



*Ophthalmology • Refractive Surgery*  
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# Glossary of Vision Terms

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**ACCOMMODATION**

The ability of the eye to change its focus from distant to near objects; process achieved by the lens changing its shape.

**ANTERIOR CHAMBER**

The space in front of the iris and behind the cornea.

**AQUEOUS HUMOR, AQUEOUS FLUID (A-kwe-us)**

Clear, watery fluid that flows between and nourishes the lens and the cornea; secreted by the ciliary processes.

**ASTIGMATISM (uh-STIG-muh-tizm)**

A condition in which the surface of the cornea is not spherical; causes a blurred image to be received at the retina.

**BINOCULAR VISION**

The blending of the separate images seen by each eye into a single image; allows images to be seen with depth.

**BLIND SPOT**

- (1) A small area of the retina where the optic nerve enters the eye; occurs normally in all eyes.
- (2) Any gap in the visual field corresponding to an area of the retina where no visual cells are present; associated with eye disease.

**CENTRAL RETINAL ARTERY**

The blood vessel that carries blood into eye; supplies nutrition to the retina.

**CENTRAL RETINAL VEIN**

The blood vessel that carries blood from the retina.

**CENTRAL VISION**

See VISUAL ACUITY.

**CHOROID (KOR-oyd)**

The layer filled with blood vessels that nourishes the retina; part of the uvea.

**CILIARY MUSCLES**

The muscles that relax the zonules to enable the lens to change shape for focusing.

**CILIARY PROCESSES**

The extensions or projections of the ciliary body that secrete aqueous humor.

**CONES, CONE CELLS**

One type of specialized light-sensitive cells (photoreceptors) in the retina that provide sharp central vision and color vision. Also see RODS.

**CONJUNCTIVA (KAHN-junk-TY-vuh)**

The thin, moist tissue (membrane) that lines the inner surfaces of the eyelids and the outer surface of the sclera.

**CONTRAST SENSITIVITY**

The ability to perceive differences between an object and its background.

**CORNEA (KOR-nee-uh)**

The outer, transparent, dome-like structure that covers the iris, pupil, and anterior chamber; part of eye's focusing system.

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**DILATION**

A process by which the pupil is temporarily enlarged with special eye drops (mydriatic); allows the eye care specialist to better view the inside of the eye.

**DRUSEN**

Tiny yellow or white deposits in the retina or optic nerve head.

**FLUORESCEIN ANGIOGRAPHY** (FLOR-uh-seen an-jee-AHG-ruh-fee)

A test to examine blood vessels in the retina, choroid, and iris. A special dye is injected into a vein in the arm and pictures are taken as the dye passes through blood vessels in the eye.

**FOVEA** (FOH-vee-uh)

The central part of the macula that provides the sharpest vision.

**FUNDUS**

The interior lining of the eyeball, including the retina, optic disc, and macula; portion of the inner eye that can be seen during an eye examination by looking through the pupil.

**HYPEROPIA** (hy-pur-OH-pee-uh)

Farsightedness; ability to see distant objects more clearly than close objects; may be corrected with glasses or contact lenses.

**INTRAOCULAR PRESSURE** (IOP)

Pressure of the fluid inside the eye; normal IOP varies among individuals.

**IRIS**

The colored ring of tissue suspended behind the cornea and immediately in front of the lens; regulates the amount of light entering the eye by adjusting the size of the pupil.

**LACRIMAL GLAND** (LAK-rih-mul)

The small almond-shaped structure that produces tears; located just above the outer corner of the eye.

**LEGAL BLINDNESS**

In the U.S., (1) visual acuity of 20/200 or worse in the better eye with corrective lenses (20/200 means that a person must be at 20 feet from an eye chart to see what a person with normal vision can see at 200 feet) or (2) visual field restricted to 20 degrees diameter or less (tunnel vision) in the better eye. NOTE: These criteria are used to determine eligibility for government disability benefits and do not necessarily indicate a person's ability to function.

**LENS**

The transparent, double convex (outward curve on both sides) structure suspended between the aqueous and vitreous; helps to focus light on the retina.

**LOW VISION**

Visual loss that cannot be corrected with eyeglasses or contact lenses and interferes with daily living activities.

**MACULA** (MAK-yoo-luh)

The small, sensitive area of the central retina; provides vision for fine work and reading.

**MYOPIA** (my-OH-pee-uh)

Nearsightedness; ability to see close objects more clearly than distant objects; may be corrected with glasses or contact lenses.

**OPTIC CUP**

The white, cup-like area in the center of the optic disc.

**OPTIC DISC/OPTIC NERVE HEAD**

The circular area (disc) where the optic nerve connects to the retina.

**OPTIC NERVE**

The bundle of over one million nerve fibers that carry visual messages from the retina to the brain.

**PERIPHERAL VISION** (per-IF-ur-al)

Side vision; ability to see objects and movement outside of the direct line of vision.

**POSTERIOR CHAMBER**

The space between the back of the iris and the front face of the vitreous; filled with aqueous fluid.

**PRESBYOPIA** (prez-bee-OH-pee-uh)

The gradual loss of the eye's ability to change focus (accommodation) for seeing near objects caused by the lens becoming less elastic; associated with aging; occurs in almost all people over age 45.

**PUPIL**

The adjustable opening at the center of the iris that allows varying amounts of light to enter the eye.

**REFRACTION**

A test to determine the best eyeglasses or contact lenses to correct a refractive error (myopia, hyperopia, or astigmatism).

**RETINA** (RET-in-nuh)

The light-sensitive layer of tissue that lines the back of the eyeball; sends visual messages through the optic nerve to the brain.

**RETINAL PIGMENT EPITHELIUM** (RPE) (ep-ih-THEE-lee-um)

The pigment cell layer that nourishes the retinal cells; located just outside the retina and attached to the choroid.

**RODS, ROD CELLS**

One type of specialized light-sensitive cells (photoreceptors) in the retina that provide side vision and the ability to see objects in dim light (night vision). Also see CONES.

**SCHLEMM'S CANAL**

The passageway for the aqueous fluid to leave the eye.

**SCLERA** (SKLEH-ruh) The tough, white, outer layer (coat) of the eyeball; with the cornea, it protects the entire eyeball.

**TONOMETRY**

The standard to determine the fluid pressure inside the eye (intraocular pressure).

**TRABECULAR MESHWORK** (truh-BEC-yoo-lur)

The spongy, mesh-like tissue near the front of the eye that allows the aqueous fluid (humor) to flow to Schlemm's canal then out of the eye through ocular veins.

**UVEA, UVEAL TRACT** (YOO-vee-uh)

The middle coat of the eyeball, consisting of the choroid in the back of the eye and the ciliary body and iris in the front of the eye.

**VISUAL ACUITY**

The ability to distinguish details and shapes of objects; also called central vision.

**VISUAL FIELD** The entire area that can be seen when the eye is forward, including peripheral vision.

**VITREOUS** (VIT-ree-us)

The transparent, colorless mass of gel that lies behind lens and in front of retina.

**ZONULES** (ZAHN-yoolz)

The fibers that hold the lens suspended in position and enable it to change shape during accommodation.