

NATURE OF HUMAN PHYSIOLOGY

BND-106

SELF-HELP QUIZ: LESSON 2

ANSWERS

1. T, P. 48
2. F, Metabolism, P. 50
3. F, 58,835 gallons, P. 53
4. T, P. 52
5. T, P. 55
6. F, Dr. Norbert Wiener, P. 59
7. T, P. 61
8. T, P. 62
9. T, P. 64
10. T, P. 62
11. F, Resist and expel it, P. 65
12. T, P. 67
13. T, P. 66
14. F, Spinal brain, P. 69
15. T, P. 68

NATURE OF HUMAN PHYSIOLOGY

BND-106

PROGRESS TEST 1

TEXT: *Health For The Millions* by Dr. Herbert M. Shelton

This Test will cover Chapters 1 through 9 in this textbook. This Progress Test may contain True or False, Multiple Choice, Fill in the Blanks, or Questions and Answers. At the end of your Progress Test, you will find your Answer Sheets on which to write your answers.

1. True or False: The over-all processes of rejecting materials in the organism and those involved in preparing it for excretion constitutes drainage.
2. Sanitary engineers have developed excellent means of draining the cesspools of our cities, but all too often we ignore those of our _____.
3. True False: The tissues of man are woven on a loom that no Eastern Rug Designer or Western Carpet Machinery can rival. Where strength is needed, an iron-like power of resistance is given to man's tissues, though this strand of fiber is finer than spider's thread. Yet, where elasticity is required, the fibers rival rubber in flexibility.
4. The _____ kingdom supports the plant kingdom which in turn supports everything above it. It takes the lifeless materials of our water and soil, and raising them to the status of living structure.

A. Vitamin B. Soil C. Mineral D. Natural
5. True or False: In all higher animals, digestion begins in the stomach in a complex series of processes that are seldom fully appreciated. A digestive fluid, the saliva, has been poured out by the glands of the mouth. This initiates the digestion of some food elements and serves to moisten the food and prepare it for swallowing.

6. True or False: The taste buds of the palate are starting points of sensory impulses that travel to the brain. From there motor impulses travel to the stomach and prepare in advance the proper gastric juices. Different foods require different modifications.
7. True or False: The small intestine is coiled to provide ample space for pushing food through it to be exited and voided.
8. _____ and purgatives lead to chronic constipation. The more violent the bowel action occasioned by a drug, the more injury is done to the digestive tract.
A. Salt B. Laxatives C. Tobacco D. Excitants
9. _____ occasions strong waves of rhythmic muscular contractions and movements which mix the food with digestive juices and their enzymes and propel it along the intestinal canal. To assure efficient control of this start-and-stop mechanism, the intestine is supplied with a double set of nerves. The vagus nerve activates these structures while the sympathetic nerves inhibit their activities.
10. True or False: Taking large quantities of water into the colon, whether by enema or by irrigation, distends it, leaves it dry and enervates it and causes constipation to become chronic. Any method of forcing causes constipation to become chronic. Any method of forcing bowel action may add to constipation.
11. _____ is the universal source of food for all tissues and cells. It is the royal board from which are fed the ministers of life. We are made of no other stuff than what comes from the crimson fountain of our blood. All needed food factors are contained in blood and carried by it to all parts of the body. Blood, as an organic fluid into which all things stream and from which tissues take substance, is the essence of our circulating channels. It feeds the heart, brain, muscles and nerves, bones, hair, nails, eyes, liver, skin, and all other parts of the body.
12. True or False: Blood and lymph are the sap of the animal organism.

13. _____ are minute vessels termed from their hair-like fineness, that receive the blood from the arteries and carry it into the tissues.
- A. Capillaries B. Veins C. Blood D. Nerves
14. The final process of nutrition by which food is transformed into cell substance of living structure is known as _____. It is by this magic process that muscles, bone, nerve, and brain become what they are.
- A. Catabolism B. Anabolism
- C. Metabolism D. Assimilation
15. True or False: The body is incessantly busy compounding the blood and making it into flesh, bone, and functional products. As its components are rendered no longer useful by previous use, waste is removed from the blood. We witness a grand current from the fluid to the solid and from the solid back to the fluid, a perpetual series of formations, destructions, and reformations.
16. True or False: Amino-acids do not all have to be present in the foods you eat but must be present in the blood to form complete protein.
17. True or False: Nutritive secretions are divided into two classes:
- (1) The secretions involved in preparation of foodstuffs for entrance into the bloodstream
- (2) Those involved in utilization of prepared materials after they enter the bloodstream.
18. True or False: The breaking down of cell substances in normal activities (functions) of the organism results in substances no longer usable. These are toxic. Such waste-products (by-products of metabolism as they are called) must be eliminated from the body; else they accumulate and poison it. They are continuously formed in every activity of every cell, giving rise to waste which must be continuously removed from the cells, blood, and lymph.
19. True or False: Drainage begins in the cell.

