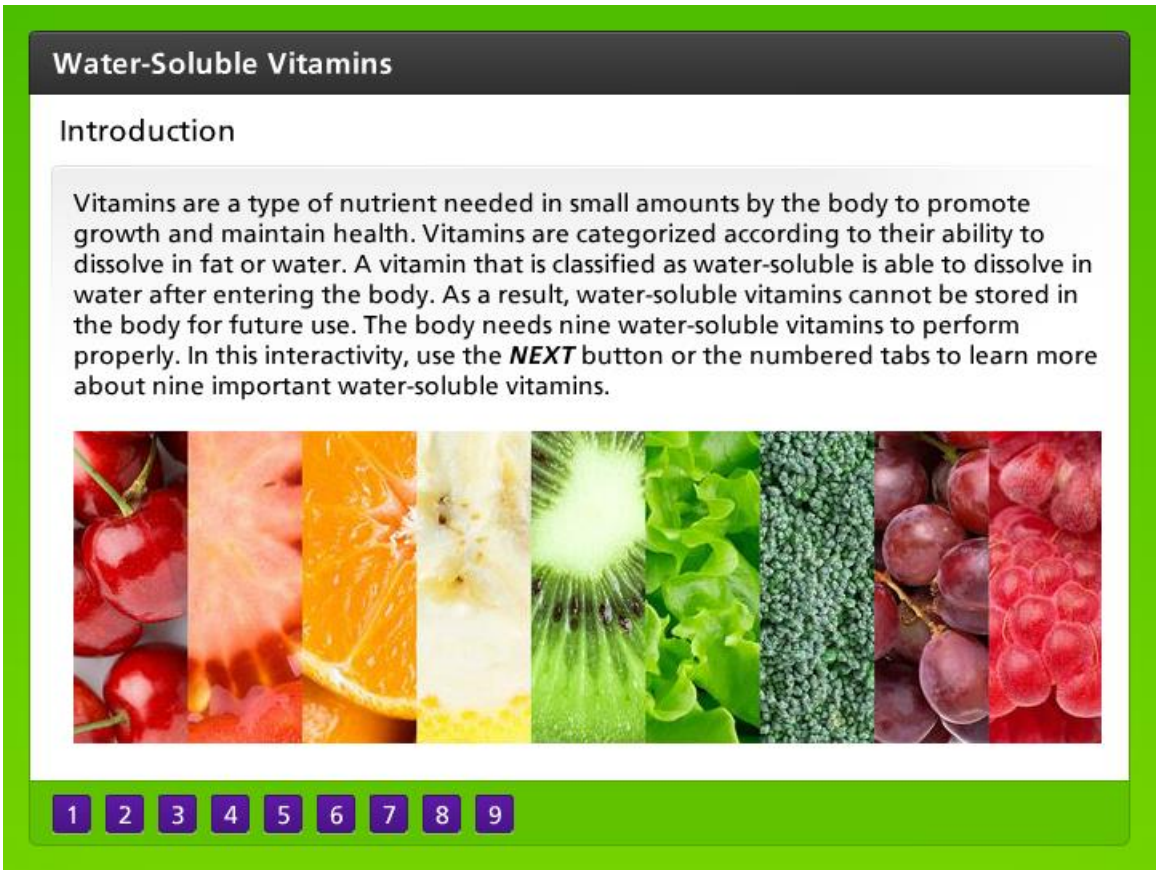
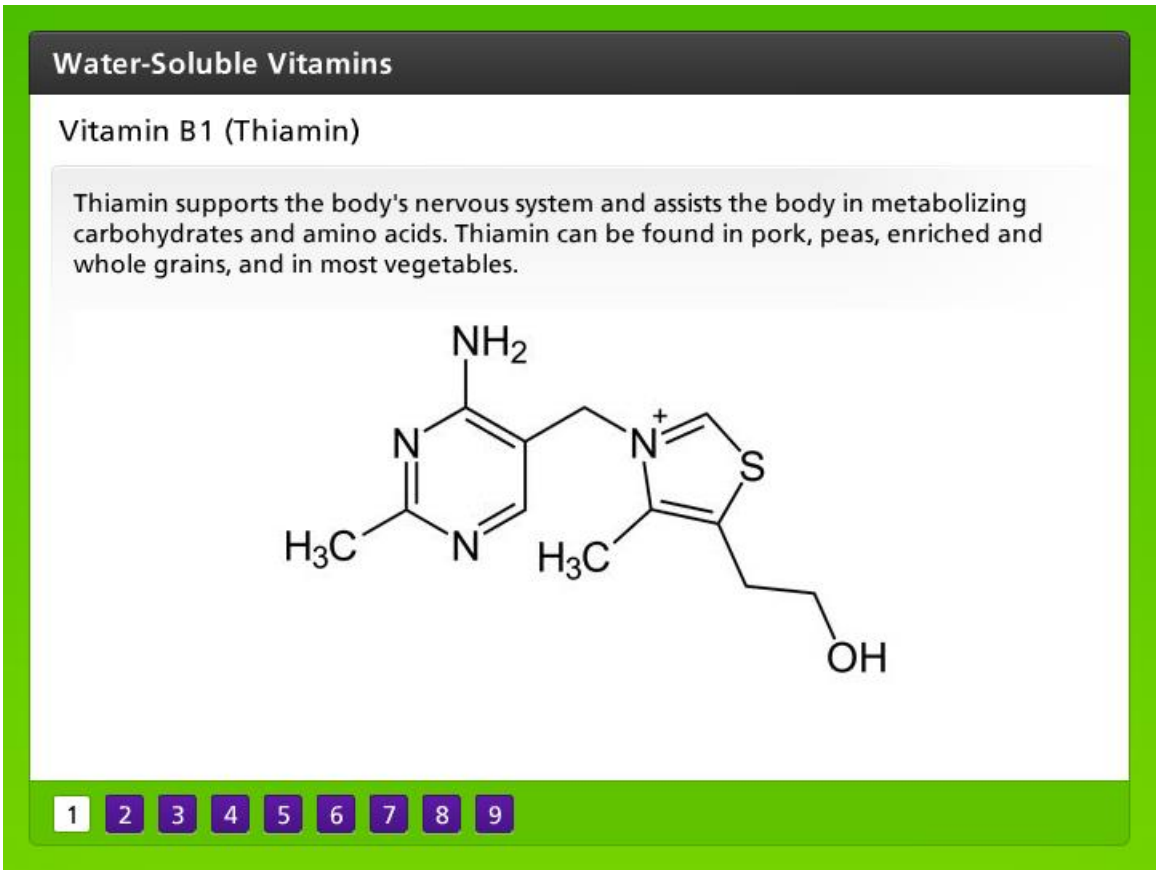
Module 8: Lifelong Health and Wellness
Topic 1 Content: Water-Soluble Vitamins

