Protocol and information used from or modified from:

Science Buddies Staff. "Liver Stinks!" *Science Buddies*, 28 July 2017, https://www.sciencebuddies.org/science-fair-projects/project-ideas/BioChem\_p030/biotechnology-techniques/liver-stinks?fave=yes&amp;amp;isb=cmlkOjY3Mzc0ODYsc2lkOjAscDox&amp;amp;from=TSW. Accessed 6 Nov. 2019.

Link:<https://www.sciencebuddies.org/science-fair-projects/project-ideas/BioChem_p030/biotechnology-techniques/liver-stinks?fave=yes&amp%3Bamp%3Bisb=cmlkOjY3Mzc0ODYsc2lkOjAscDox&amp%3Bamp%3Bfrom=TSW#summary>

**Instructions to teachers/leaders for preparing lesson:**

Buy beef liver from grocery store (usually QFC has it)

Cut liver into slices and place into individual containers with each of the following conditions. Prepare them the night before the lesson- at least the acid soaking should be the night before. The other conditions could be prepared the day of the activity :

- Control (normal)

- Acid (make a weak acid solution and incubate over night)

- Cooked (microwave the slices until they are cooked – it smells quite badly beware)

- Smoothie (blend up the liver with some water and make a smoothie-like consistency)

→ Store all the above conditions in the fridge until the lesson

- Frozen (optional – hard to keep this cold enough without a proper amount of dry ice. I don’t recommend using this condition when needing to travel and perform the activity outside of a lab)