

Procedure

Name of snack food: _____

1. Weigh a sample of snack food (0.45—0.50 g) and crush it using a mortar and pestle. Weigh the crushed food. Transfer the crushed food to a test tube.
2. Add petroleum ether (3 mL) to the test tube.
3. Stopper the test tube and shake for several seconds.
4. Remove the stopper and pipette the liquid into the second test tube. Do not allow any solid to be transferred to the second test tube.
5. Add another portion of petroleum ether (3 mL) to the first tube. Stopper the test tube and shake. Pipette the liquid into the second test tube, transferring as much liquid as possible. Again, don't transfer any of the solid to the second test tube.
6. Allow the liquid in the second test tube to sit for 2 to 3 min. While you are waiting, weigh a watch glass.
7. Pour or pipette the liquid in the second test tube onto the watch glass. Fill a beaker with hot tap water and place the watch glass on the beaker in the hood to evaporate the solvent (5 to 10 min).
8. Make sure the bottom of the watch glass is dry and weigh the watch glass and the extracted fat.

(Procedure stolen shameless from:
http://www.carolina.com/apscience/biology_fat.asp)

Experimental data

Name of snack food: _____

1. Mass of crushed snack food
2. Mass of watch glass
3. Mass of watch glass and extracted fat
4. Mass of extracted fat
5. Observed percent of fat in snack food
(mass of extracted fat/mass of crushed snack food) X 100%
6. Theoretical percent of fat in snack food derived from
label information (mass of fat per serving/mass of serving size) X 100%
7. Percent of snack food fat extracted
(Answer from 5/ Answer from 6) X 100%