Introduction



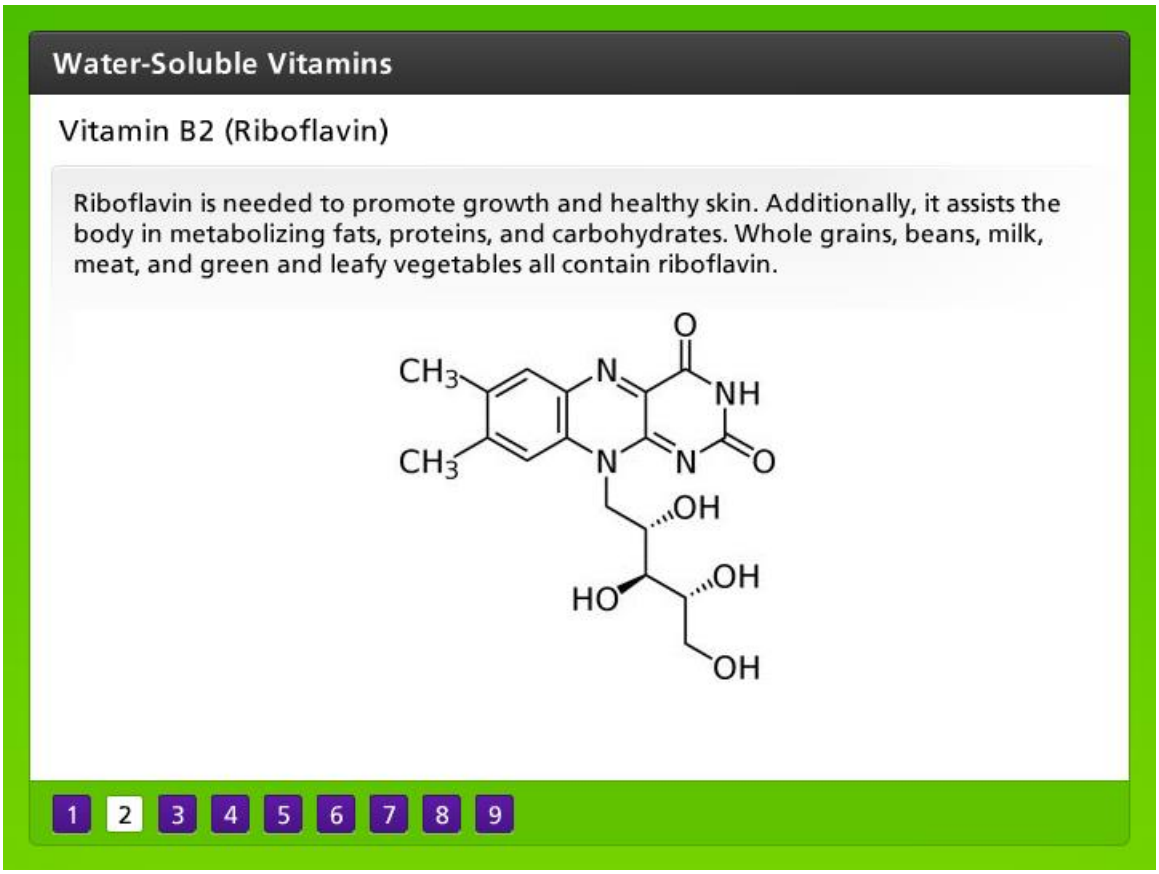
Vitamins are a type of nutrient needed in small amounts by the body to promote growth and maintain health. Vitamins are categorized according to their ability to dissolve in fat or water. A vitamin that is classified as water-soluble is able to dissolve in water after entering the body. As a result, water-soluble vitamins cannot be stored in the body for future use. The body needs nine water-soluble vitamins to perform properly. In this interactivity, use the ***NEXT*** button or the numbered tabs to learn more about nine important water-soluble vitamins.