20. True or False: The brain is the control tower of the organism.
21. Though it creates no part of the body, turns out not a single drop of secretion, and produces not a single seed, the _____ is the husbandman of the corporeal farm of the human organism.
- A. Nervous system B. Circulatory system
C. Visceral body D. Brain
22. It is composed of visceral afferent (sensory) fibers, and visceral efferent (motors) fibers. This system is known as the _____ system.
23. True or False: The brain and its nervous appendages constitute the master control system of the body.
24. True or False: The morphological difference between the somatic motor system and visceral motor system is that two nerve cells are required for transmission of an impulse to the effector's organ in the viscera, while only one nerve cell is necessary to skeletal muscle.
25. The _____ system controls the beating of the heart, heaving of the chest, flow of blood, digestion of food, secretion of the liver, and other involuntary controls.
- A. Nervous B. Autonomic C. Circulatory D. Blood
26. True or False: The sensory nature of the body is plain from the fact that any part of it may be the seat of pain, even though the pain may be felt elsewhere. Thus, pain becomes an object of consciousness. The sufferings of disease indicate what happens in the higher stages of order and health. Even those organs that have no sensory nerves can make themselves felt. They act in relation to substances, either to appropriate them or to expel them.
27. True or False: The spinal chord moves as if it feels; the medulla oblongata eats and breathes as though it were instinct with appetite; the sense feels as though it were conscious; the brain understands as though it possessed intelligence; the cheeks blush as though they were ashamed; the muscles contract as though they were strong; the glands

secrete as though they were autonomous. But it is all quasi. Behind all these actions, sensations and functions stands the mind. Take this away and all actions soon cease.

28. True or False: Through the nervous system the organs of the body receive the passions of the mind. Example: The blushing of the embarrassed maiden is due to the relaxation of facial blood vessels. This results in more blood being sent there. If the young man's heart beats faster when his sweetheart smiles at him, it is due to nerve impulses from the heart.
29. True or False: In life we witness no dance of death.
30. True or False: The nerve is the grand conductor of motive power as well as sensory impulses. The energy of nerves is the life of organs. Nerves are continuous with the brain, and their energy is continuous with its energy. The bodily parts are mechanical and must await orders for action from the nervous system, packed as it is with impulses to the action that it conveys to the organs. Impulses from the nervous system reaching the machinery of the organization give powers corresponding to the kind and complexity of the organ that is activated. The rivers of sensation and impulse that flow in the nerves press into action and sense parts and functions that no other torrents can gain sway. Without the nervous system the body could not for a moment preserve the unity and coherence which constitute the ideal of physical perfection.

NATURE OF HUMAN PHYSIOLOGY

BND-106

PROGRESS TEST 2

TEXT: *Health For The Millions* by Dr. Herbert M. Shelton

This Test will cover Chapters 10 through 16 in this textbook. This Progress Test may contain True or False, Multiple Choice, Fill in the Blanks, or Questions and Answers. At the end of your Progress Test, you will find your Answer Sheets on which to write your answers.

