Tissues, Tissue layers and Cells “working together”

- 4 basic tissue types, each w/ subtypes:
  * **Epithelial** - lining a cavity or surface, covering & secretion.
  * **Connective** - support & attachment.
  * **Muscle** - movement (locomotion & pump).
  * **Nervous** - e- transmission for info & control of other tissues.

- The term 'Visceral organs' is not an exact term. It usually refers to the abdominopelvic and thoracic organs involved in Digestion, Reproduction, Respiration, Excretion.
  Each visceral organ is made up of combinations of 2 or more of these, arranged in **tissue layers**:

Typical Visceral Organ: What they do:

(NOTE: not all have these layers; this is just a starting point)

- The organ will move a substance through the lumen of the tube, and typically do one of 2 things (or both):
  a. Absorb substances from the lumen into the tissues.
  b. Secrete something into the lumen.

  Also, the organ needs to provide protection, especially from harmful agents within the lumen, and support and connect the organ to the body wall.

- Each tissue layer will have one or more tissue type. Tissue layers have specific functions. Here is a pattern we are often going to see:

1. **Mucosa**: lines the cavity (lumen), and does all the absorbing & secreting in and out of the lumen.

2. **Submucosa**: connects the mucosa to underlying tissues, contains glands for secreting into the lumen, and blood vessels for supplying blood flow (see later).

3. **Muscularis externa**: move substances through the tube (e.g.: peristalsis). 2 layers: **longitudinal** and **circular**.

4. **Serosa**: Give an outer “shell” to the organ, connect the tube to surrounding structures, and (often) surround the organ in a protective fluid-filled bag.

  However, our slides are often “pieces of the organ”