Vitamin B_1 (Thiamin)



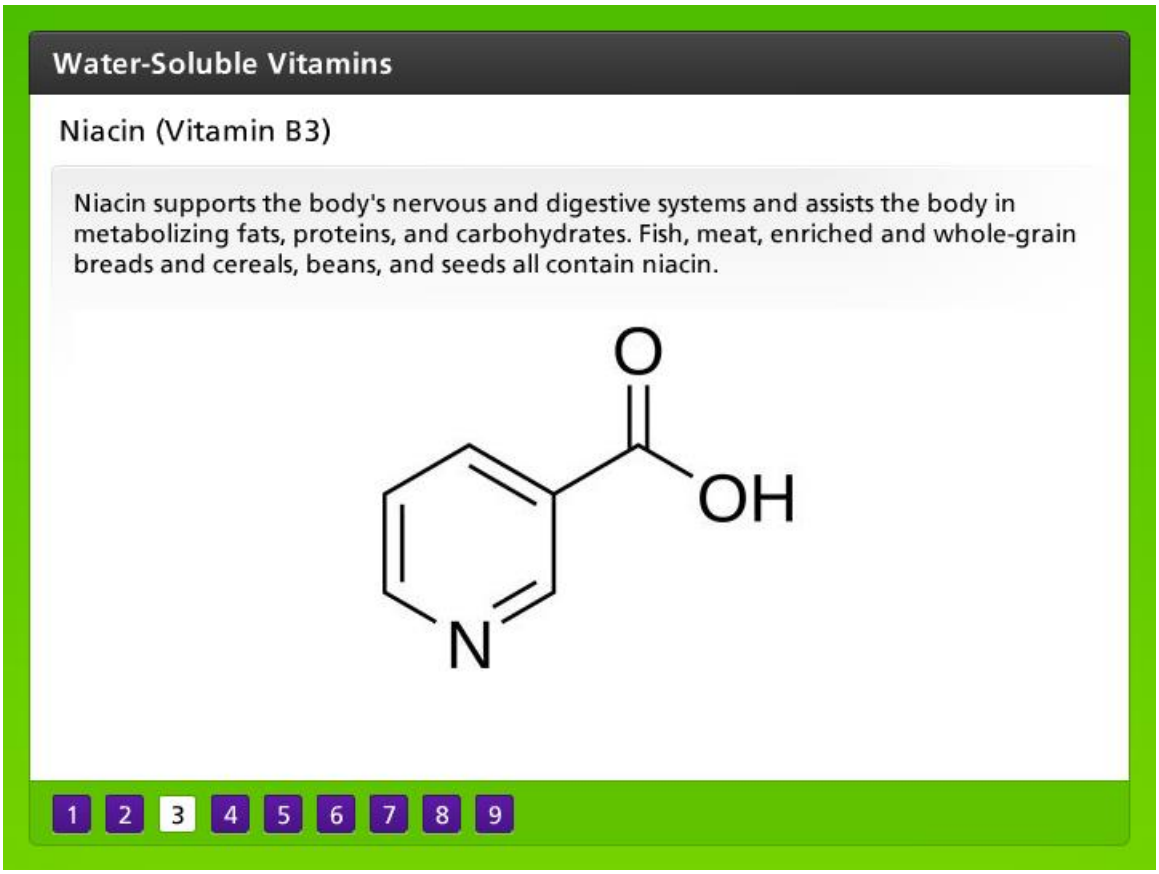
Thiamin supports the body's nervous system and assists the body in metabolizing carbohydrates and amino acids. Thiamin can be found in pork, peas, enriched and whole grains, and in most vegetables.

