vessels).

Passage of meconium should occur within the first 24 to 48 hours, although it may be delayed up to 7 days in very low birth weight infants.

Transitional Stools

Usually appear by third day after initiation of feeding; greenish brown to yellowish brown, thin, and less sticky than meconium; may contain some milk curds.

Milk Stool

Usually appears by fourth day.

In **breastfed infants,** stools are yellow to golden, are pasty in consistency, and have an odor similar to that of sour milk.

In **formula-fed infants,** stools are pale yellow to light brown, are firmer in consistency, and have a more offensive odor.

The neonatal gastrointestinal mucosa performs an important function as a barrier to foreign antigens. Both immune and nonimmune factors may play a vital role in decreasing the absorption of antigens capable of causing serious neonatal illness; however, the functional capacity of this system may be immature or altered. Feeding an infant human milk increases the effectiveness of this defense mechanism (Le Huërou-Luron, Blat, and Boudry, 2010).

Renal System

All structural components are present in the renal system, but there is a functional deficiency in the kidneys' ability to concentrate urine and to cope with conditions of fluid and electrolyte stress, such as dehydration or a concentrated solute load.

Total volume of urine per 24 hours is about 200 to 300 ml by the end of the first week. However, the bladder voluntarily empties when stretched by a volume of 15 ml, resulting in as many as 20 voidings per day. The first voiding should occur within 24 hours. The urine is colorless and odorless and has a specific gravity of about 1.020.

Integumentary System

At birth, all of the structures within the skin are present, but many