**DNA Extraction from Strawberries, Kiwifruit, Chicken Liver, etc.**

1. Make 100mL of DNA extraction buffer. Use 90mL water, 5mL dish soap, 1.5g NaCl (this equates to .25M NaCl), and then top-up to 100mL with water.
   1. An alternative, much-used, salt is sodium acetate. Use 2.5g NaOAc (make sure it’s bone-dry, not hydrated!).
2. Grind fruit, etc with mortar & pestle.
3. Add around 10mL of the extraction buffer to each fruit. Mix well (at least 1 minute).
4. Strain puree to remove cellular debris. Save the juice.
5. Pour small amount of the DNA-containing juice in test tube. Add an equal amount of ice-cold ethanol on top. The DNA will appear as a white, globular precipitate.
6. Remove it with a glass rod or a bamboo skewer.
7. Answer the questions below.

**Respond to all questions. Type up your answers and make it look professional. Upload to Canvas when finished.**

1. **Why do we crush the DNA source first? (the Kiwi, the strawberries, etc)**
2. **Why do we use detergent?**
3. **What does the salt do?**
4. **Why do we strain the mixture?**
5. **What does the cold alcohol do? (we used 91% isopropanol and 70% ethanol)**
6. **What is the purpose of chilling the alcohol first?**
7. **What are some uses for extracted DNA? Why would anyone want to extract it? There are many reasons for collecting and analyzing DNA – I want you to do Internet research and list five (5) examples. Use complete sentences and explain what you are talking about! Don’t use 2-word answers.**