Vitamin B_2 (Riboflavin)



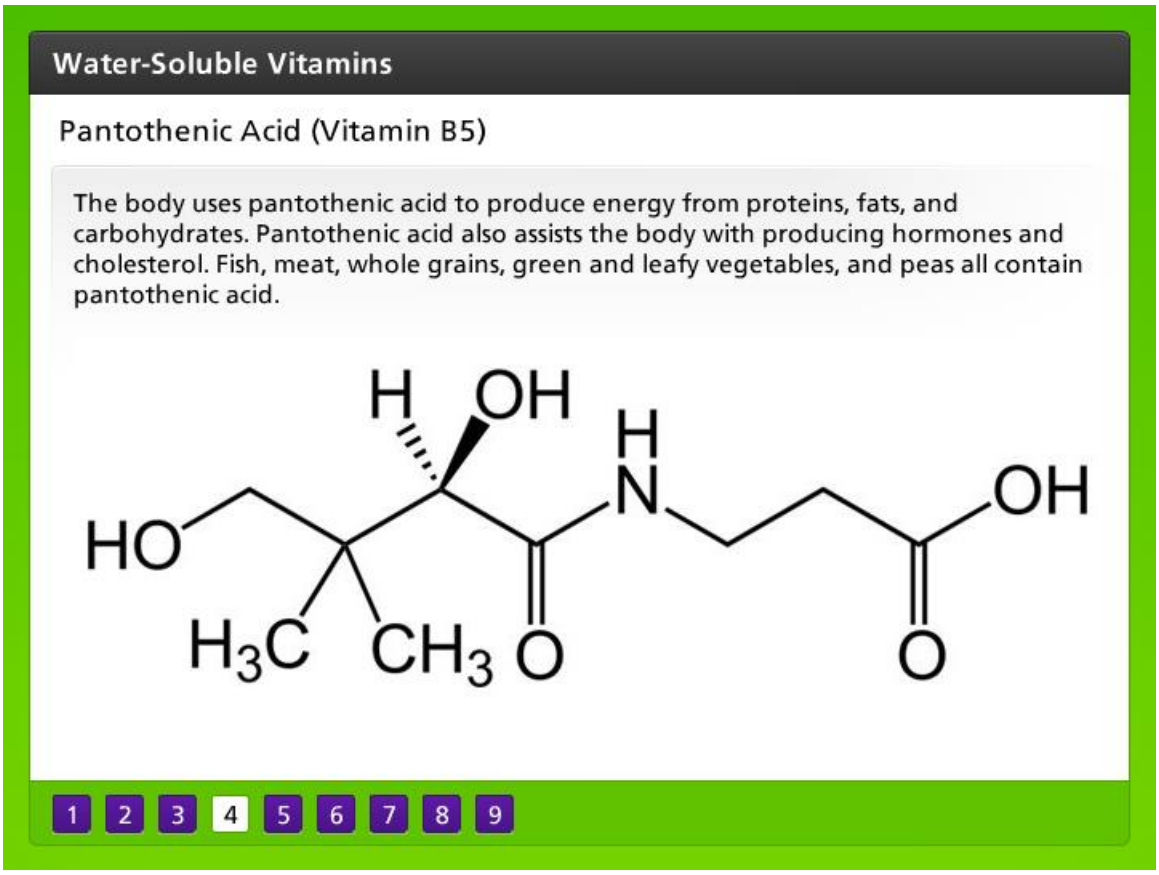
Riboflavin is needed to promote growth and healthy skin. Additionally, it assists the body in metabolizing fats, proteins, and carbohydrates. Whole grains, beans, milk, meat, and green and leafy vegetables all contain riboflavin.

