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## Jat in $\sigma$ ood Products

(Continuation from Experiment 10C: Fats in Dropped Cookies)

Each group prepared a variation of chocolate chip cookies. Using the iPad apps, CalCounter or MyFitnessPal, determine the total fat in the recipe as well as the amount in 1 cookie. Complete the nutritional facts below.

| Whole Recipe | Calories | Total Fat (g) | Fat from Calories <br> (1 g= $\qquad$ calories) | Saturated Fat <br> (g) | Unsaturated Fat (g) | Trans Fat <br> (g) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 150 g flour |  |  |  |  |  |  |
| 2 mL baking soda (1/2 t) |  |  |  |  |  |  |
| 2 mL salt (1/2 t) |  |  |  |  |  |  |
| 125 mL assigned fat: <br> Fat: $\qquad$ |  |  |  |  |  |  |
| 100 g brown sugar |  |  |  |  |  |  |
| 90 g granulated sugar |  |  |  |  |  |  |
| 1 large egg |  |  |  |  |  |  |
| 2 mL vanilla (1/2 t) |  |  |  |  |  |  |
| 185 g chocolate chips |  |  |  |  |  |  |
| Totals for Entire Recipe: |  |  |  |  |  |  |
| Totals for 1 Cookie: (Divide total cookies amounts by 24) |  |  |  |  |  |  |

Work with the other groups to collect their data to complete the chart below:

| Totals for 1 Cookie <br> Using Assigned Fat: | Calories | Total Fat <br> $\mathbf{( g )}$ | Fat from Calories <br> $(1 \mathrm{~g}=\ldots$ <br> calories $)$ | Saturated Fat <br> $(\mathrm{g})$ | Unsaturated Fat <br> $(\mathrm{g})$ | Trans Fat <br> $(\mathrm{g})$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1- Vegetable Shortening |  |  |  |  |  |  |
| 2- Vegetable Oil |  |  |  |  |  |  |
| 3- Butter |  |  |  |  |  |  |
| 4- Stick Margarine |  |  |  |  |  |  |
| 5- Tub Margarine |  |  |  |  |  |  |
| 6- Lard |  |  |  |  |  |  |

Which recipe had the greatest total fat? $\qquad$
Greatest saturated fat? $\qquad$
Greatest unsaturated fat? $\qquad$
Least total fat? $\qquad$
Least saturated fat? $\qquad$
Least unsaturated fat? $\qquad$

Read pg. 284-285 in your textbook. List the 6 functions of fats in food preparation. Describe each function's role in this recipe, if applicable. Note: Not all of the functions may be used for every recipe. Read the text carefully to determine if lipids served this function for this particular cookie recipe.

| Function | Application in Chocolate Chip Recipe (if applicable) |
| :--- | :--- |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |
| 5. |  |
| 6. |  |

## Read pg. 278 in the textbook to answer the following questions:

What kind of fat is oleic acid? How does oleic acid's properties impact margarine if used in this recipe in place of butter?

Referring to the chart on the front side of this worksheet, did this recipe contain any trans fats? What are the potential negative side effects associated with trans fats?

