The conjunctiva is a mucous membrane that lines the upper and lower eyelids and extends over the sclera to the corneal margin. It contains lymphoid tissue, which provides some immunology protection. It is innervated by CN V, the trigeminal nerve. The portion of the conjunctiva that covers the sclera is termed the bulbar conjunctiva; the portion covering the inner surface of the eyelids is termed the palpebral conjunctiva.

**Figure 1. Eyelid Muscles**

**TEAR PRODUCTION AND DRAINAGE**

The lacrimal gland is located in the superolateral aspect of the eyelid below the eyebrow(s). It secretes watery (aqueous) tears and produces about 0.2 ml of tears in 24 hours. Aqueous tears flow downward and inward toward the tear drainage system at the inner canthus. In addition to aqueous tears, several glands located in the conjunctiva and eyelid margins secrete oily and sticky (mucous) tears. The meibomian glands are located within the tarsal plate of the eyelid and secrete oily tears. The glands of Zeiss, Moll, Wolfing, and Krause secrete sticky tears. These three types of tears provide moisture and protection to the surface of the eye(s).

With each blink, tears are pushed across the eye toward the puncta located at the medial junction of the upper and lower eyelids. From the puncta, tears are pushed into the canaliculi and then into the lacrimal sac.
They are drained from the lacrimal sac and nasolacrimal duct to the inside of the nose and down the throat (see Figure 2).

Figure 2. Lacrimal System

TEAR FILM
The tear film has three distinct layers. The outermost layer is secreted by the meibomian glands. This lipid layer prevents evaporation of the underlying tear layers, keeping the cornea continually moist. The middle layer consists of aqueous tears from the lacrimal gland. These tears provide nutrients that help sustain the health of the cornea. The innermost layer is composed of mucous, which provides stability to the tear film as well as lubrication and also functions to trap and remove debris.

CORNEA
The cornea is a round, convex, avascular tissue that is continuous with the sclera. The junction of the cornea and the sclera is called the limbus. The