Niacin (Vitamin B_3)



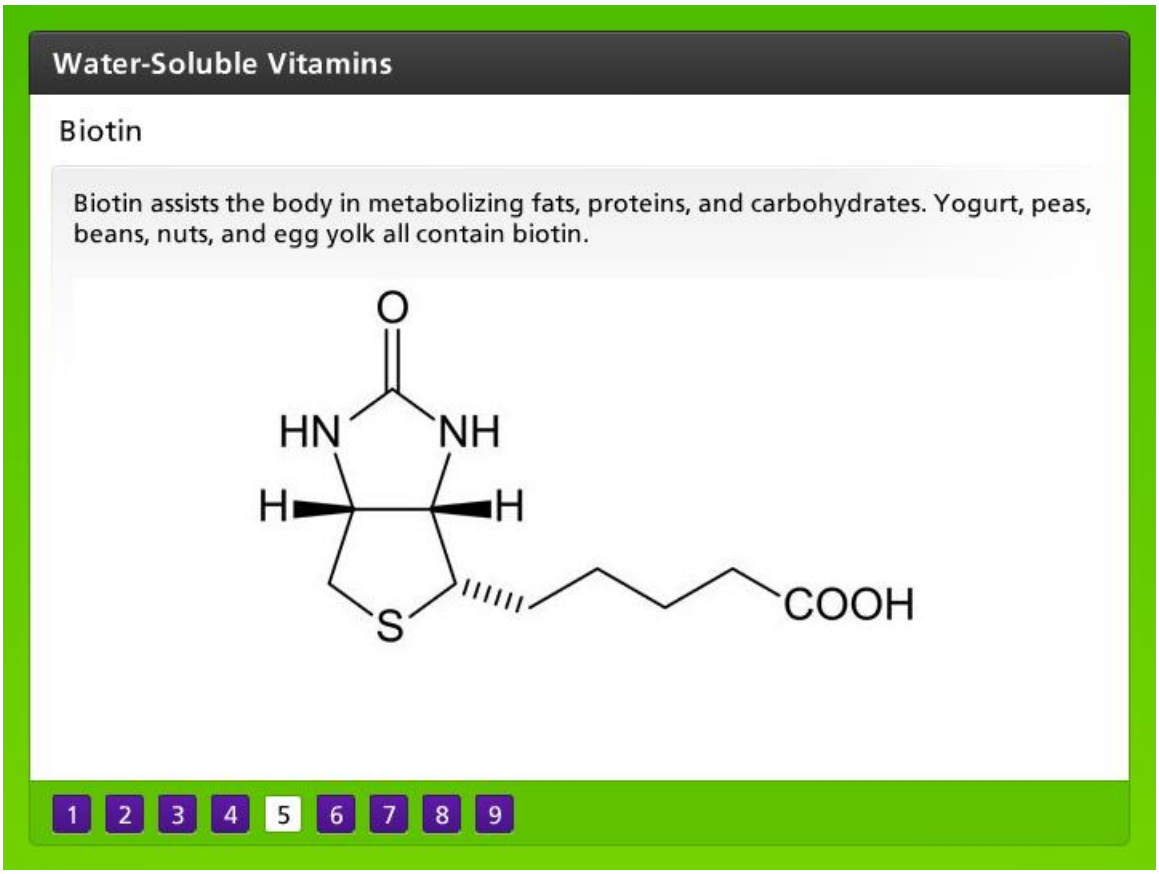
Niacin supports the body's nervous and digestive systems and assists the body in metabolizing fats, proteins, and carbohydrates. Fish, meat, enriched and whole-grain breads and cereals, beans, and seeds all contain niacin.

Pantothenic Acid (Vitamin B_5)



