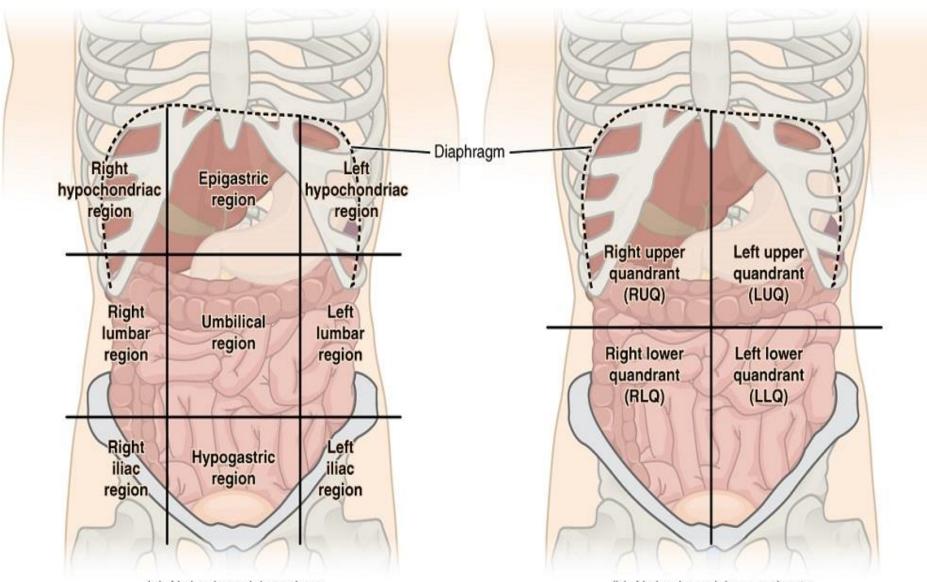
# **Abdominal cavity**



(a) Abdominopelvic regions

(b) Abdominopelvic quandrants

- The abdomen is the region of the trunk below the diaphragm. It consists an upper part, the abdomen proper and a lower part, the true pelvis.
- Superiorly- diaphragm

- Inferiorly- the abdominal cavity extends into the false pelvis.
- The gluteal region lies behind the lower part of both the abdominal cavity and the pelvic cavity.

- Regions of abdomen-
- ➤ The anterior aspect of the abdomen, therefore, is divided into the 9 regions by using 2 transverse and 2 vertical planes.
- ✓ The superior transverse plane is the transpyloric plane. It lies midway between the upper border of the manubrium sterni (suprasternal notch) and the upper border of the pubic symphysis. It passes through the lower part of body of L1 vertebra and cuts the costal margin at the tip of the 9th costal cartilage. internally, this plane cuts across the pylorus and hence its name.

- ✓ The inferior transverse plane is the transtubercular plane. It lies at the level of the tubercles of the iliac crests. It passes through the upper part of body of L5 vertebra. This plane cuts the tubercles of the iliac crest, it has been called the transtubercular plane.
- ✓ The 2 vertical planes used for subdividing the abdomen into regions are the right and left lateral planes. On the anterior aspect of the body, they are represented by the right and left lateral lines. The right and left lateral lines are commonly referred to as the midclavicular lines.

- The upper end of each line is at the midpoint between the medial and lateral ends of the clavicle.
- Its lower end is midway between the anterior superior iliac spine and the pubic symphysis.
- The abdomen is divided into the following 9 regions.

#### In the midline from above downwards:

- 1. Epigastrium
- 2. Umbilical region
- 3. hypogastrium

### Lateral to the epigastrium

- 1. Right hypochondrium
- 2. Left hypochondrium

#### Lateral to the umbilical region

- 1. Right lumbar region
- 2. Left lumbar region

#### Lateral to the hypogastrium

- 1. Right iliac region (inguinal)
- 2. Left iliac region

- 2 additional planes are sometimes used.
  These are-
- 1. The subcostal plane at the lowest part of the costal margin formed by the 10<sup>th</sup> costal cartilage; this plane lies at the level of the upper part of body of L3 vertebra.
- 2. The supracristal plane at the level of the highest points of the iliac crests; when drawn on the posterior surface of the body, this plane cuts the spine of L4 vertebra.

- Other surface markings related to abdomen-
- ❖ The midline of the anterior abdominal wall is marked by a slight groove. When skin over the midline is removed, a white line called the linea alba (latin.albus-white) is seen.
- **❖** A curved line extending from the pubic tubercle below to the tip of the 9<sup>th</sup> costal cartilage above. This line is the linea semilunaris.
- The umbilicus is a prominant feature on the anterior abdominal wall, but is not a useful landmark because of variability in its position.

❖In the healthy young adult, it usually lies at the level of intervertebral disc between L3 and L4. the umbilicus marks the point at which the umbilical cord is attached during foetal life.

## Walls of abdomen

