

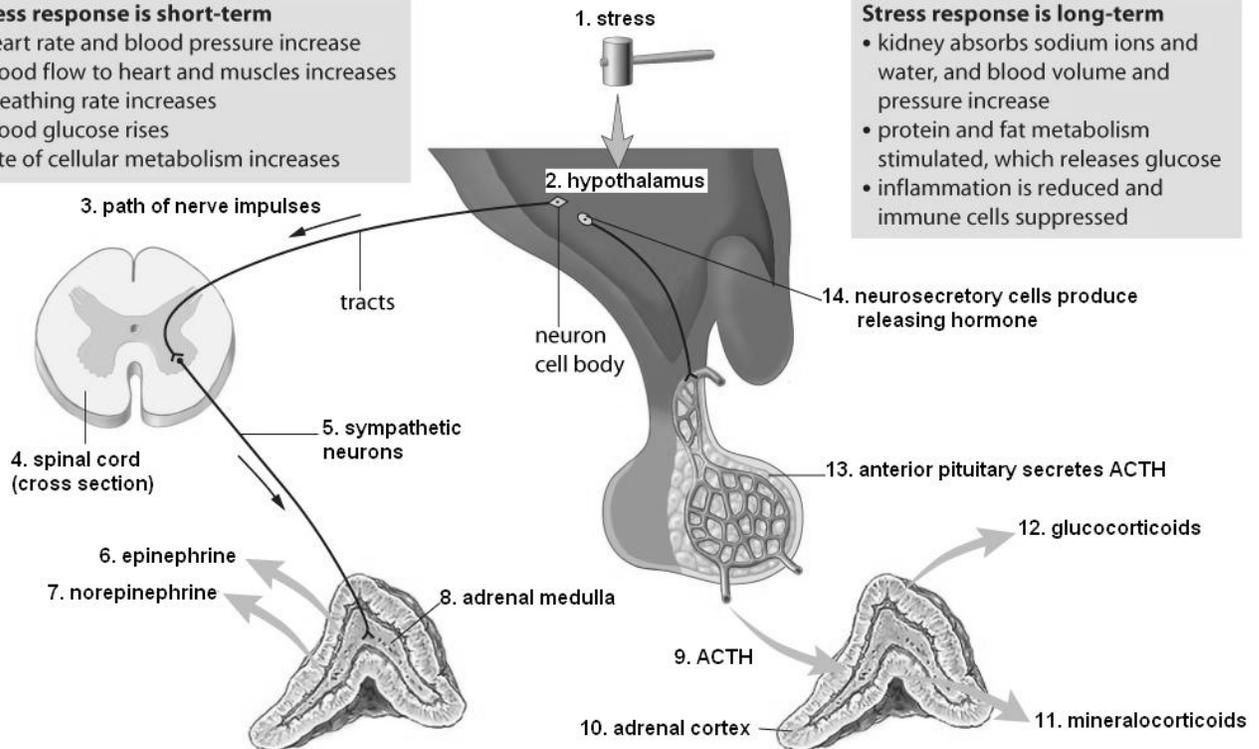
# Short- and Long-term Stress Responses Answer Key

## Stress response is short-term

- heart rate and blood pressure increase
- blood flow to heart and muscles increases
- breathing rate increases
- blood glucose rises
- rate of cellular metabolism increases

## Stress response is long-term

- kidney absorbs sodium ions and water, and blood volume and pressure increase
- protein and fat metabolism stimulated, which releases glucose
- inflammation is reduced and immune cells suppressed



The adrenal medulla and adrenal cortex are under the control of the hypothalamus. The adrenal medulla provides a rapid and short-lived stress response, while the adrenal cortex provides a sustained stress response.