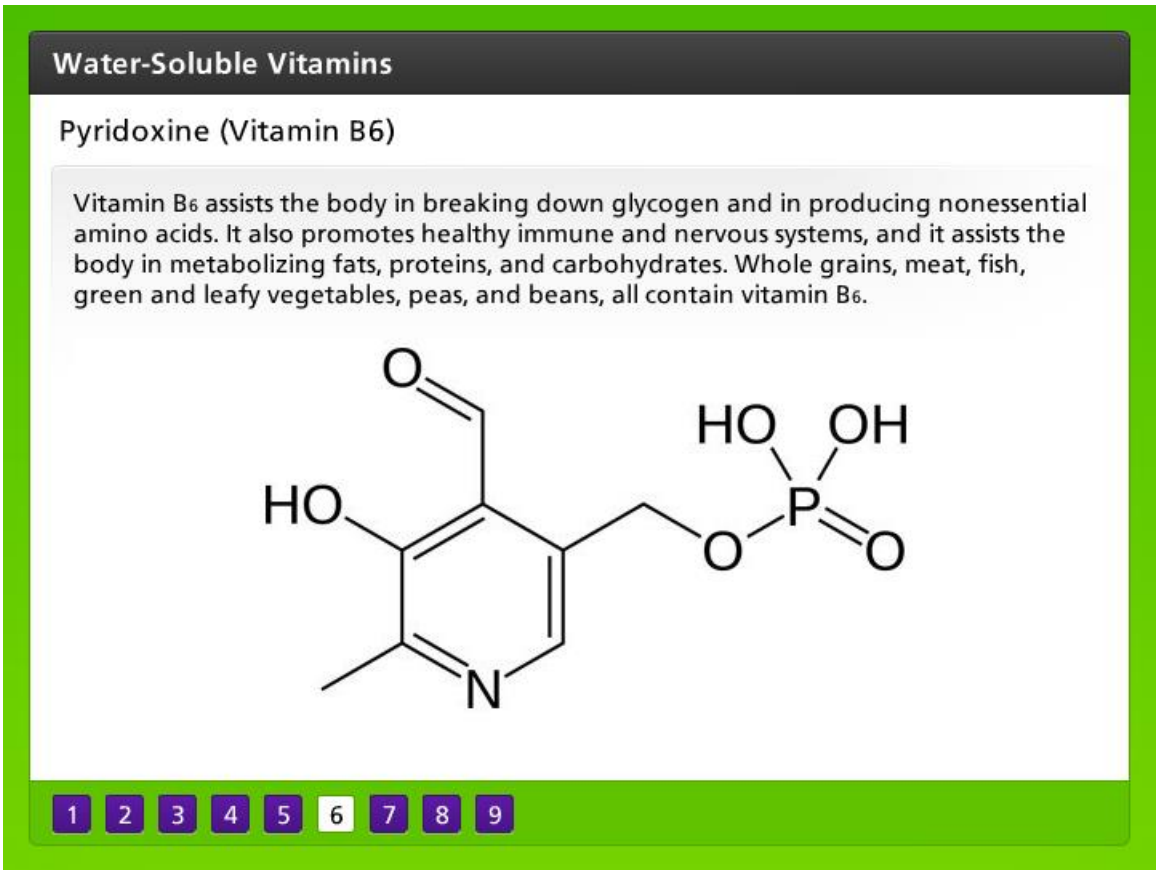
The body uses pantothenic acid to produce energy from proteins, fats, and carbohydrates. Pantothenic acid also assists the body with producing hormones and cholesterol. Fish, meat, whole grains, green and leafy vegetables, and peas all contain pantothenic acid.

Biotin



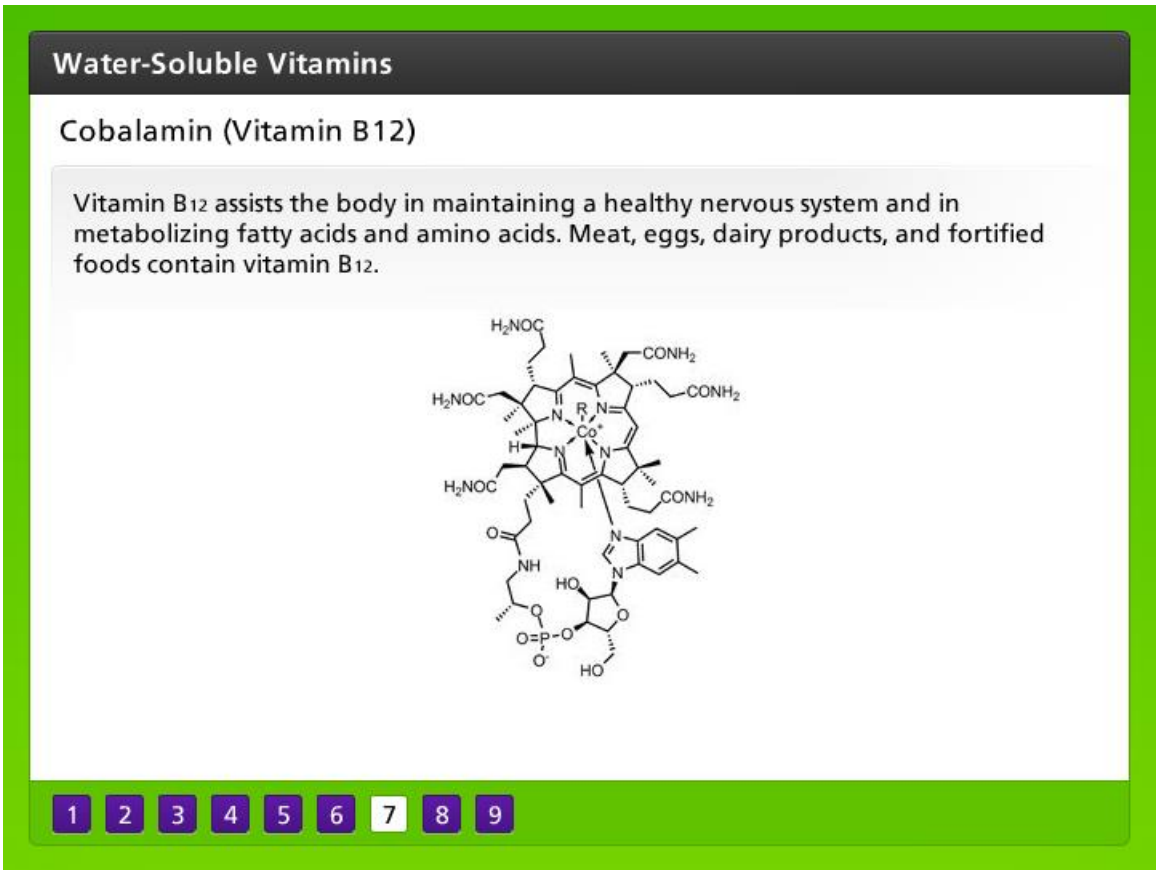
Biotin assists the body in metabolizing fats, proteins, and carbohydrates. Yogurt, peas, beans, nuts, and egg yolk all contain biotin.