1. True or False: The autonomic division of the nervous system, consisting of fibers from both the central and sympathetic nervous systems, control the circulation of the blood. One division of this—the “vaso-motor” nervous system—controls the flow of blood to and from every part of the body. The brain and nerves possess the power of expanding or constricting the arteries and capillaries anywhere in an instant. They can produce secretion or stop it at will.
2. Nerve energy is _____-_____. The efficiency of both circulation and elimination (excretion) is determined by the amount of nerve energy the individual has. The importance of maintaining a normal supply of nerve energy, therefore, becomes apparent. The enervated individual, that is, the individual with lowered nerve energy, is slowly poisoned by the retention and accumulation of his own cell waste, a blood and flesh condition that has been designated “toxemia.” Toxemia is autogenous poisoning.
3. True or False: If the parts of the human form have functions, the whole has functions, too. What, then, is the physiology, not of the organs of man, but of man as an organism? As an organism man must have some function in the grand scheme of things—in the web of life. Indeed, as the most highly organized being in nature and possessed of a wider range of adaptation to circumstances and conditions, his role

in nature, like that of the brain, is his own organism, and is the highest function in nature. We would expect his role to be symbiotic rather than parasitic and predatory; directive rather than destructive; a friend of life rather than foe. That he is the most destructive force in nature may be a result of his obvious insanity.

4. True or False: All organic sensations and motions, from visceral sensitivity to intellectual perception, is evidence that living structure is obedient to the heart.
5. True or False: The muscular system carries the body into action and action into the rest of the body. Were the muscles themselves not sensories, they could not have a motor life. They are the seat of power—the “I’ can and ‘I’ will” of action. They are the organs of locomotion and bodily progress.
6. True or False: The perspiration of a healthy human body possesses no disagreeable odor like that of flesh-eating animals.
7. True or False: The functions and capacities of a complex organism are made possible by the structural arrangements and organic synthesis formed during embryonic evolution. Despite the proliferation of cells in the evolving embryo, they never lose their solidarity. Not only a continuous adjustment, but also a profound equilibrium co-adapts the differentiated cellular units into functioning organs. The living unit spreads ever wider from the very first cell division, tracing the lineaments of the new organism with unerring certainty.
8. True or False: Removing the tonsils or appendix, or cutting away part of the liver or taking out the womb and ovaries, may do unpredictable and permanent damage to the whole body. Every part of the body, in its quiet way, works for the whole of the body. Every part must work with every other part to obtain healthy results.
9. True or False: Interdependence increases with the singularity of the organism, as there is constant striving toward greater perfection in living techniques. This leads to greater conservation of energy in the performance of tasks.

10. True or False: All organs of the body transmit their state to the body at large. A wound inflicted by a needle point gives a sensation to the whole man.
11. True or False: Man has lived so long in violation of natural laws that he has lost sight, by false conditions, how he might and should be enjoying health and good bodily development.
12. As Dr. _____ has expressed it: "Health is not the result of partial but of integral development." The vigor of any part of the organism is dependent upon normal exercise of the part, whereby a music of organic physiology arises where true harmony of parts exists in the collective whole.
- A. Thomas Low Nickols B. Sylvester Graham
C. R.T. Trall D. Herbert Shelton
13. The conditions of health are few and simple. From the beast of field and the bird of the air many valuable lessons are waiting to be learned. If studied in their natural state and in the exercise of their instinctive ways of life, they would teach us about _____ and how to live naturally.
- A. Ourselves B. Nature C. Them D. Value
14. True or False: The sensations of health are not mere, negatives ones. There are feelings of strength and vigor, a sense of well-being and distinct pleasure in activity.
15. Because the principles of _____ grow out of a wealth of related facts, they have their roots in the daily life and real experiences of man. Because they are true, they will apply with full force to other forms of life, and not to man alone. (NEXT PAGE)
- A. Simplicity C. Hygiene
B. Complexity D. None of the above

16. Here are some of the questions we should ask ourselves: “Would we violate _____? Are we not creatures of _____? Are we not normally in harmony with _____? To live in the open fields, woods, sunshine and fresh air, to eat the simple products of the garden and orchards, to drink pure water, to rest and sleep, to exercise and enjoy the companionship of our fellow humans, is this not as natural to man as to the lower orders”?
- A. Nature B. Habits C. Chaos D. Self
17. True or False: We have become *naturalized* citizens of the unnatural kingdom. We are *naturalized* in wrong living.
18. True or False: We predispose ourselves to disease through wrong habits of eating stimulants, excesses of all kinds, emotional irritations, and remedial courses long before the drugging therapy of doctors is applied.
19. True or False: Substances suitable for food of man are called “organic”; substances not usable as food are “inorganic.” (Vitamin, Minerals, Herbs)
20. True or False: Nature turns out no food that is pure protein, nor pure carbohydrate, nor pure fat.
21. _____ has packed all fruits, nuts, leafy vegetables, cereals, and legumes, with minerals. If foods are eaten in their unprocessed, unrefined, and uncooked state, there is no possibility of mineral deficiency. Our dietary deficiencies grow largely out of a refined and processed diet.
- A. Commercialism B. Man C. The world D. Nature
22. True or False: That men kill themselves by degrees is not evident to anyone who observes the dietetic habits of mankind, and this is especially evident to those who observe man’s alcohol drinking habit. The evils of the world have blinded the minds of the unbelievers.
23. True or False: Darwin, the father of comparative anatomy, said: “Fruits, roots, and succulent parts of vegetables appear to be the natural food of man His short canine teeth, not passing beyond the

