

Chapter 36 Skeletal, Muscular, and Integumentary Systems **Enrichment**

Acne

Contrary to one popular belief, pimples are not caused by chocolate. Pimples *are* caused by acne, a disorder of the sebaceous glands in the skin. Sebaceous glands secrete a fatty lubricant, known as sebum, through the pores and hair follicles. Humans have sebaceous glands all over the body, except the palms of the hands and soles of the feet. Acne occurs when sebum from the sebaceous glands clogs the pores in these areas of the body. Blackheads are external plugs made of sebum and dead cells. If the plugs are invaded by bacteria, they become pimples, or pus-filled inflammations.

Hormones trigger the production of sebum. Hormone cycles change throughout adolescence, so adolescents are most likely to suffer from acne. The exact cause of acne is not clear. Genetic factors, as well as hormonal changes, seem to trigger the disorder. While they do not cause acne, poor skin care, lack of sunlight, and lack of exercise may aggravate it. In some people, certain foods may also irritate symptoms of the disorder.

Most adolescents, and many adults, suffer from some form of mild acne; a few people have more severe cases. Treatments vary greatly. For minor cases, gently cleansing the skin with mild soap and warm—not hot—water can help irritations heal more quickly. For more severe cases, antibiotics, especially tetracycline, can reduce infection and prevent new infections. When antibiotics are used over a long period of time, however, bacteria often become resistant to them.

Two drugs have been developed for treating acne, both related to vitamin A. Tretinoin (brand name: Retin-A) and isotretinoin (brand name: Accutane) have successfully been used to treat acne. Both drugs, however, may have side effects.

Evaluation *On the lines provided, answer the following questions.*

1. Do different types of food cause pimples? Explain your answer.

2. What are some possible factors that cause acne?

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