Pyridoxine (Vitamin B_6)



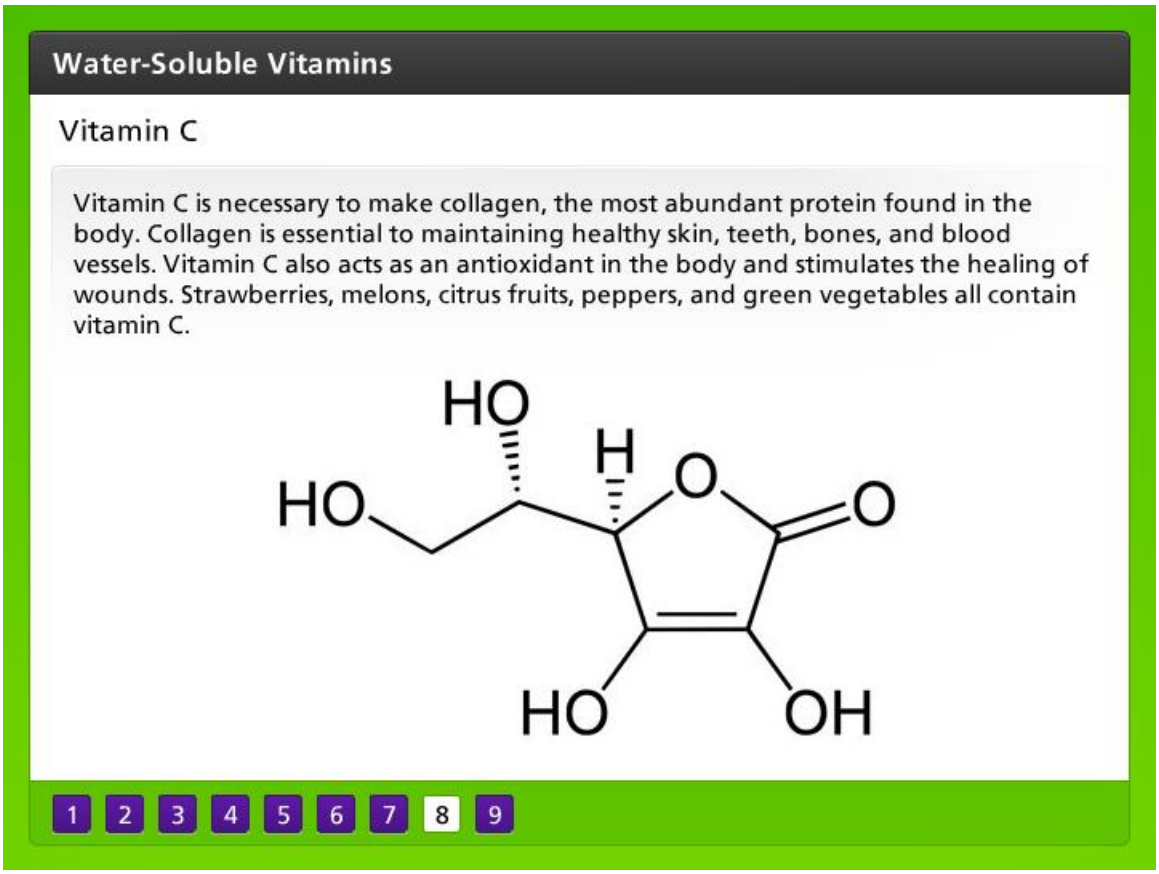
Vitamin B_6 assists the body in breaking down glycogen and in producing nonessential amino acids. It also promotes healthy immune and nervous systems, and it assists the body in metabolizing fats, proteins, and carbohydrates. Whole grains, meat, fish, green and leafy vegetables, peas, and beans, all contain vitamin B_6.

