

NUR 2063 / NUR2063 Essentials of Pathophysiology Exam 1 Review| Highly Rated Complete Guide | Latest, 2022 / 2023 | Rasmussen College

1. homeostasis
 - **tendency to resist change in order to maintain a stable, relatively constant internal environment**
2. what does homeostasis do?
 - **regulates temperature, glucose, blood pressure, & pH in the body**
3. without homeostasis our body cannot function properly resulting in
 - **sickness or even death**
4. cells attempt to prevent their own death from environmental factors through
 - **adaptation**
5. during cellular adaptation
 - **cells may alter size, numbers, or types trying to manage these changes & maintain homeostasis**
6. adaptation
 - **may involve one or combination of cell modifications, may be normal or not, permanent or reversible**
 - **once response is removed, adaption comes to end**
7. types of adaptive changes

- atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia

8. differentiation

- the process by which cells become specialized in terms of their type, function, structure, and cell cycle

9. atrophy

- happens due to decreased work demands on the cell
- cells uses less oxygen & organelle shrinks
- reduced size of tissue or organ, resulting from decrease in cell size

10. example of atrophy

- arthritis (limits ones mobility due to the inflammation of the joints that cause pain) therefore, could lead to muscle disuse & atrophy

11. hypertrophy

- occurs when cells increase in size in an attempt to meet increased work demands
- enlargement of organs or tissues
- size increase can result from normal or abnormal changes

12. example of hypertrophy

- bodybuilder increases biceps during workout, biceps get larger, & increase strength/function

13. hyperplasia

- increased number of cells in an organ or tissue

14. hyperplasia examples

- wound healing, liver regeneration