Anatomical Planes

Many views of the body are based on real or imaginary "slices" called *sections* or *planes.* "Section" implies an actual cut or slice to reveal internal anatomy, whereas "plane" implies an imaginary flat surface passing through the body. The three major anatomical planes are *sagittal, frontal,* and *transverse* (fig. A.3).

A **sagittal**[1] (SADJ-ih-tul) **plane** passes vertically through the body or an organ and divides it into right and left portions. The sagittal plane that divides the body or organ into equal haves is also called the **median (mid-sagittal) plane.** The head and pelvic organs are commonly illustrated on the median plane (fig. A.4*a*).

A **frontal (coronal) plane** also extends vertically, but it is perpendicular to the sagittal plane and divides the body into anterior (front) and posterior (back) portions. A frontal section of the head, for example, would divide it into one portion bearing the face and another bearing the back of the head. Contents of the thoracic and abdominal cavities are most commonly shown in frontal section (fig. A.4*b*).

[1] *sagitta* = arrow

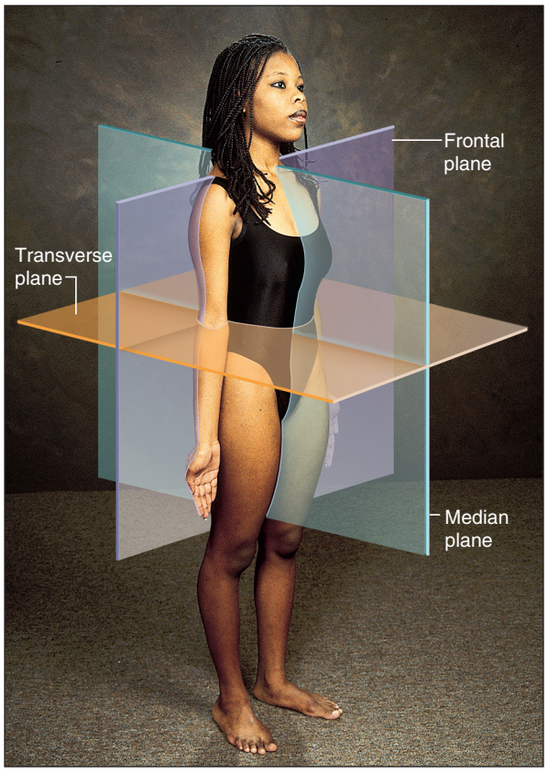

Figure A.3 Anatomical Planes of Reference.
What is the other name for the particular sagittal plane shown here?

A **transverse (horizontal) plane** passes across the body or an organ perpendicular to its long axis (fig. A.4*c*); therefore, it divides the body or organ into superior (upper) and inferior (lower) portions. CT scans are typically transverse sections (see fig. 1.17, p. 24).

Directional Terms

Table A.1 summarizes frequently used terms that describe the position of one structure relative to another. Intermediate directions are often indicated by combinations of

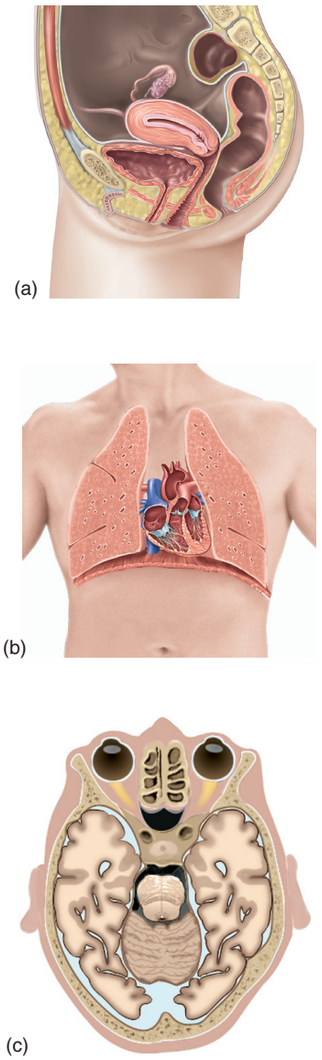

Figure A.4 Views of the Body in the Three Primary Anatomical Planes. (*a*) Sagittal section of the pelvic region. (*b*) Frontal section of the thoracic region. (*c*) Transverse section of the head at the level of the eyes.