7 Instead of measuring glucose levels in the milk, identify another compound you could have measured the levels of to determine whether lactase was active.
Measuring the galactose level should show similar results.

8. The test you performed using simulated intestinal fluids required 5 mL of milk and 2 to 7 minutes to obtain results. Explain why in the film Dr. Wells had to consume a liter of milk and blood glucose levels were measured periodically for 40 minutes, a much longer period of time.
In this experiment, simulated intestinal fluid was used whereas the lactase has an immediate contact with the lactose which quickly breaks down into glucose and galactose. Unlike when a person drinks milk, it travels first to the small intestine, be broken down by lactase, and the glucose has to be diffused into the bloodstream where it will be measured.

9. a. Read the nutrition label on a container of milk. In addition to carbohydrates, which include lactose, list the other nutrients present.

b. If lactose intolerance did not cause any symptoms, lactose-intolerant individuals would be able to use milk as a source of protein. Explain why it is possible for them to digest the proteins in milk even though they lack the lactase enzyme.
Enzymes are specific. Lactase only digests lactase. Other enzymes are responsible for digesting proteins.

c. Sucrose is a disaccharide present in many cow milk substitutes such as soy, rice, and almond milk. It is composed of glucose and fructose. Explain why lactose intolerant individuals may be able to digest sucrose without any problems.
Digesting sucrose requires enzymes other than lactase. An intestinal fluid called sucrose which helps break down sucrose. Individuals who are lactose intolerant only lack in enzyme lactase but can still produce enzyme digesting sucrose.

10. A milk allergy is the result of an immune reaction to one or more of the components of milk, such as the protein casein. Explain how an allergy to milk is different from lactose intolerance.
Milk allergy is an insusceptible reaction which includes the creation of antibodies explicit to substances in milk. Lactose intolerance does not involve the immune system but is the result of an inability to produce lactase enzyme. The symptoms of milk allergy and lactose intolerant are different. Milk allergy includes hives, wheezing, and vomiting while lactose intolerant includes gastrointestinal distress, including gas and diarrhea.