



CANADA AGRICULTURE
AND FOOD MUSEUM
MUSÉE DE L'AGRICULTURE
ET DE L'ALIMENTATION
DU CANADA



Eggperiments: Fun with Naked Eggs

Materials

At least 2 naked eggs
2 clear cups large enough to hold an egg plus some liquid
Corn syrup
Water
Food colouring
A spoon or ladle

Method

Put a naked egg into one of the cups and add enough corn syrup to cover the egg.

Put another naked egg into another cup and add enough water to cover it and a few drops of food colouring.

Put both cups into the refrigerator for 24 hours.

After the 24 hours you should have one nice and plump egg in the water and one shriveled and flabby egg in the corn syrup.

Explanation

The membrane of the naked egg is selectively permeable—it lets some molecules through and blocks others. Water (mixed with food colouring) moves through the membrane easily but bigger molecules (like sugar molecules in the corn syrup) don't.

In the corn syrup cup, the water molecules from the egg white (which is 90% water) have moved through the membrane to the corn syrup (25% water) causing the naked egg to shrivel and go limp.