

# Stay Abreast

## Anatomy of the Lactating Breast

These pictures are based on new research that overturns 160 years of conventional wisdom about the anatomy of the lactating breast.

### 1. Cooper's Ligaments

Provides support and a frame work for the glandular and fatty tissue

### 2. Retromammary Fat

Fat pad at the back of the breast, at the chest wall

### 3. Glandular Tissue

The part of the breast that makes the milk

### 4. Intraglandular Fat

Fatty tissue that is intermingled with the glandular tissue

### 5. Subcutaneous Fat

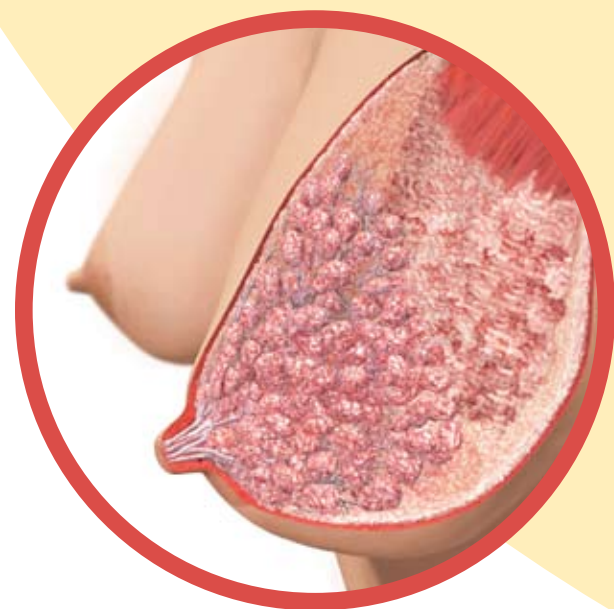
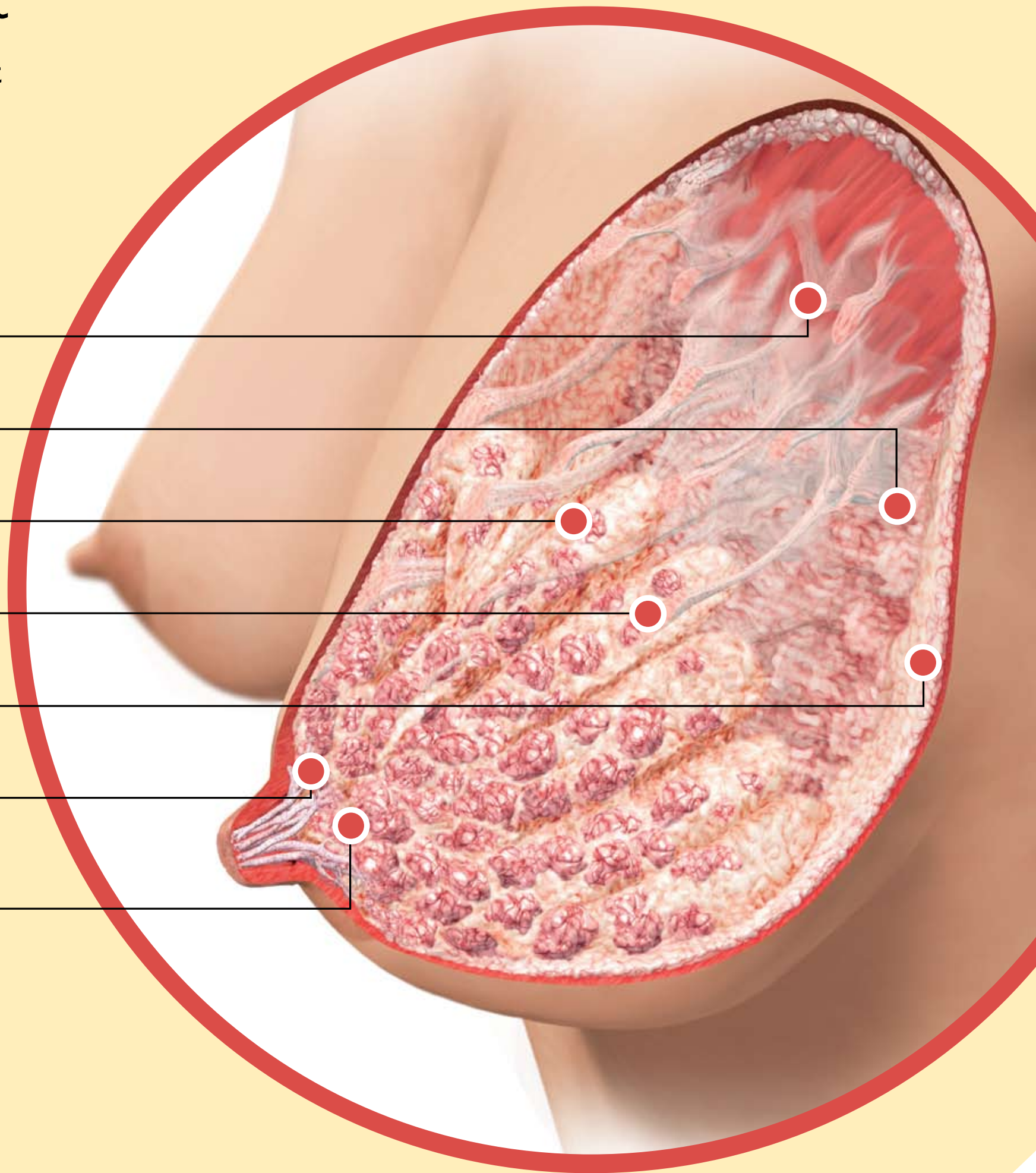
Fatty tissue that lies just under the skin

