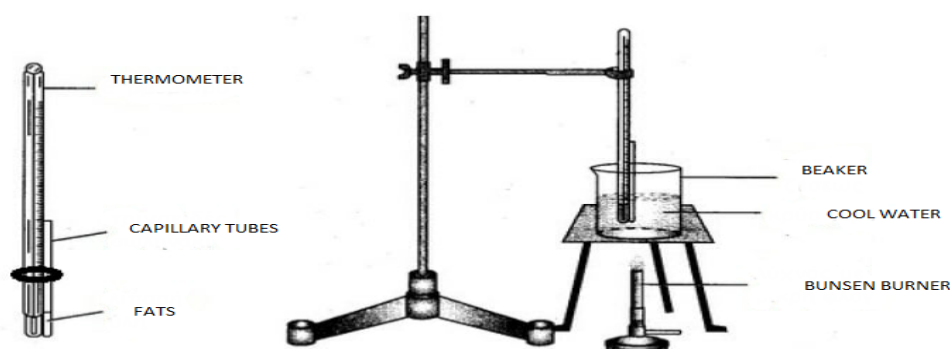


DETERMINATION OF THE MELTING POINT OF FATS

MATERIALS

Different types of fats	Tube support stand	Bunsen burner
Metal tripod with mesh	Beaker >250ml	Thermometer 0-100 °C
Capillary tubes	Rubber bands	Lighter



Butter T. Corfu Savoy

Description Unsalted butter from pasteurized cream.

Ingredients: From 100% pasteurized cow's milk cream, 82% dry fat, 16% moisture, 2% non-fat dry substances.

Nutrition Values Per 100 g: Energy 3054kj / 743kcal Fat 82.0 g of which Saturates 54.0 g Carbohydrates 0.6 g of which Sugars 0.6 g Protein 0.6 g Salt 0.0 g



Culinary Product Nea Fytini (vegetable fat/butter)

Ingredients: Vegetable Fats and Oils, Hydrogenated Vegetable Fats, Butter Aroma, Vitamins A & D, Coloring matter: B-Carotene.

Nutrition Values Per 100 g: Energy 3700kj / 900kcal Fat 100 of which Saturates 50.0 Carbohydrates 0.0 g of which Sugars 0.0 g Protein 0.0g Salt 0.0 g.

METHOD

You are divided into groups of 2-3 people maximum. Pull the tube support stand towards you, to easily reach the equipment. In the latch (pin) of the tube support stand you attach the thermometer to the latch. Place the tripod with the grid beneath the tube. Above the tripod with the grid, place the beaker with cool tap water and fill it to the top. Attach the thermometer. (Don't be afraid, it is not a mercury thermometer.) The two "legs" of the tripod should be left to right and one to the front. There is butter from pasteurized cream and capillary tubes, be careful they are very thin and glassy and break easily. Do not cut yourselves. Put the capillary tube in the butter, at an angle, until it is about 25% full. Do not hold the capillary on the butter side to prevent heat transfer from your hands. Detach the thermometer from the tube support stand, adjust the capillary tube to the bottom (base) of the thermometer, with a rubber band. Put the thermometer back in place. First, take the Bunsen burner out of the tripod, turn it on and place it underneath. Turn on the Bunsen burner with the air duct closed to give you a yellow, reducing flame, as low as a lighter / candle flame. At some point the butter will clear up. The butter in the tube can be shifted upwards. The point where the butter will be clear is the melting point. Note the temperature. Expect around 32-35 ° C. Discard the tube and repeat (again with cool water) the process for the vegetable fat/butter. It does not clear completely, we will see some white spots. We expect it to clear up between the white spots. As a melting point of fats we expect 40-45 ° C.