Exam

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) The field of nutrigenomics has the potential to improve human health by 1) _____
   A) creating new foods with biologically active ingredients.
   B) altering a diseased individual's DNA makeup.
   C) identifying foods that can regulate specific genes.
   D) expanding the human genome 100-fold.

2) Which of the following may one day develop personalized diets tailored to a specific genetic makeup? 2) _____
   A) microbiomics
   B) cryogenics
   C) genetic engineering
   D) nutrigenomics

3) Which of the following statements is TRUE about the consumption of foods containing phytochemicals? 3) _____
   A) They increase the risk of diseases of aging.
   B) They increase the rates of blood clotting.
   C) They increase the rates of infection.
   D) They reduce the risk of cancer.

4) Which of the following is NOT one of the challenges facing the field of nutrigenomics? 4) _____
   A) The statistics needed to measure genes and their variants are very complex.
   B) Age, gender, and lifestyle must also be taken into account in how foods interact with genes.
   C) Scientists do not know the functions of thousands of genes in the human genome.
   D) Scientists have not been able to identify the mechanism by which diet contributes to disease.

5) The microorganisms in the gastrointestinal (GI) tract benefit our health by 5) _____
   A) promoting the inflammatory response.
   B) producing enzymes that help digest food and absorb nutrients.
   C) serving as "tags" in screenings for cancer.
   D) suppressing the genes that cause cancer.

6) Which of the following is NOT a health-promoting function associated with a healthy intake of phytochemicals from foods? 6) _____
   A) enhanced immune function to protect against infection
   B) slowing of tumor cell growth in the development of cancer
   C) increase in bacterial resistance to antibiotics
   D) reduction in inflammation that is linked to the development of heart disease

7) Bread enriched with folate is an example of a 7) _____
   A) functional food. B) prebiotic. C) probiotic. D) whole food.

8) Which of the following would provide the most effective dose of live and active bacterial cultures? 8) _____
   A) 1 cup of wine
   B) 1 teaspoon of inulin
   C) 1 cup of yogurt
   D) 1 cup of tofu

9) Prebiotics contribute to health by 9) _____

A) adding lipids to the lining of the GI tract.
B) adding protein and liquid to the GI tract to increase its activity.
C) decreasing lipid metabolism.
D) stimulating the growth and activity of beneficial GI flora.

TRUE/FALSE. Write 'T' if the statement is true and 'F' if the statement is false.

10) Probiotics make up all of the roughly 100 trillion microorganisms living in the human body. 10) _____

11) Current research suggests that the health benefits of phytochemicals come only in supplement form. 11) _____

12) Probiotics contribute to human health by improving the balance of healthful bacteria in the GI tract. 12) _____

13) Inulin is a kind of prebiotic that nourishes colonies of healthful bacteria in the GI tract. 13) _____

14) Researchers have not discovered a link between the GI flora and obesity. 14) _____

15) The GI flora make chemicals that protect against asthma and other inflammatory disorders. 15) _____

16) Nutrigenomics research has shown that a mother's food intake can affect the genes expressed by her children. 16) _____

17) Orange juice with added calcium is an example of a probiotic. 17) _____

18) Prebiotics are generally found in easily digestible, high-protein foods such as meat and poultry. 18) _____

Answer Key
Testname: UNTITLED2

1) C
2) D
3) D
4) D
5) B
6) C
7) A
8) C
9) D
10) FALSE
11) FALSE
12) TRUE
13) TRUE
14) FALSE
15) TRUE
16) TRUE
17) FALSE
18) FALSE