### 6. Main Milk Duct

The milk ducts that lead into the nipple

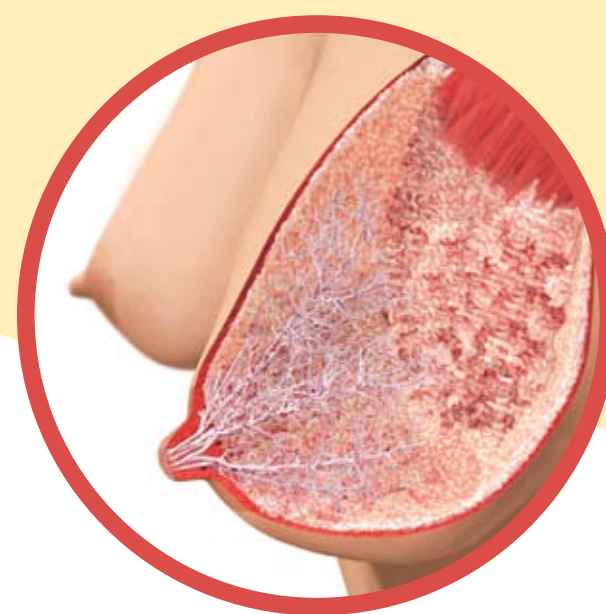
### 7. Milk Duct

The ducts throughout the breast that transport the milk from the glandular tissue to the main milk ducts



#### Glandular and Fatty Tissue

- The ratio of glandular to fat tissue in the lactating breast is 2:1
- 65% of the glandular tissue is located in a 30 mm radius from the base of the nipple
- Fatty tissue is found in three areas:
  - Retromammary
  - Intraglandular
  - Subcutaneous
- The intraglandular fat is mixed with the glandular tissue and is difficult to separate
- Subcutaneous fat is minimal at the base of the nipple



#### Ductal Network

- The ductal anatomy is similar for each breast but can vary greatly between women
- The main function of the ducts is the transport, not storage, of milk
- The ductal network is complex and the milk ducts are not always arranged in a radial or symmetrical pattern
- Resting duct diameter can differ greatly between women (range 1 – 4.4 mm)
- The ducts expand in diameter at milk ejection (average 58%)



#### Main Milk Ducts

- The main milk ducts at the base of the nipple are:
  - Approximately 2 mm in diameter
  - Superficial
  - Branching close to the nipple
- The conventionally described lactiferous sinuses behind the nipple do not exist
- The range of milk ducts exiting the nipple is 4 – 18



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