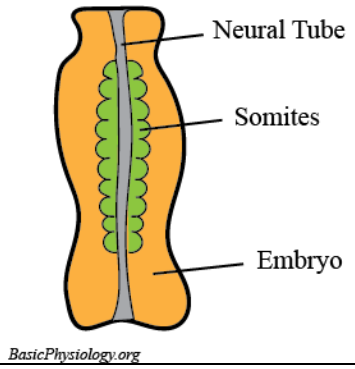
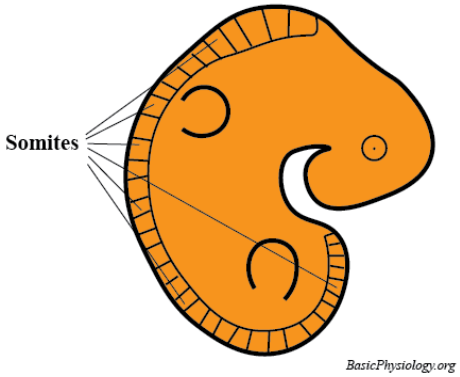
G.6.1.3. Somite

A. Somite

1.
While the primitive streak starts to disappear and the neural groove starts to fold, another event takes place in that spectacular environment.

2.
The mesoderm that are located left and right (=paraxial) of the neural fold, and between the ectoderm and the endoderm, starts to develop into separate block of cells.





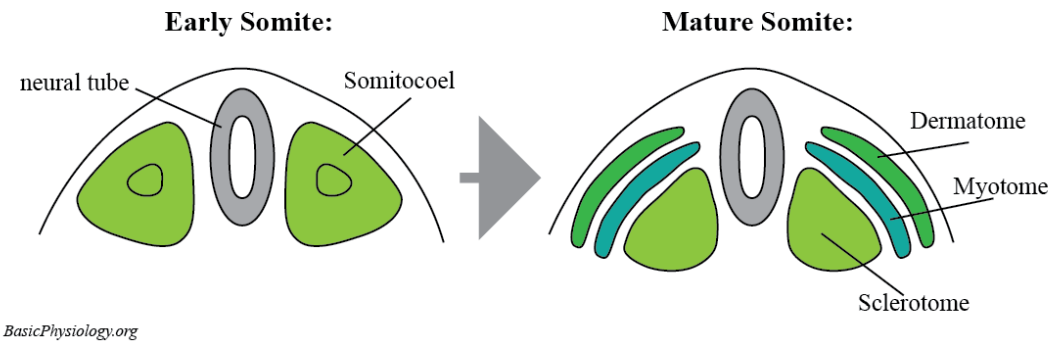
3.
These block of cells, now called **somite**, start to generate a pattern of segments in the embryo which will form the pattern of the vertebral column.

4.
You may remember (from anatomy!) that our spinal column consists of a series of individual vertebrae and numbered according to their location:
C1-C7, T1-T12, L1-L5 and S1-S5.

5.
But these somite's will produce/develop much more than the vertebrae. They also develop the rib cage, skeletal muscles and part of the skin (dermatomes)

6.
In fact, the somite develops into three specific structures:

a) The dermatome
b) The myotome
c) The sclerotome



7. The **dermatomes** will develop into specific areas in the skin. Since each skin area is derived from a specific somite, the spinal nerve from the corresponding vertebrae segment will innervate that part of the skin.	8. The **myotome** (as the name suggests) will develop several types of muscles, especially the skeletal (striated) muscles.
9. The **sclerotome** will develop into ribs, the rib cage, and many types of connective tissues (fibers, tendons, etc.).	