



# **Kazakh – Russian Medical University**

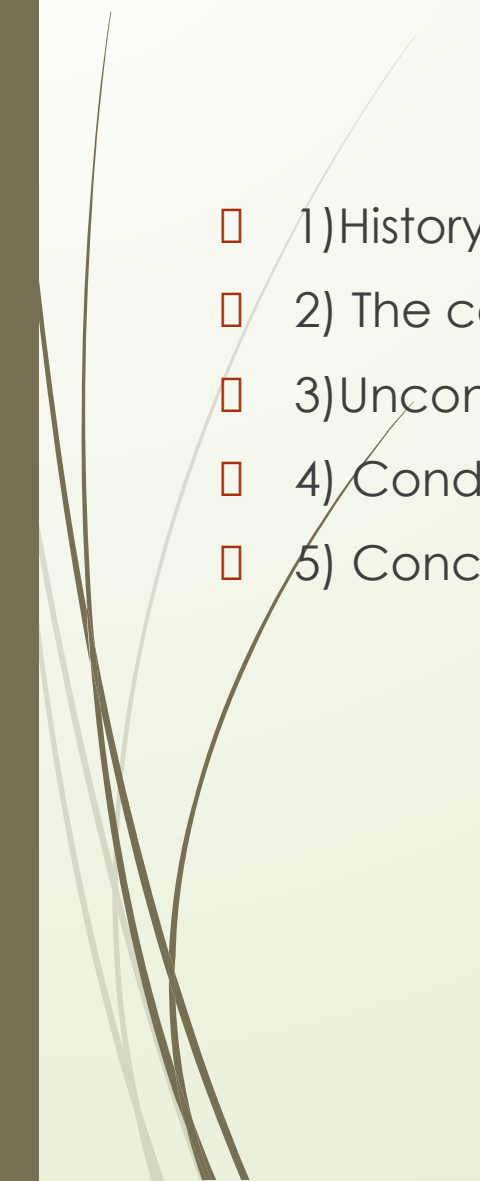
## **Reflexes**

**Done by: Aibek Bazilov, 206 A**  
**Checked by: Dinara Azretalievna**

**Almaty 2016**



# Plan

- 1) History
  - 2) The concept of reflex.
  - 3) Unconditioned reflexes.
  - 4) Conditioned reflexes.
  - 5) Conclusions.
- 

# Reflexes.





# History

- Ideas Sechenov were developed in the writings of Pavlov, who discovered the path of the objective of the pilot study of the cortex functions, developed a method of formation of conditioned reflexes and created the theory of higher nervous activity. Pavlov introduced in his writings on the division of unconditional reflexes, which are carried out congenital, hereditary designated neural pathways, and contingencies, which, according to the views of Pavlov, carried out by neural connections formed during the life of the individual human or animal.

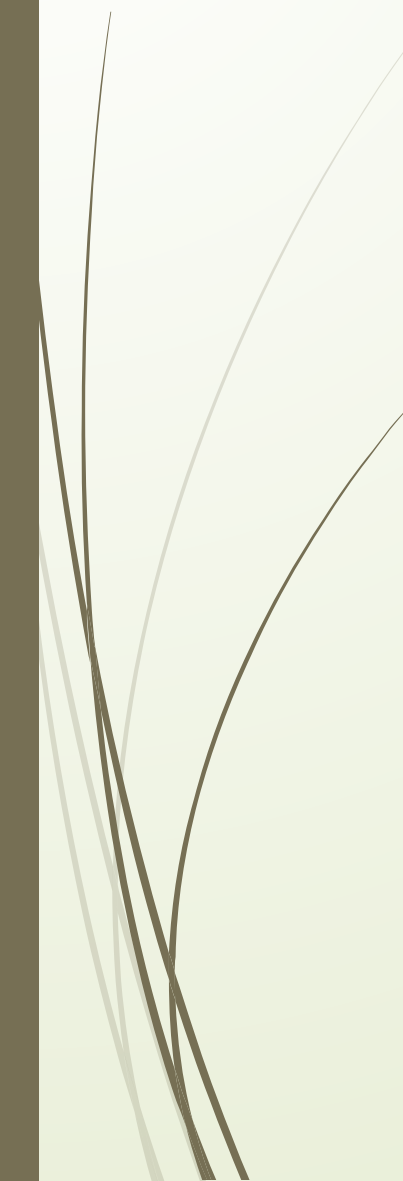


# The concept of reflex.

- Reflex- is the response of an organism to a stimulus which is carried out by the nervous system.
- The reflexes are inborn (instincts) and the conditional, that is acquired during life. Conditioned reflexes are not inherited.
- Congenital reflexes are called unconditional. They are inherited.



# Unconditioned reflexes.

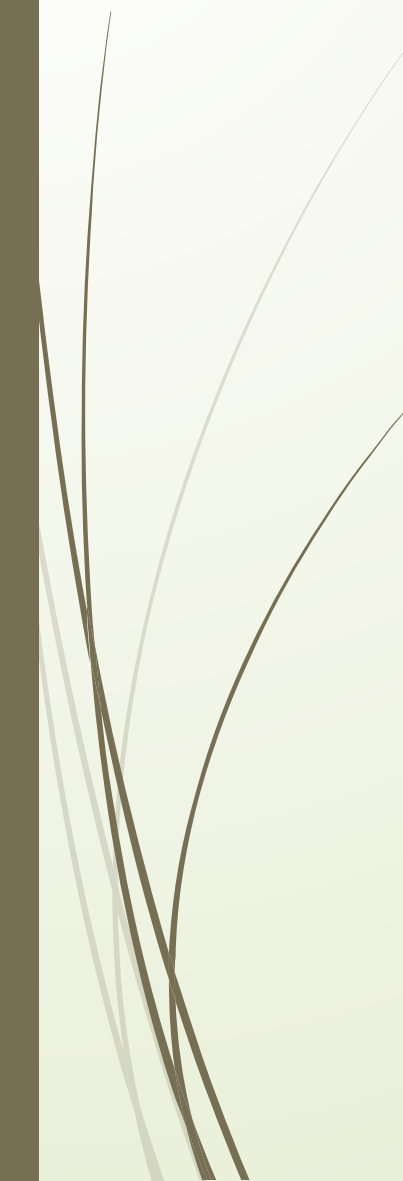
- Available from birth.
  - Do not change or disappear in the course of life.
  - Adapt the body for constant conditions.
  - The same for all organisms of this type
- 

Sneezing - protective innate reflex.





