Anatomy and Physiology of the Eye Vision System

Sensation of Sight 31 Jan 2002. The eye is a complex organ composed of many small parts, each vital to normal vision. The ability to see clearly depends on how well these components work together. The eye is composed of several parts, including the cornea, iris, pupil, lens, vitreous humor, retina, and optic nerve.

The cornea is the clear, transparent front part of the eye that serves as the primary refracting surface. It focuses light onto the retina. The iris is a pigmented ring that controls the amount of light entering the eye by changing the size of the pupil, which is the opening in the center of the iris.

The lens is a flexible, transparent structure behind the iris that helps to focus light onto the retina. The vitreous humor is a gel-like substance that fills the space between the lens and retina. The retina is the light-sensitive layer at the back of the eye that converts light into electrical signals.

The optic nerve carries these signals to the brain, where they are processed and interpreted as vision. The visual system is responsible for processing visual information, which involves several areas of the brain, including the occipital lobe.

The physiology of vision is a complex process that involves the interaction of light, the eye, and the brain. Understanding the physiology of vision is essential for optimizing visual function and treating vision-related disorders.