Introduction to Addiction Science

Addiction Science · Answer Key · 18 Questions

1. Which organ is primarily responsible for controlling the functions of the body and is significantly affected by addictive substances?

A) The stomach
B) The brain
C) The lungs
D) The liver

2. What is the name of the chemical messenger that helps brain cells communicate and is often released in excess when using addictive drugs?

A) Dopamine
B) Insulin
C) Calcium
D) Oxygen

3. What is the term for when a person's body gets used to a substance and needs more of it to get the same effect?

A) Recovery
B) Tolerance
C) Digestion
D) Immunity

4. Which part of the brain is most responsible for making decisions and controlling impulses?

A) Cerebellum
B) Brain stem
C) Prefrontal cortex
D) Occipital lobe

5. How do addictive substances primarily travel through the body to reach the brain?

A) Through the nervous system
B) Through the bloodstream
C) Through the digestive tract
D) Through the lymph nodes

6. What happens to the brain's ability to feel natural pleasure when it is frequently exposed to addictive substances?

A) It becomes more sensitive
B) It increases drastically
C) It becomes less sensitive
D) It remains completely unchanged

7. What is it called when a person feels a strong, uncontrollable urge to use a substance despite knowing it is harmful?

A) Addiction
B) Curiosity
C) Learning
D) Experimentation

8. Which of the following is considered a stimulant, a type of substance that speeds up the central nervous system?

A) Caffeine
B) Melatonin
C) Water
D) Sugar

9. What is the general term for substances that can change the way a person thinks, feels, or behaves?

A) Nutrients
B) Vitamins
C) Psychoactive drugs
D) Minerals

10. Why is it especially dangerous for a pre-teen or teenager to use addictive substances?

A) The brain is still developing
B) The lungs are too small
C) The stomach is too acidic
D) The bones are not fully grown

11. Which neurotransmitter is most closely associated with the brain's reward system?

A) Dopamine
B) Adrenaline
C) Serotonin
D) Melatonin

12. True or false: Addiction is considered a chronic disease of the brain.

A) True
B) False
C) Only in adults
D) Only in animals

13. What is 'withdrawal' in the context of addiction?

A) The feeling of happiness after taking a drug
B) The body's reaction to stopping the use of a substance
C) The act of sharing a substance
D) The process of increasing a dose

14. Which system in the brain encourages us to repeat behaviors that help us survive, like eating?

A) The reward system
B) The skeletal system
C) The digestive system
D) The immune system

15. What does 'substance misuse' refer to?

A) Using medicine exactly as a doctor prescribes
B) Using a substance in a way that is not intended or safe
C) Trying a new food
D) Taking a vitamin supplement

16. Which of these is a common short-term effect of drugs that interfere with brain function?

A) Improved memory
B) Faster reaction times
C) Poor coordination and judgment
D) Better vision

17. Which area of science focuses on how different substances impact biological processes?

A) Pharmacology
B) Geology
C) Botany
D) Astronomy

18. Why can't the brain easily 'unlearn' an addiction?

A) Because it changes the physical structure and communication pathways

B) Because it is only a mental choice

C) Because the stomach remembers the substance

D) Because it only happens during sleep