

This is practice with informational text. Print these pages. Read the two passages and circle the correct answers. This is worth 18 points.

Passage 1

No longer is asthma considered a condition with isolated, acute episodes of bronchospasm. Rather, asthma is now understood to be a chronic inflammatory disorder of the airways—that is, inflammation makes the airways chronically sensitive. When these hyper-responsive airways are irritated, airflow is limited, and attacks of coughing, wheezing, chest tightness, and breathing difficulty occur.

Asthma involves complex interactions among inflammatory cells, mediators, and the cells and tissues in the airways. The interactions result in airflow limitation from acute broncho-constriction, swelling of the airway wall, increased mucus secretion, and airway remodeling. The inflammation also causes an increase in airway responsiveness. During an asthma attack, the patient attempts to compensate by breathing at a higher lung volume in order to keep the air flowing through the constricted airways, and the greater the airway limitation, the higher the lung volume must be to keep airways open. The morphologic changes that occur in asthma include bronchial infiltration by inflammatory cells. Key effector cells in the inflammatory response are the mast cells, T lymphocytes, and eosinophils. Mast cells and eosinophils are also significant participants in allergic responses, hence the similarities between allergic reactions and asthma attacks. Other changes include mucus plugging of the airways, interstitial edema, and microvascular leakage. Destruction of bronchial epithelium and thickening of the subbasement membrane is also characteristic. In addition, there may be hypertrophy and hyperplasia of airway smooth muscle, increase in goblet cell number, and enlargement of submucous glands.

Although causes of the initial tendency toward inflammation in the airways of patients with asthma are not yet certain, to date the strongest identified risk factor is atopy. This inherited familial tendency to have allergic reactions includes increased sensitivity to allergens that are risk factors for developing asthma. Some of these allergens include domestic dust mites, animals with fur, cockroaches, pollens, and molds. Additionally, asthma may be triggered by viral respiratory infections, especially in children. By avoiding these allergens and triggers, a person with asthma lowers his or her risk of irritating sensitive airways. A few avoidance techniques include: keeping the home clean and well ventilated, using an air conditioner in the summer months when pollen and mold counts are high, and getting an annual influenza vaccination. Of course, asthma sufferers should avoid tobacco smoke altogether. Cigar, cigarette, or pipe smoke is a trigger whether the patient smokes or inhales the smoke from others. Smoke increases the risk of allergic sensitization in children, increases the severity of symptoms, and may be fatal in children who already have asthma. Many of the risk factors for developing asthma may also provoke asthma attacks, and people with asthma may have one or more triggers, which vary from individual to individual. The risk can be further reduced by taking medications that decrease airway inflammation. Most exacerbations can be prevented by the combination of avoiding triggers and taking anti-inflammatory medications. An exception is physical activity, which is a common trigger of exacerbations in asthma patients. However, asthma patients should not necessarily avoid all physical exertion, because some types of activity have been proven to reduce symptoms. Rather, they should work in conjunction with a doctor to design a proper training regimen, which includes the use of medication.

In order to diagnose asthma, a healthcare professional must appreciate the underlying disorder that leads to asthma symptoms and understand how to recognize the condition through information gathered from the patient's history, physical examination, measurements of lung function, and allergic status. Because asthma symptoms vary throughout the day, the respiratory system may appear normal during physical examination. Clinical signs are more likely to be present when a patient is experiencing symptoms; however, the absence of symptoms upon examination does not exclude the diagnosis of asthma.

1. According to the passage, what is the name for the familial inclination to have hypersensitivity to certain allergens?
 - a. interstitial edema
 - b. hyperplasia
 - c. hypertrophy
 - d. atopy

2. Why does a person suffering from an asthma attack attempt to inhale more air?
 - a. to prevent the loss of consciousness
 - b. to keep air flowing through shrunken air passageways
 - c. to prevent hyperplasia
 - d. to compensate for weakened mast cells, T lymphocytes, and eosinophils

3. The passage suggests that in the past, asthma was regarded as which of the following?
 - a. a result of the overuse of tobacco products
 - b. a hysterical condition
 - c. mysterious, unrelated attacks affecting the lungs
 - d. a chronic condition

4. Which of the following would be the best replacement for the underlined word exacerbations in this passage?
 - a. allergies
 - b. attacks
 - c. triggers
 - d. allergens

5. The passage mentions all of the following bodily changes during an asthma attack except
 - a. severe cramping in the chest.
 - b. heavy breathing.
 - c. airways blocked by fluids.
 - d. constricted airways.

6. Although it is surprising, which of the following triggers is mentioned in the passage as possibly reducing the symptoms of asthma in some patients?
 - a. using a fan instead of an air conditioner in summer months
 - b. exposure to second-hand cigarette smoke
 - c. the love of a family pet
 - d. performing physical exercise

7. Why might a patient with asthma have an apparently normal respiratory system during an examination by a doctor?
 - a. Asthma symptoms come and go throughout the day.
 - b. Severe asthma occurs only after strenuous physical exertion.
 - c. Doctor's offices are smoke free and very clean.
 - d. The pollen and mold count may be low that day.

8. Who might be the most logical audience for this passage?
 - a. researchers studying the respiratory system
 - b. healthcare professionals
 - c. a mother whose child has been diagnosed with asthma
 - d. an antismoking activist

9. What is the reason given in this article for why passive smoke should be avoided by children?
- A smoke-filled room is a breeding ground for viral respiratory infections.
 - Smoke can stunt an asthmatic child's growth.
 - Smoke can heighten the intensity of asthma symptoms.
 - Breathing smoke can lead to a fatal asthma attack.

