

Name: _____ Date: _____

Living with Your Liver **Answers**

Trial Number	Drops of Liver Solution	Drops of Salt Solution	Observations and Rate of Reaction
1	15	0	Solution fizzed quickly Bubbles formed 1.5 in (3.8 cm) high
2	15	15	Solution fizzed more slowly Bubbles formed 0.75 in (1.9 cm) high
3	15	30	Solution fizzed slowest Few bubbles formed

1. Which test tube had the slowest reaction?

The test tube with 30 drops of salt solution had the slowest reaction.

2. How did adding salt to the liver solution affect the reaction?

Adding salt to the liver solution caused the reaction to fizz slower and caused fewer bubbles to form.

3. When the liver solution fizzes a lot, the liver cells are doing a good job of breaking down the toxic hydrogen peroxide. How did adding salt affect the liver's ability to break down the toxin?

Since the test tube with 30 drops of salt fizzed the least, adding salt to the liver reduces the liver's ability to break down the toxin.

4. As a biomedical engineer working to regenerate a liver, how would you make sure that the new organ will function as well as possible?

I would make sure that a person receiving an artificial liver does not eat a lot of salty foods so that the liver can function properly and break down toxins in the body.