

one “body” or handle, which encloses the power source—either disposable or rechargeable batteries. The nurse should practice changing the heads, which snap on and are secured with a quarter turn, and replacing the batteries and light bulbs. Nurses who are not directly involved in physical assessment are often responsible for ensuring that the equipment functions properly.

### Preparing the Child

The nurse can prepare the child for the ophthalmoscopic examination by showing the child the instrument, demonstrating the light source and how it shines in the eye, and explaining the reason for darkening the room. For infants and young children who do not respond to such explanations, it is best to use distraction to encourage them to keep their eyes open. Forcibly parting the eyelids results in an uncooperative, watery-eyed child and a frustrated nurse. Usually, with some practice, the nurse can elicit a red reflex almost instantly while approaching the child and may also gain a momentary inspection of the blood vessels, macula, or optic disc.

### Funduscopy Examination

Fig. 4-17 shows the structures of the back of the eyeball, or the **fundus**. The fundus is immediately apparent as the **red reflex**. The intensity of the color increases in darkly pigmented individuals.

### Nursing Alert

A brilliant, uniform red reflex is an important sign because it rules out many serious defects of the cornea, aqueous chamber, lens, and vitreous chamber. Any dark shadows or opacities are recorded because they indicate some abnormality in any of these structures.