Cobalamin (Vitamin B_{12})



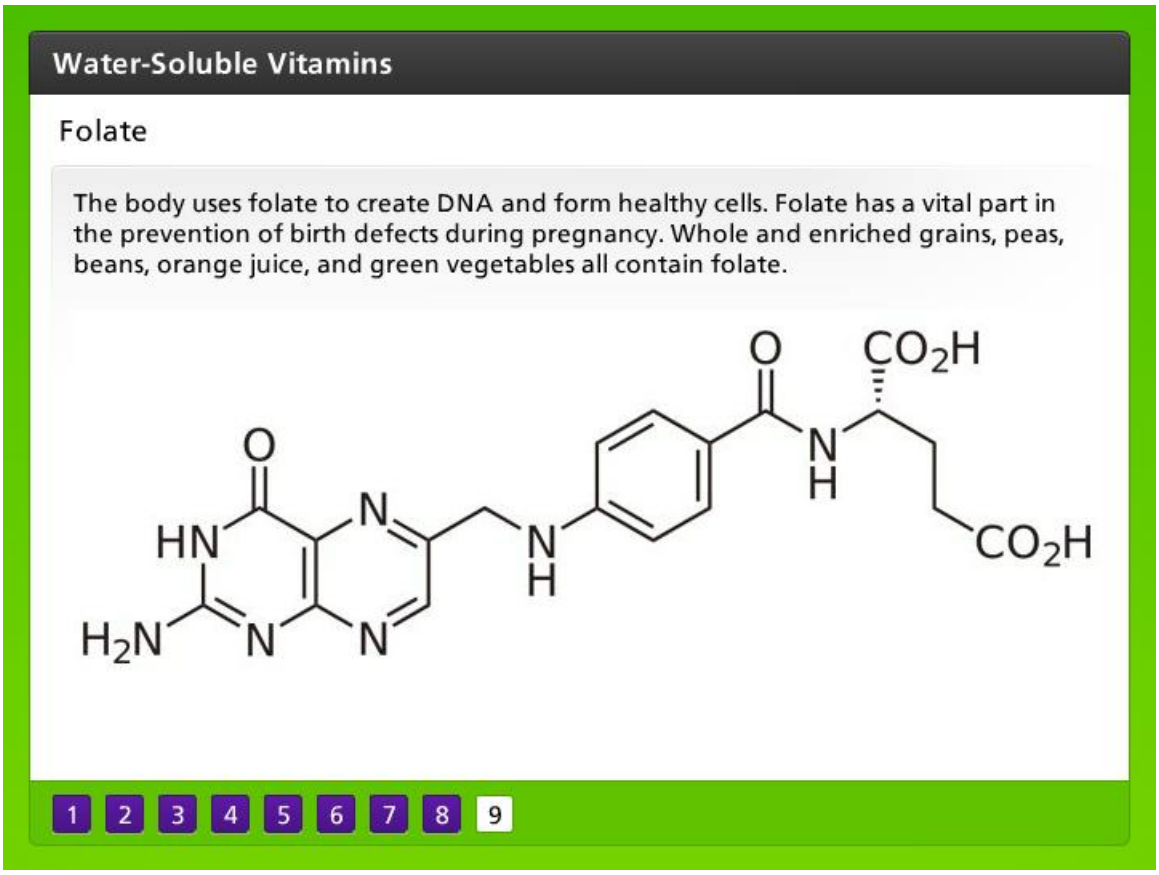
Vitamin B_{12} assists the body in maintaining a healthy nervous system and in metabolizing fatty acids and amino acids. Meat, eggs, dairy products, and fortified foods contain vitamin B_{12}.

Vitamin C



Vitamin C is necessary to make collagen, the most abundant protein found in the body. Collagen is essential to maintaining healthy skin, teeth, bones, and blood vessels. Vitamin C also acts as an antioxidant in the body and stimulates the healing of wounds. Strawberries, melons, citrus fruits, peppers, and green vegetables all contain vitamin C.

Folate



The body uses folate to create DNA and form healthy cells. Folate has a vital part in the prevention of birth defects during pregnancy. Whole and enriched grains, peas, beans, orange juice, and green vegetables all contain folate.