

Lab 3

Purpose: examine some aspects of the action of pancreatic lipase and bile salts on lipids

Procedure: Add just a little bit of litmus powder to a container of dairy cream to produce a medium blue color in the test tube. Then poured 3 ml of the litmus cream into 4 separate test tubes. To continue, Into two additional test tubes we then poured 3 ml of 2% pancreatin. Followed by Pre Incubating the litmus cream and the pancreatin separately in a 37 C water bath for 5 minutes. We Then prepared four test tubes like so:

- Tube #1: 3 ml cream + 3 ml pancreatin
- Tube #2: 3 ml cream + 3 ml distilled water
- Tube #3: 3 ml cream + 3 ml pancreatin + pinch of bile salts

Then Gently we shook each tube for 30 seconds to mix in the bile salts. Incubated all four tubes in a 37 C water bath for 1 hour, checking every minute for the first 5 minutes or until the first tube changed color, then every 15 minutes for the rest of the hour. We recorded the time and number of the tube. Continuing checking for the remainder of the hour. Lastly, we removed the tubes from the water bath and tested the pH of each tube using pH paper and noted the odor and color of each tube

Results:

	10 Minutes	20 Minutes	30 Minutes
H ₂ O	same shade purple	the bottom became a dark purple color	a dark purple color; 8 on the PH scale
Pancreatic	turned light purple	lighter shade of purple	a light purple color; 7 on the PH scale
H ₂ O + Bile	turned dark purple	foamy; Dark purple color at the bottom of the tube	a dark purple color; 9 on the PH scale
Pancreatic + Bile	turned light purple	foamy; lighter purple in color	top half light purple and bottom half dark purple; 8 on the PH scale

Discussion: After finishing this lab, my lab partner and I were surprised with the results. Genuinely, we thought that all would have very minor differences in them, but we were proven wrong. As the table shows, the H₂O started off the same color for time, but slowly started to turn dark purple. The pancreatic started as a light purple color and remained a dark purple color at the end with the lowest PH level of 7. The H₂O with bile started off a dark purple color

and ended a dark purple color with the highest PH level of 9. Lastly, the pancreatic with bile started off a light purple and ended with half light and half dark with the same PH level as just the H₂O. We saw the most significant change in the H₂O and Pancreatic + Bile tubes.