

Thought Lab 6.2: An Accident and an Opportunity Answer Key

Answers to Analysis Questions

- Excerpt B:** But from the result of a great number of experiments and examinations, made with a view to asserting the truth of this opinion, in the empty and full state of the organ,...I am convinced that there is no alteration of temperature.
- Excerpt E:** At 2 o'clock P.M.—twenty minutes after having eaten an ordinary dinner of boiled, salted beef, bread, potatoes, and turnips, and drank a gill [about 142 mL] of water, I took from stomach, through the artificial opening, a gill of the contents....Digestion had evidently commenced, and was perceptually progressing, at the time.
- Excerpt C:** I think I am warranted, from the result of all the experiments, in saying, that the gastric juice, so far from being 'inert as water,' as some authors assert, is the most general solvent in nature of alimentary [food-related] matter—even the hardest bone cannot withstand its action.
- Excerpt D:** The gastric juice does not accumulate in the cavity of the stomach until alimentary matter is received and excites its vessels to discharge their contents for the immediate purpose of digestion.
- The main idea in Excerpt F is that there is some connection between the nervous system and the digestive system.
- Beaumont's observations were likely accurate.

Excerpt A: I consider myself but a humble inquirer after truths—a simple experimenter. And if I have been led to conclusions opposite to the opinions of many who have been considered luminaries of physiology, and in some instances, from all the professors of this science, I hope the claim of sincerity will be conceded to me, when I saw that such difference of opinion has been forced upon me by the convictions of experiment, and the fair deductions of reasoning. You could also note the digestive properties of the gastric juice.

Excerpt C: I think I am warranted, from the result of all the experiments, in saying, that the gastric juice, so far from being 'inert as water,' as some authors assert, is the most general solvent in nature of alimentary [food-related] matter—even the hardest bone cannot withstand its action.

You could also note that digestion starts immediately.

Excerpt E: At 2 o'clock P.M.—twenty minutes after having eaten an ordinary dinner of boiled, salted beef, bread, potatoes, and turnips, and drank a gill [about 142 mL] of water, I took from stomach, through the artificial opening, a gill of the contents....Digestion had evidently commenced, and was perceptually progressing, at the time.

- As a researcher, Beaumont asked questions, conducted experiments in an attempt to answer these questions, and then communicated the inferences that he made based on his observations.