Passage 2

Millions of people in the United States are affected by eating disorders. More than 90% of those afflicted are adolescents or young adult women. Although all eating disorders share some common manifestations, anorexia nervosa, bulimia nervosa, and binge eating each have distinctive symptoms and risks.

People who intentionally starve themselves (even while experiencing severe hunger pains) suffer from anorexia nervosa. The disorder, which usually begins around the time of puberty, involves extreme weight loss to at least 15% below the individual's normal body weight. Many people with the disorder look emaciated but are convinced they are overweight. In patients with anorexia nervosa, starvation can damage vital organs such as the heart and brain. To protect itself, the body shifts into slow gear: Menstrual periods stop, blood pressure rates drop, and thyroid function slows. Excessive thirst and frequent urination may occur. Dehydration contributes to constipation, and reduced body fat leads to lowered body temperature and the inability to withstand cold. Mild anemia, swollen joints, reduced muscle mass, and light-headedness also commonly occur in anorexia nervosa.

Anorexia nervosa sufferers can exhibit sudden angry outbursts or become socially withdrawn. One in ten cases of anorexia nervosa leads to death from starvation, cardiac arrest, other medical complications, or suicide. Clinical depression and anxiety place many individuals with eating disorders at risk for suicidal behavior.

People with bulimia nervosa consume large amounts of food and then rid their bodies of the excess calories by vomiting, abusing laxatives or diuretics, taking enemas, or exercising obsessively. Some use a combination of all these forms of purging. Individuals with bulimia who use drugs to stimulate vomiting, bowel movements, or urination may be in considerable danger, as this practice increases the risk of heart failure. Dieting heavily between episodes of bingeing and purging is common.

Because many individuals with bulimia binge and purge in secret and maintain normal or above normal body weight, they can often successfully hide their problem for years. But bulimia nervosa patients—even those of normal weight—can severely damage their bodies by frequent binge eating and purging. In rare instances, binge eating causes the stomach to rupture; purging may result in heart failure due to loss of vital minerals such as potassium. Vomiting can cause the esophagus to become inflamed and glands near the cheeks to become swollen. As in anorexia nervosa, bulimia may lead to irregular menstrual periods. Psychological effects include compulsive stealing as well as possible indications of obsessive-compulsive disorder, an illness characterized by repetitive thoughts and behaviors. Obsessive compulsive disorder can also accompany anorexia nervosa. As with anorexia nervosa, bulimia typically begins during adolescence. Eventually, half of those with anorexia nervosa will develop bulimia. The condition occurs most often in women but is also found in men.

Binge-eating disorder is found in about 2% of the general population. As many as one-third of this group are men. It also affects older women, though with less frequency. Recent research shows that binge-eating disorder occurs in about 30% of people participating in medically supervised weight-control programs. This disorder differs from bulimia because its sufferers do not purge. Individuals with binge-eating disorder feel that they lose control of themselves when eating. They eat large quantities of food and do not stop until they are uncomfortably full. Most sufferers are overweight or obese and have a history of weight fluctuations. As a result, they are prone to the serious medical problems associated with obesity, such as high cholesterol, high blood pressure, and diabetes. Obese individuals also have a higher risk for gallbladder disease, heart disease,

and some types of cancer. Usually they have more difficulty losing weight and keeping it off than do people with other serious weight problems. Like anorexic and bulimic sufferers who exhibit psychological problems, individuals with binge-eating disorder have high rates of simultaneously occurring psychiatric illnesses, especially depression.

10. Fatalities occur in what percent of people with anorexia nervosa?
- a. 2%
 - b. 10%
 - c. 15%
 - d. 30%
11. Which of the following consequences do all the eating disorders mentioned in the passage have in common?
- a. heart ailments
 - b. stomach rupture
 - c. swollen joints
 - d. diabetes
12. According to the passage, people with binge-eating disorder are prone to all of the following except
- a. loss of control.
 - b. depression.
 - c. low blood pressure.
 - d. high cholesterol.
13. Which of the following is not a statement about people with eating disorders?
- a. People with anorexia nervosa commonly have a blood-related deficiency.
 - b. People with anorexia nervosa perceive themselves as overweight.
 - c. The female population is the primary group affected by eating disorders.
 - d. Fifty percent of people with bulimia have had anorexia nervosa.
14. People who have an eating disorder but nevertheless appear to be of normal weight are most likely to have
- a. obsessive-compulsive disorder.
 - b. bulimia nervosa.
 - c. binge-eating disorder.
 - d. anorexia nervosa.
15. Glandular functions of eating-disorder patients slow down as a result of
- a. lowering body temperatures.
 - b. excessive thirst and urination.
 - c. protective measures taken by the body.
 - d. the loss of essential minerals.

16. The inability to eliminate body waste is related to

- a. dehydration.
- b. an inflamed esophagus.
- c. the abuse of laxatives.
- d. weight-control programs.

17. According to the passage, which of the following is true of bulimia patients?

- a. They may demonstrate unpredictable social behavior.
- b. They often engage in compulsive exercise.
- c. They are less susceptible to dehydration than are anorexia patients.
- d. They frequently experience stomach ruptures.

18. Which of the following represent up to two-thirds of the binge eating disorder population?

- a. older males
- b. older females
- c. younger males
- d. younger females