common lives of the others, and the tubercular teeth would not permit him either to feed on herbage or devour flesh.

24. True or False: Lions fed for long periods of time on muscle meat in captivity stop breeding unless blood and bone is added to their natural diet.
25. True or False: It has been estimated that “from one-third to one-half of the whole human family, from the creation of the specie to the present time, have subsisted entirely, or nearly so, on vegetable food and were well sustained in all the physiological interests of their nature.

NOTE:

**TURN TO THE NEXT PAGE FOR THE ANSWER SHEETS FOR
PROGRESS TEST 2**

NATURE OF HUMAN PHYSIOLOGY

BND-106

SELF-HELP QUIZ: LESSON 9

ANSWERS

1. F, Should not eat, P. 214
2. T, P. 220
3. T, P. 224
4. T, P. 229
5. T, P. 226
6. T, P. 228
7. F, Accelerates, P. 231
8. T, P. 233
9. T, P. 241
10. T, P. 242

NATURE OF HUMAN PHYSIOLOGY

BND-106

PROGRESS TEST 3

TEXT: *Health For The Millions* by Dr. Herbert M. Shelton

This Test will cover Chapters 17 through 32 in this textbook. This Progress Test may contain True or False, Multiple Choice, Fill in the Blanks, or Questions and Answers. At the end of your Progress Test, you will find your Answer Sheets on which to write your answers.

1. True or False: Cocoa, coffee, tea, chocolate, morphine and quinine are representative of bitter substances, each of them poisonous.
2. True or False: Rhubarb is abundant in oxalic-acid, binds calcium, and is toxic in character.
3. _____ regarded honey as inferior to sugar, producing much indigestion with other foods.
A. Trall B. Shelton C. Graham D. Walter
4. True or False: Pepper, coffee, and tea are stimulating, highly irritating and waste much organic power. All of them retard digestion and destroy tasty, natural flavors.
5. True or False: Once man's normal sensitivity of the olfactory and gustatory nerves has been restored he will again enjoy plain, natural food without irritating substances such as salt and pepper and other spices.
6. Coffee, tea, cocoa, and chocolate all contain an almost identical _____, called caffeine in coffee, theine in tea, and theobromine in chocolate. This substance can be fatal to man.

7. Alcohol is a product of the _____ (decomposition) of carbohydrates (sugars). There's a world of difference between grape juice and wine.
8. True or False: It has been repeatedly shown that tea, coffee, alcohol and similar poisons very markedly retard digestion, destroy digestive enzymes or, at the very least, inhibit their actions.
9. True or False: Hygienists who have tried both modes of living are the better judges when it comes to expressing which mode is superior. Living hygienically or living unhygienically.
10. True or False: Cooking destroys food values. It coagulates proteins, de-aminizes some amino-acids, caramelizes sugars, breaks up fats into free trans-fatty acids, destroys vitamins and enzymes, chemically renders mineral salts non-usable, leeches substances from foods, makes them indigestible and alters the natural taste and flavors.
11. True or False: The health-seeker for a correct diet must learn to handle edibles in a way that conserves all valuable food properties.
12. For best results in nutrition, grating should be done with the _____ rather than kitchen utensils. _____ is the normal manner of eating fruits and vegetables.

A. Hands, Swallowing	C. Mouth, Swallowing
B. Teeth, Swallowing	D. Teeth, Chewing
13. "_____" it has been said, "is the best sauce when eating natural food."
14. True or False: Hyperorexia is the lack of desire for food.
15. If not comfortable in body and mind from one meal to the next, _____ the meal.
16. True or False: Heated arguments should be avoided at the dining table. Peace, poise and cheer should prevail around the table. Any psychological or physical factor that adds to the enjoyment of eating will enhance the flow of digestive juices.

