

Cell Specialization and Tissues

All individuals develop from a zygote (single cell derived from a sperm and egg). During the development of the embryo cell specialization occurs - cells become differentiated

cells → cell types → tissues → organs → person

Types of Cells:

- epithelial
 - skin
 - membranes
 - gland and some organ tissue
- muscle cell
 - skeletal (voluntary)
 - smooth muscle (involuntary) digestive tract
 - cardiac muscle (involuntary)
- nervous
 - brain and nerves
- connective
 - bones
 - ligaments and tendons
 - fat
 - blood

(any tissue that produces a matrix)