

Folklore, Legends, and Human Biology

Medical Folklore And Physiology · Answer Key · 25 Questions

1. Ancient folklore often attributed 'humours' to personality traits; which specific physiological fluid was associated with the 'melancholic' temperament?

- A) Blood
- B) Yellow bile
- C) Black bile**
- D) Phlegm

2. The legend of the 'vampire' has been historically linked to porphyria; which human organ system is primarily affected by this group of disorders?

- A) Respiratory system
- B) Heme biosynthetic pathway**
- C) Endocrine system
- D) Central nervous system

3. In medieval European folklore, what was the primary medicinal function attributed to the use of 'mummy powder' (ground Egyptian mummies)?

- A) Reducing internal inflammation
- B) Treating headaches and bleeding**
- C) Inducing sleep
- D) Stimulating bone growth

4. The 'Werewolf' myth was once used to describe a rare psychiatric condition; what is the clinical term for the delusion where a person believes they are transforming into an animal?

- A) Lycanthropy**
- B) Capgras syndrome
- C) Cotard delusion
- D) Boanthropy

5. Medieval legends claimed the 'Mandragora' (Mandrake) root could cure infertility; which potent alkaloid found in the plant actually affects the human parasympathetic nervous system?

- A) Atropine
- B) Scopolamine
- C) Hyoscyamine
- D) All of the above**

6. The folklore surrounding 'St. Anthony's Fire' was actually caused by ergotism; which human body system is primarily damaged by the ergot alkaloid toxins?

A) Circulatory system

B) Digestive system

C) Integumentary system

D) Excretory system

7. Ancient Roman folklore suggested that 'mistletoe' could cure epilepsy; what is the modern scientific classification for the toxic proteins found in the *Viscum album* plant?

A) Lectins

B) Prions

C) Cytokines

D) Neurotransmitters

8. Which historical 'miracle cure' derived from folklore involved the ingestion of crushed pearls, which are composed primarily of which chemical compound?

A) Calcium sulfate

B) Calcium carbonate

C) Magnesium silicate

D) Sodium bicarbonate

9. The legend of the 'changeling' was often used to explain infants suffering from which real-world genetic or developmental condition?

A) Cystic fibrosis

B) Phenylketonuria

C) Turner syndrome

D) Type 1 Diabetes

10. In ancient medical folklore, 'trepanation' was performed to treat various ailments; modern neurosurgery acknowledges it only for which specific condition?

A) Epilepsy

B) Schizophrenia

C) Intracranial pressure

D) Migraines

11. What is the biological basis for the 'corpse candle' folklore, where pale lights appear in graveyards due to the release of which gas during decomposition?

A) Methane

B) Phosphine

C) Hydrogen sulfide

D) Carbon monoxide

12. The 'Mandala' of body proportions in ancient lore often referenced the 'Vitruvian' ideal; which human organ serves as the primary regulator of the homeostatic processes described?

- A) Heart
- B) Hypothalamus**
- C) Liver
- D) Pituitary gland

13. Folklore once claimed that 'dragon's blood' (a resin) could heal skin; what is the main chemical component that provides its antioxidant properties?

- A) Taspine
- B) Tannins**
- C) Capsaicin
- D) Resveratrol

14. The myth of the 'Fountain of Youth' represents the human desire to reverse cellular aging; which enzyme is responsible for maintaining the length of telomeres in human cells?

- A) Telomerase**
- B) DNA polymerase
- C) Ligase
- D) Helicase

15. Historically, 'St. Vitus Dance' was described in folklore as a spiritual possession; what is the modern medical term for the involuntary, jerky movements of Sydenham's chorea?

- A) Bradykinesia
- B) Dyskinesia**
- C) Ataxia
- D) Athetosis

16. Which nutrient deficiency, often ignored in ancient folklore, causes the physical symptoms of pellagra, including dermatitis and dementia?

- A) Niacin (B3)**
- B) Ascorbic acid (C)
- C) Thiamine (B1)
- D) Cobalamin (B12)

17. The folklore of 'The Evil Eye' was believed to cause sudden infant death; which sudden cardiac arrhythmia is the most likely medical cause for such occurrences?

- A) Long QT syndrome**
- B) Atrial fibrillation
- C) Ventricular tachycardia
- D) Bradycardia

18. What organ is physically responsible for the 'heartbreak' pain described in folklore, often involving a surge of catecholamines resulting in Takotsubo cardiomyopathy?

- A) Vagus nerve
- B) Left ventricle**
- C) Right atrium
- D) Coronary artery

19. The legend of the 'Succubus' was once used to explain sleep paralysis; which part of the brain is the primary seat of the REM atonia that causes this phenomenon?

- A) Pons**
- B) Cerebellum
- C) Thalamus
- D) Hippocampus

20. Folklore attributed 'glowing bones' to cursed spirits, but this is actually a biological phenomenon caused by which element found in bones?

- A) Calcium
- B) Phosphorus**
- C) Magnesium
- D) Potassium

21. Which common folkloric practice of bloodletting, meant to balance humours, actually causes a dangerous drop in which blood component?

- A) Hemoglobin**
- B) Platelets
- C) Lymphocytes
- D) Fibrinogen

22. The myth of 'mermaids' was likely an observation of which real-world animal, whose mammary glands and lactation look somewhat human?

- A) Dolphin
- B) Manatee**
- C) Seal
- D) Walrus

23. Ancient folklore suggested placing 'copper' on wounds to heal infection; what is the known antimicrobial action of copper ions on bacterial cell membranes?

- A) Oligodynamic effect**
- B) Osmotic lysis
- C) Protein denaturation
- D) Interference with DNA replication

24. The 'Plague Doctor' costume in folklore used vinegar-soaked sponges; what is the biological limitation of this as a respiratory filter against airborne pathogens?

- A) High pore density
- B) Lack of viral neutralization**
- C) Rapid evaporation
- D) Acidic instability

25. The legend of 'sleeping beauty' may have been based on encephalitis lethargica, which affects which specific area of the human brain?

- A) Substantia nigra**
- B) Hypothalamus
- C) Amygdala
- D) Prefrontal cortex