

BI 358 Active Learning Questions Lecture 18

1. Do *anti-oxidant supplements* maintain or improve sight and reduce the risk of *eye degenerative* diseases in adults? What about *consuming plant-foods* rich in vitamins C, E selenium and β -carotene, *whole grains and oysters* containing zinc, and *fish* high in Ω fatty acids? What about daily *meat eaters* and development of *cataracts*? Can vision impact reading in children? Explain briefly.
2. Draw a picture of the *eye* indicating the location of the following with labels: *aqueous humor, vitreous humor, pupil, lens, fovea, sclera, choroid* and *retina*. Cataracts alter which eye structure/s? How is *vision improved* in a patient diagnosed with *cataracts*?
3. What is *emmetropia*? *Hyperopia*? *Myopia*? How are *hyperopia* and *myopia* corrected? What is *astigmatism* and how is it *corrected*? What is *glaucoma* and how is it *treated*?
4. Describe the *mechanism of accommodation*. What *eye structures* and *muscles* are involved? Draw 2 pictures below illustrating your understanding of *accommodation*.
5. Compare and contrast *rods* and *cones*. Which are most prevalent and where are they most densely located within the eye? Best for *night vision*? Best for *visual acuity*? List the major types of *color blindness*.