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Multicellular Organisms

- 1) How does multicellular life maintain homeostasis compared to unicellular life?

→ The cells of multicellular organisms become specialized for tasks + communicate to maintain homeostasis.

- 2) Describe the levels of organization of specialized cells in multicellular organisms.

Cells - specialized for a particular function

Tissues - similar cells for a particular function

Organ - tissues together for a larger task

Organ systems - organs together for a specific function

Give an example of each level (other than nervous system).

Ex: Blood Cells → ^{Tissue of} Vessels → Heart → Circulatory System (Cardiovascular System)

Ex: Neuron → Nerve Tissue → Brain → Nervous System

- 3) How do cells respond to chemical signals from outside the cell?

→ To respond to chemical signals, a cell must have a receptor to which the signalling molecule can bind.