# Food Lab: Identifying Lipids

## Purpose

To identify which foods contain lipids.

## Materials

- Brown paper sheets (paper bag cut open)
- Vegetable oil
- Nutella
- Water
- Milk
- Butter
- Egg white
- Egg yolk
- Heavy cream
- Plain yogurt
- Peanut butter
- Little plastic cups

## Procedure

- 1. Place the class into groups of 4 (or as you see fit for the particular class)
- 2. Each group should receive each of the above materials
- 3. Each of the food ingredients should be separated into little plastic cups, to make distribution to the class easier.
- 4. Each group should separate their brown paper into 10 sections with a coloured marker, and label each section with the appropriate food items. Please refer to Figure 1.
- 5. The water should be placed in the first square as it is control group for this experiment
- 6. Complete Chart 1 with your predictions on which foods you think contain lipids.
- 7. Place a sample of each food item in their corresponding section on the brown paper
- 8. Allow 15 mins for the food samples to dry
- 9. Observe the brown paper after 15 mins and determine if there is a dark grease stain present.
- 10. Record your observations in Chart 2.
- 11. Food items that left behind a dark grease stain contain lipids.

Water	Nutella	Egg white	Peanut butter	Egg yolk
Butter	Plain yogurt	Heavy cream	Vegetable oil	Milk

Figure 1: Arrangement of food items on brown paper.

### Predictions

Chart 1: Predictions for which food items contain lipids.

Food item	Prediction
Nutella	
Egg white	
Peanut butter	
Egg yolk	
Butter	
Plain yogurt	
Heavy cream	
Vegetable oil	
Milk	

#### Observations

Chart 2: Observations of which foods left a dark grease stain.

Food item	Observation
Nutella	
Egg white	
Peanut butter	
Egg yolk	
Butter	
Plain yogurt	
Heavy cream	
Vegetable oil	
Milk	

### Questions

- 1. Compare your predictions with the results you obtained. Were you correct? Where did you go wrong?
- 2. Why would foods containing lipids leave a dark grease stain behind on brown paper?
- 3. What are some real life examples you have seen where grease stains appeared on paper bags?