    - How to include Vitamins A, C, D, E, phytonutrients in your diet
- Probiotics
    - Gut health and inflammation
    - Foods to promote gut health

Studies & References

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