

How “Happy” Is Your Meal?

Trans fat: Found in margarine, cookies, crackers, vegetable shortening and many fast foods. Trans fat raises LDL, lowers HDL cholesterol and is linked to an increased risk for heart disease. Trans fat is contained in partially hydrogenated and hydrogenated fat or oil; is a form of artificial saturated fat.

Trans fat is the result of adding hydrogen to a vegetable oil (hydrogenation) to improve its shelf life, flavor and functional properties. Trans fats have been linked to heart disease. The FDA has determined that trans fat should be consumed in minimum quantities.

How “Happy” Is Your Meal?

Materials:

McDonald’s Happy Meal

Blender

Measuring cups for liquid (clear)

Sauce pan

Tall skinny and clear container (i.e. olive container)

Activity:

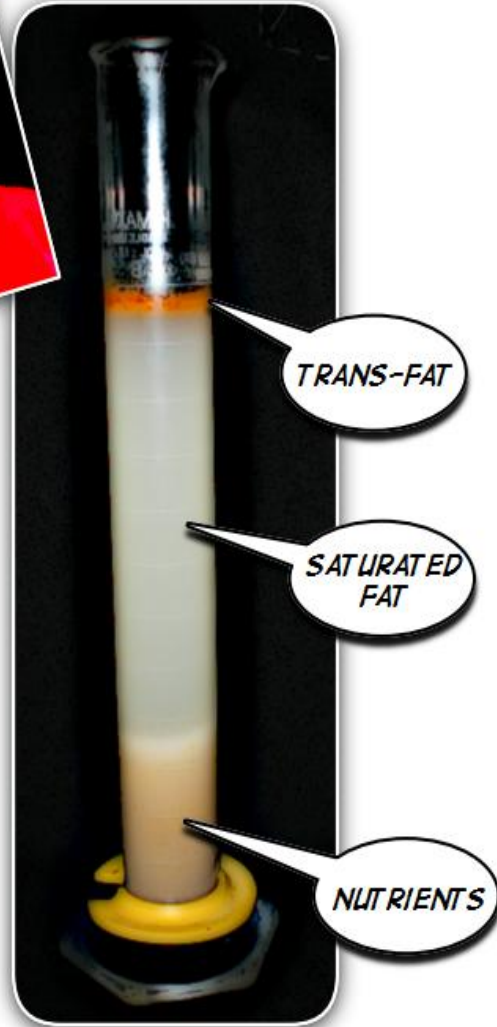
1. Break up the burger and fries (not the toy!) into small pieces and blend on high until the mixture is well pulverized.
2. Scoop 2 tablespoons of the mixture into the sauce pan and add two cups of water.
3. Boil the mixture gently for 15 minutes.
4. Fill the tall/skinny container with the mixture.
5. Refrigerate overnight.
6. Remove the mixture from the refrigerator and measure the amount of fat that will be found on top of the mixture.

How “Happy” Is Your Meal?

How does the volume of McMush added to the boiling mixture affect the volume of Trans-fat observed.

	TRIAL ONE	TRIAL TWO	TRIAL THREE	AVERAGE
30 mL McMush	4	5	4	4
60 mL McMush	12	13	14	13
90 mL McMush	8	9	8	8

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The fat will form a layer at the top of the mixture and will turn into a solid as it cools.

FYI-The translucent white material floating on the top is saturated fat. The thin orange near the top is trans-fat. All nutrients show up as a dark brown at the bottom.