# The Strange Case of BeriBeri

*In 1887 a strange nerve disease attacked the people in the Dutch East Indies. The disease was beriberi. Symptoms of the disease included weakness and loss of appetite, victims often died of heart failure. Scientists thought the disease might be caused by bacteria. They injected chickens with bacteria from the blood of patients with beriberi. The injected chickens became sick. However, so did a group of chickens that were not injected with bacteria.*

*One of the scientists, Dr. Eijkman, noticed something. Before the experiment, all the chickens had eaten whole-grain rice, but during the experiment, the chickens were fed polished rice. Dr. Eijkman researched this interesting case and found that polished rice lacked thiamine, a vitamin necessary for good health.*

1. State the Problem.
2. What was the hypothesis?
3. How was the hypothesis tested?
4. Should the hypothesis be supported or rejected?
5. What should be the new hypothesis and how would you test it?

ANSWERS

1. State the Problem : people were getting sick and dying

2. What was the hypothesis? that sickness was being caused by a bacteria

3. How was the hypothesis tested? they injected the blood of sick people into chickens to see if the chickens became sick

4. Should the hypothesis be supported or rejected based on the experiment? hypothesis is not supported, the control group (not injected) became sick

5. What should be the new hypothesis? rice is causing the people and chickens to become sick because it is missing a vitamin, the vitamin could be added to the chickens diet to see if that cures them