17. True or False: Forceful activity after a meal should cause one to skip the meal entirely, or at the very least, eat a light meal that will quickly be digested.
18. True or False: "We are a nation of food drunkards. Our persistence in such eating finally exhausts the self-regulating resources of the digestive organs and causes suffering.
19. True or False: Chewing food slowly helps to avoid overeating and helps tremendously in better digestion. The more the food is chewed, the better the taste buds detect the character of food being eaten, which in turn secretes the proper quality and quantity of enzymes needed for digestion.
20. True or False: Dr. Shelton stated: "Almost every malady to which the human frame is subject, is either by highways or byways connected with the stomach."
21. True or False: Air is literally the "breath of life." It is oxygen that we take from the air; the presence of oxygen is necessary for the performance of all the functions of life. It is essential to all changes in tissues and to all vital action. Oxygen is not only essential to man's highest physical vigor and well-being, but also to his mental health.
22. True or False: Man, like other animals, is constructed to breathe through the mouth.
23. _____, of England, took the position that man is not normally a drinking animal, but that sufficient water for all his purposes is contained in fruits and vegetables, and that these should constitute his diet. More than 50% of our food is pure water, and this should be sufficient.
 - A. William Lamb, M.D.
 - B. Dr. Shelton
 - C. John Tilden
 - D. None of the above
24. True or False: Heat supplies the necessary condition of vital activity.
25. Feeble and sick individuals who find it difficult or impossible to maintain a normal temperature in a cold climate need to be kept

warm. Chilling _____ all functions of life and reduces their already greatly reduced stock of energy.

- A. Stops B. Inhibits C. Reduces D. All of the above

NOTE:

**TURN TO THE NEXT PAGE FOR THE ANSWER SHEET FOR
PROGRESS TEST 3**

NATURE OF HUMAN PHYSIOLOGY

BND-106

SELF-HELP QUIZ: LESSON 12

ANSWERS

1. T, P. 286
2. F, Graham, P. 285
3. T, P. 283
4. T, P. 282
5. T, P. 291
6. F, Is, P. 301
7. T, P. 291
8. T, P. 313
9. T, P. 309, 310
10. T, P. 306

NATURE OF HUMAN PHYSIOLOGY

BND-106

PROGRESS TEST 4

TEXT: *Health For The Millions* by Dr. Herbert M. Shelton

This Test will cover Chapters 32 through 41 in this textbook. This Progress Test may contain True or False, Multiple Choice, Fill in the Blanks, or Questions and Answers. At the end of your Progress Test, you will find your Answer Sheets on which to write your answers.

1. True or False: By means of clothing, housing and artificial heating arrangements, we are able to live in cold climates. By means of cooling systems and a reduction of clothing, we live more comfortably in hot regions and seasons. But none of these arrangements are ideal. A warm climate serves man best, and first class habits of living enable him to live better in whatever climate he resides.
2. True or False: Dr. Shelton declared: "Life is a Sun-Child."
3. True or False: The influence of exercise in controlling nutrition and functions is universal, applying as much to bones as to muscles and other tissues of the body. Bones duly exercised receive active nutrition, so that they acquired greater dimensions, strength and stability. If they are not used, they do not receive greater nutritive supplies, do not develop and are not strong. Extensive experience has shown that inaction diminishes the size of a bone, injures its structure and deprives it of hardness to such an extent that it may be cut with a knife. Bones subjected to strenuous use become harder, tougher, larger, and less liable to injury.
4. True or False: Sedentary existence tends to preserve all functions of life.

