

Chapter 16

Use with Section 3

ENRICHMENT

● Biological Compounds

Exploring the Antarctic

On August 8, 1914, Sir Ernest Shackleton, a famous explorer and commander of the superbly constructed sailing ship the *Endurance*, left England with a crew of 26 expert sailors and scientists, along with one photographer. Their goal was to be the first people ever to cross Antarctica on foot. They failed, but their story is a great account in the annals of human survival.

January 18, 1915: After battling for six weeks through 1000 miles of pack ice, the *Endurance*, just one day away from the Antarctic continent, is trapped in ice. For the next ten months, the *Endurance* and crew drift helplessly away from their goal. It's a failed mission.

October 27, 1915: Shackleton orders the crew to abandon ship. The temperature is -16°F . They have little food, no radio, and three lifeboats. They march (and drift on ice packs) toward Paulet Island, nearly 500 km to the north. Their diet is mainly penguin and seal. Shackleton's main concerns are the men's morale and the outbreak of scurvy, a life-threatening illness caused by a lack of vitamin C.

April 9, 1916: The ice breaks due to warmer temperatures. The boats are launched. For seven days and nights through high seas, ice, and killer whales, the men sailed northeast, toward South Georgia.

April 15, 1916: They miraculously reach the uninhabited, blizzard-raked Elephant Island after being on sea for 497 days. Shackleton chooses five men to continue sailing with him to an island 644 km to the west.

May 10, 1916: Shackleton and his men successfully reach South Georgia Island.

August 30, 1916: The remaining crew on Elephant Island is rescued by a Chilean ship. All the men have survived.

1. The crew of the *Endurance* survived on a diet that included a lot of saturated fats. Although this normally is very bad, explain how this diet could have helped the men.

2. British seamen were originally nicknamed "limeys" because they always took limes on their voyages to fight off scurvy. Scurvy causes uncontrollable bleeding due to a lack of vitamin C. If none of Shackleton's crew developed scurvy, what can you infer about the crew's diet of penguin and seal meat?

