# The Economics of Human Biology

Economics And Health Science · Practice Test · 8 Questions

**1. What term describes the economic cost represented by the number of years of life lost due to premature mortality and years lived with disability?**

A) Gross Domestic Product
B) Disability-Adjusted Life Years (DALY)
C) Consumer Price Index
D) Human Capital Depreciation

**2. In health economics, what is the 'opportunity cost' of an individual spending one hour exercising?**

A) The calories burned during the workout
B) The value of the next best alternative use of that hour
C) The total cost of a gym membership
D) The reduction in healthcare premiums

**3. Which organ consumes approximately 20% of the body's total energy expenditure, representing a massive 'fixed cost' for human survival?**

A) The liver
B) The heart
C) The brain
D) The kidneys

**4. How does the 'law of diminishing returns' apply to caloric intake for human health?**

A) Each additional calorie consumed provides less marginal benefit for survival once basic needs are met
B) All calories provide the exact same utility
C) Caloric intake has no relationship to economic productivity
D) Consuming fewer calories always increases physical strength

**5. What is the primary 'economic' purpose of the body's homeostatic mechanisms?**

A) To increase the cost of living
B) To minimize energy expenditure while maintaining internal stability
C) To maximize the consumption of glucose
D) To eliminate the need for external resources

**6. From an economic resource perspective, what is the most energy-dense 'capital good' stored by the human body?**

A) Protein
B) Glucose
C) Adipose tissue (fat)
D) Water

**7. Which metric is commonly used by health economists to compare the value of different medical interventions by calculating the cost per additional year of high-quality life gained?**

A) Quality-Adjusted Life Year (QALY)
B) Total Revenue per Patient
C) Gross National Happiness
D) Human Development Index

**8. What economic concept explains why the body prioritizes blood flow to vital organs like the heart and brain during times of 'resource scarcity' (hypovolemic shock)?**

A) Market equilibrium
B) Elasticity of demand
C) Rational prioritization of scarce resources
D) Comparative advantage