5. True or False: There is a number of contra-indication for exercise, including all acute diseases, joint inflammations, and exhaustion.
6. Those organs that never sleep need periods of reduced activity. They must have time-out to recuperate and repair. This "time-out" for rest of the heart, lungs, digestive system, nervous system, glands, etc. is known as _____ rest, and is secured by most organs during periods of greatly reduced eating or entire abstinence and is often beneficial; sleep is a daily necessity.
7. True or False: A state of profound sleep is a state of utter unconsciousness. If there are any mental activities in process during this state, we have no memory of them when we awaken. The assertion that the mind never sleeps, that even in the profoundest states of sleep it is always active, is most difficult to prove.
8. True or False: There can be no doubt that night is the best time for sleep. When we surrender ourselves to the night's embrace, we sleep.
9. True or False: Digestion proceeds less effectively during sleep when neither physical nor mental activities interfere with the process. A half hour of sleep during the first half of the period of digestion will prove to be debilitating. We should not indulge nature's kind heart. We should not do as the Indians or farmer did; a quiet slumber under the shade of a friendly tree favors bad digestion.
10. True or False: If we spend our leisure in indolence, gluttony and excess, we will destroy ourselves more rapidly than by previous overwork. Idleness and inactivity, whether mental or physical, insure loss of function and early aging. Our leisure should be used constructively for more rest and relaxation, for physical culture and culture of the mind.
11. True or False: Cold baths are enervating which means they're healthy.
12. True or False: The relation between the body and the mind is so intimate that if the body is in any way impaired, we seem to become different beings. Our views of life are altered; pessimism is likely to supplant optimism, worry taking the place of cheerfulness, discouragement replaces courage, grouchiness and irritability displace

amity and geniality, despair replaces enthusiasm, and all joy seems to go out of life.

13. True or False: As the brain is part of the animal system, it is not subject to the same general laws as every other organ of the body.
14. True or False: There is not a state of mind, however produced, but that the body feels and responds to it. Our conscious pleasures or pains are objects of touch to the whole viscera. Anxiety exists in the mind as a knot, upon which the stomach makes a knot in itself in order to feel. The viscera shape themselves upon mental modes that they may sensate the mental states, as the hand makes itself into a sphere to feel a sphere.
15. The _____ effects showing that it is physically connected to our body can be seen when blood is almost wholly withdrawn from the brain, and unconsciousness occurs; if it is altogether withdrawn and the brain is denied blood for a short time, death results.

A. Physical B. Fleshly C. Conscious D. Mental
16. True or False: The brain exercising influence over blood circulation can be seen when fear makes one ghost-like, and causes the lungs to forget their respiratory function and the chest to contract and remain so. This is an action of the mind, making the moments dramatic when we live beyond sense and passion.
17. True or False: A lack of self-esteem or one's belief in one's abilities suppresses our self-latent ability in reserve and prevents its full use and powers. If you underestimate yourself, only the rare individual will recognize in you abilities you have failed to discover.
18. True or False: Christian Science and New Thought religions compelled the medical system to give health attention to the mental life of their patients.
19. True or False: One of the first functions to suffer as a result of faulty nutrition and as a consequence of enervation and toxemia, is that of sex. Human sex-life is a faithful mirror of the total human condition and rests upon the total human way of life.

20. To live within one's income is the first requisite of securing that degree of health that naturally belongs to the living organism. Those who squander their biological and physiological capital soon find themselves _____. If the energies of man are not held in restraint, to the end that they may be conserved, he will speedily exhaust himself and bring on all the evils that inevitably grow out of enervation and self-poisoning. For, if instead of husbanding our energy to carry on the functions of life we squander it, it is inevitable that elimination shall be checked and waste will accumulate in the body.
- A. In dire straits B. Dead
C. Bankrupt D. Unconscious
21. True or False: If man's wisdom is sufficiently great that he permits his appetites and passions to rule him, soon he is enervated, and the impairment of the functions of life strikes at the very foundation of being. Body renewal lags; cell-building deteriorates; blood and lymph become foul; tissues become sour; slowly but surely he goes down and out. Moderation should be the rule of life.
22. True or False: People who have no interest to occupy their minds and don't physically exercise are prone to seek poisonous indulgences like smoking, alcohol, and excessive sex, which further weaken their mental powers into completely impaired debauchery leading to constant headaches, nausea, and bad attitude about life in general.
23. True or False: We can observe the mind's operations on its organic apparatuses. It seems to be no less real than bones themselves.
24. True or False: Just as physiology is the first science that will have to be re-animated, so psychology is the first ghost that will have to be embodied in human habitation.
25. True or False: Every day the phenomenon of intoxication exemplifies that the operations of the mind are disturbed in equal degree to which the brain is excited by poisons. Mind and body are well connected.

NOTE:

**TURN TO THE NEXT PAGE FOR THE ANSWER SHEET FOR
PROGRESS TEST 4**