# Conditioned reflexes.

- ❑ Available in their lifetime.
  - ❑ May change or disappear when conditions change.
  - ❑ Every body produces its own.
  - ❑ Adapt to changing body conditions.
- 



# Examples of conditioned reflexes in animals

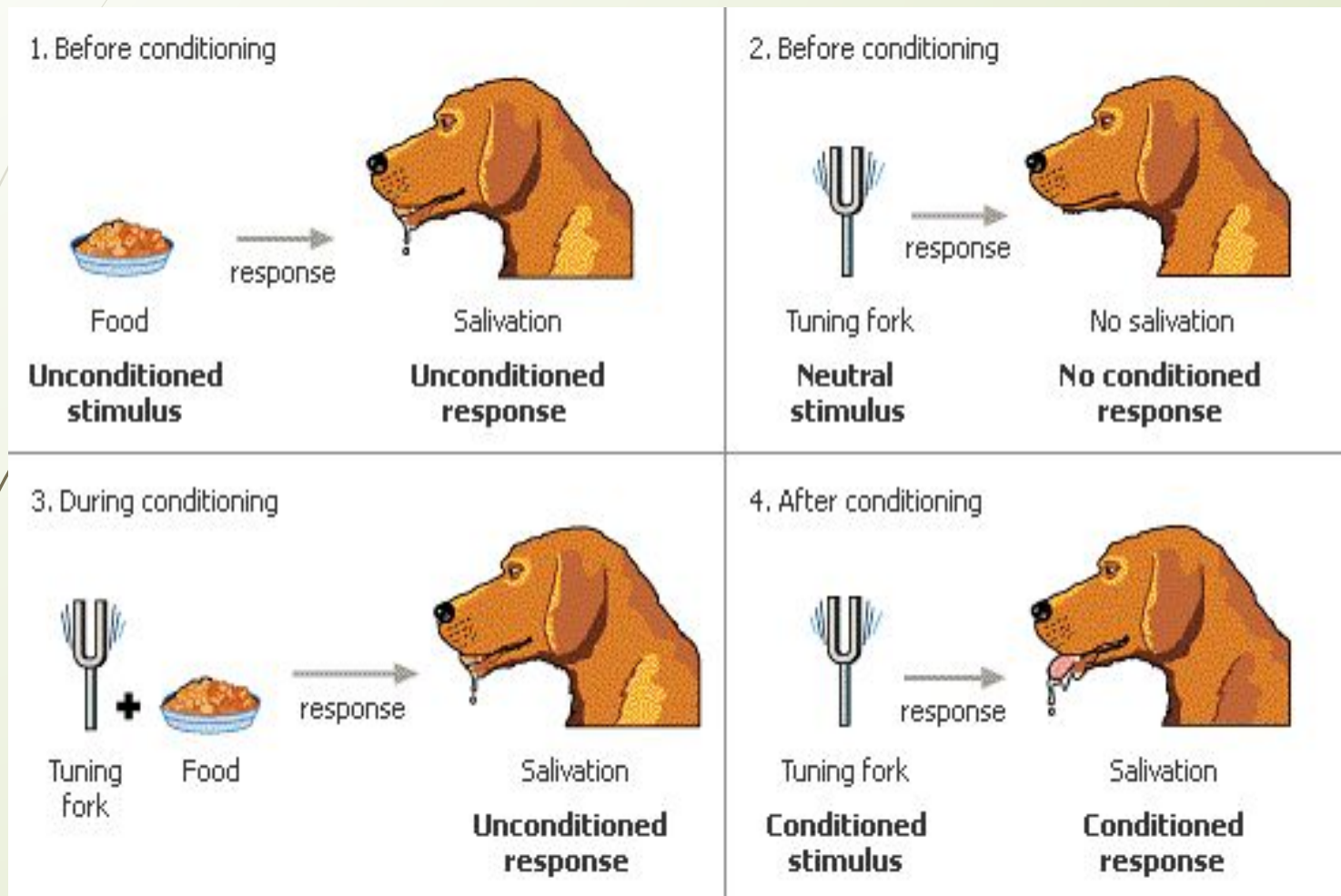


# The basis of training - a conditioned reflex.





# Conditioned reflex





# Conclusions.

- At the heart of the nervous system is the reflex - response to stimulation.
- Reflexes are divided into conditional, developed in the course of life and innate or unconditional.
- Unconditioned reflexes help to survive in difficult conditions.
- Due to conditioned reflexes animals acquire skills.

# Tests

1) Both are called innate reflexes?

A) Unconditioned reflexes      B) Conditioned reflex      c) Protective reflex

2) both are called acquired reflexes?

A) Unconditioned reflexes      B) Conditioned reflex      c) Protective reflex

3) Who studied conditioned reflexes?

a) I.P. Pavlov      b) I.M. Sechenov      c) A.M. Sapin

4) That refers to the protective reflex?

A) Sneezing      b) Running      c) cry

5) a reflex underlies the training of animals?

A) Unconditioned reflexes      B) Conditioned reflex      c) Protective reflex