

## 1. Antioxidants in Health

*Antioxidants are naturally occurring compounds that can protect the body from harmful free radicals, sweeping them up, before they can cause damage.*

Many experts believe free radical damage is one of the most prominent causes of devastating diseases such as, heart disease, cancer and many other diseases. Indeed, the aging process itself is the result of free radical damage

**Eye disease is no exception:** research suggests that certain antioxidants can reduce the risk of cataracts, macular degeneration and more.

*Where do I get my antioxidants?*

*Vitamin E, C and A are some of the vitamins which act as antioxidants* Tomatoes, broccoli, cauliflower, peppers, red grapes, garlic, spinach, tea, carrot, soy, whole grains ...are all excellent choices. The key is to focus on eating those fruits and vegetables that have **rich hues of color**. These are high in what are known as **phytonutrients**

## 2. Vitamin A and Eye Sight

Eyes are simply amazing. Its because they can give you the perception of images in 'reality.' Vision is a complicated process that requires numerous components of the human eye and brain to work together.

*How does vitamin A help your eyes?.*

The photosensitive compound in the retina is a protein called 'Rhodopsin' to which vitamin A is present. This complex plays the important role in light perception and thus in the Vision. Vitamin A aids in maintaining good night vision and day-to-day vision.. The earliest symptoms of vitamin A deficiency is night blindness

*Where do I get my vitamin A?*

Carrots have beta-carotene, which our body converts

into vitamin A. Beta-carotene comes from green leafy vegetables and intensely colored fruits and vegetables

**The Vitamin A food:** Tomatoes, Spinach, Liver, Egg Yolk, Colored Vegetables- carrot, papaya and green leaves.

*Take care of your eyes for the 'eye' to take care of you.*

## 3. Amino acids in Eye care

*How does amino acids help your eyes?*

People with diabetes are under high risk, for the complication of the eyes namely i) diabetic retinopathy ii) Cataract. Dietary amino acids can prevent/control these ocular diseases by preventing the excess glucose in damaging the lens and the retina of the eye. Scientists at Sankara Nethralaya, Chennai have found that free amino acids have significant anti-diabetic effects when supplemented orally to patients with diabetes.

*Where do I get my amino acids?*

Include **nuts**(peanuts), **seeds**, **pulses**, **soya** products, **cereals** (wheat, oats, and rice), **eggs** and some **dairy products** (milk, cheese and yoghurt) – a combination of many of these in your every day's food! The nutritional quality of the soya bean is superior as It contains more protein and is also a good source of iron and calcium.

When two different foods are combined, the amino acids in one protein can compensate for the one lacking in the other. This is known as protein complementing. **Peas on toast, Peanut butter-sandwich, Rice with beans are all examples of protein complementing.**

### *Complete Protein Foods*

- |                                  |                                  |
|----------------------------------|----------------------------------|
| ○ <i>Milk and Dairy products</i> | ○ <i>Corn plus peas or beans</i> |
| ○ <i>Eggs</i>                    | ○ <i>Rice plus beans</i>         |
| ○ <i>Fish</i>                    | ○ <i>Lentils plus bread</i>      |

*Take protein-diets of  
good quality and  
quantity every day.*

*Keep Cataract / Retinopathy away.*

#### 4. Green leafy vegetables & Eye

*How does green leafy vegetables help your eyes?*

Green leafy vegetables are rich in **vitamins A, C** and many are good sources of **Iron and Calcium** as well. Blue region of the visible light is the most damaging wavelengths of light to which the retina is routinely exposed, that may cause damage to the **macula**, an area in the back of the eye's retina that creates the sharpest vision. Antioxidants rich in the green leafy vegetable are recognized as a key factors in maintaining the health of the macula.

*The sources of green leafy vegetables in your diet*

Green leafy vegetables like **spinach (palak), murungai, agathi, ponanganni, mulai keerai, araikerrai, vendhaiakeerai/ fenugreek (methi)** etc. are the rich sources of iron, folic acid and vitamin B<sub>12</sub> and hence should be consumed in abundance. Iron is absorbed less well from plant-based foods than from meat, but its absorption is improved by the presence of Vitamin C. A habit of salad along with green leafy vegetables topped with lemon juice is going to be great for your vision. Ensure variety in your every day sources of the green leafy vegetables, and don't overcook them!

## Patient Information



## Food and EYE



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