Answers Nutrition 120: Vitamins and Minerals Review

1. How many calories per gram do vitamins provide? Minerals?

Vitamins and minerals do not provide any calories (zero)

2. Why does the body need vitamins?

The body needs vitamins to regulate the body processes.

3. How many vitamins are known today? Minerals?

There are 13 known vitamins and 16 minerals that are known to be important to your diet.

- 4. Name three stages in the life cycle during which the body has a greater than usual need for vitamins. Three stages in the life cycle during which the body needs vitamins in a greater quantity are during adolescence, when you are pregnant, and when are you elderly
- 5. What is toxicity and how does it relate to vitamin consumption?

Toxicity is a poisonous condition that occurs when vitamins are consumed in large quantities. It can occur with fat soluble vitamins especially because our body stores the excess it can also occur if you are taking large amounts of vitamin supplements.

6. What vitamin can be produced by the body through exposure to sunshine? Vitamins D

7. What causes scurvy?

Scurvy is caused by a vitamin C deficiency.

- 8. What is the difference between a vitamin and a provitamin? Give an example of a provitamin. Provitamins are not vitamins at all, but the body can convert them into the active form of a vitamin. Beta-Carotene is a provitamin for vitamin A.
- 9. Name the 5 functions of vitamins.

The five functions of vitamins are: nutrient metabolism, energy production and release, tissue maintenance, normal digestion, and infection resistance

10. What is the difference between fat soluble and water soluble vitamins? Give an example of two fat-soluble vitamins and two water soluble vitamins.

Fat soluble vitamins are stored after ingesting them, excess water soluble vitamins are excreted in the urine therefore deficiency symptoms develop. An example of a fat soluble vitamin would be A,D,E,K and water-soluble vitamins are the B vitamins B12,B1,B2,B6 and vitamin C.

11. What are minerals?

Minerals are nutrients needed in small amounts to perform various functions in the body. Minerals are elements that can be found on the periodic table, such as calcium, iron and phosphorous.

12. What is the difference between a macro mineral and a micro mineral?

Macrominerals are the major minerals are required in amounts of 100mg or more per day. Microminerals are the trace minerals they are required in amounts less than 100mg per day.

13. Name the 6 functions of minerals

The 6 functions of minerals are: helping enzymes complete chemical reactions, becoming part of body components, aiding normal nerve functioning and muscle contraction, promoting growth, regulating acid-base balance in the body, and maintaining body fluid balance.