## Activity 5 – Blubber Experiment

Test the insulating power of the fat molecules in shortening in this activity.

### Supplies

* large bowl
* ice
* cold water
* 4 zip top sandwich bags
* thermometer (optional)
* vegetable shortening (Crisco or similar)
* spatula
* towel

### Instructions

1. Fill a large bowl with ice and cold water.
2. Turn a zip top bag inside out, place the bag on your hand, and use a spatula to cover both sides of the bag in vegetable shortening.
3. Place the shortening coated bag inside another bag and seal the tops to each other.
4. Turn a clean bag inside out, place it in another clean bag and seal tops to each other.
5. Place one hand in each bag and place your hands in the ice water.
6. Which hands gets cold faster?

Blubber is a thick layer of fat to keep ocean and arctic animals warm and to store nutrients when there isn’t much food. The fat molecules in the shortening simulate blubber.

Adapted from [Little Bins Little Hands](https://littlebinsforlittlehands.com/blubber-experiment/).