Lesson Plan

TEACHER COPY

One Food at a Time

Exploring nutrients in individual foods

CURRICULUM EXPECTATIONS

Determine the nutritional value of a variety of foods (e.g., fast food, fad diets, snack foods…) using Canada's Food Guide and other resources.

OBJECTIVES:

Students with no previous exposure to FoodFocus will:

A. Select groups of foods using "Food by Type" capabilities of FoodFocus.
B. Do searching and sorting within a group of foods.
C. Specify food quantities by mass and volume in FoodFocus.
D. Determine nutrient content for a single food using FoodFocus.
E. Complete a questionnaire on food nutrients and cost dealing with only one food at a time.

RESOURCES:

Print Materials:

- Teacher Answer Sheet
- Student Handouts

Software:

- FoodFocus software for nutrition education version 3.5 with the following nutrients available for display: Energy (KJ, Kcal), Water, Dietary Fibre, Vitamins A, B6, B12, C, D, E, Thiamin, Niacin, Folate, Calcium, Iron, Potassium, Zinc, Sodium, Carbohydrate, Protein, Fat, Saturated Fat, Cholesterol, Total Monounsaturated Fat, Total Polyunsaturated Fat, Total N-6 Fat, Total N-3 Fat, LA, ALA, EPA+DHA, and Ratio N-6/N-3. If you chose to have a different set of nutrients used by students, the results of some questions below will change accordingly.

PROCEDURES/ACTIVITIES:

A. Student Questionnaire

1. Introduce the FoodFocus software and how to start the program. Explain that only the "Food by Type" menu of the FoodFocus software need be used for this assignment.
2. Students complete the student questionnaire

B. Evaluation

1. Students mark their completed questionnaire using answers provided with the teacher version of the questionnaire.
2. Review with students any problems they experienced. If you have revised the costs for foods used in the questionnaire and the correct answers are how different than those provided in the teacher version of the questionnaire, explain the differences.

WRAP-UP/HOMEWORK:

None

EXTENSION/ALTERNATIVE ACTIVITIES:

If students have additional time, distribute copies of the FoodFocus QuickStart and To Start sheets and encourage the students to duplicate the exercise of evaluating a small meal as discussed in the To Start example.

Encourage students to pay attention to the foods they eat and the quantities they consume as they will need such information for future food recall assignments.

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Teacher Answer Sheet

Start the FoodFocus program using the Start|Programs menu on your computer or select the FoodFocus icon on your desktop.

1. How many grams of protein are there in 250 ml of 2% partly skimmed milk? Choose the closest answer.
   a) 2 b) 5 c) 9 d) 25

   Hint:
   A. Select Food by Type | Milk, Cream, Cheese | Milk Fluids to get a list of foods.
   B. Double click on " MILK, FLUID, PARTLY SKIMMED, 2% M.F."
   C. On the "Enter Quantity for a new food" window, click on "Show Nutrient Data".
   D. If a pop-up window appears which states that "No group of persons was defined so one adult female is used as a default", click 'OK'.
   E. At the top of the "Nutrient Analysis for One Food" window, click the " 250 ml" quantity and then click on the 'Scientific Units' display option.
   F. Read the number of grams of protein.

   Answer: c) 8.5 grams of protein in 250 ml of 2% milk

2. What fraction of an adult woman's daily Dietary Reference Intake for Vitamin D is met by 250 ml of 2% partly skimmed milk?
   a) 5% b) 15% c) 35% d) 55%

   Hint:
   A. On the "Nutrient Analysis for One Food" window (repeat the steps in question #1 if you need to redisplay it), click on the '% Daily DRI' display option.
   B. Read the '% DRI' for Vitamin D.

   Answer: c) 15% which is closest to the 17% value displayed

3. For how many of the nutrients shown in FoodFocus would an adult woman get at least 5% of nutrition recommendations from 250 ml of 2% milk. Count only those nutrients for which we should get at least 100% of the nutrient recommendations. Do not count water or the macro (big) nutrients- protein, carbohydrates and total fat.
   a) 1 b) 2 c) 5 d) 10

   Hint: Count those nutrients listed under "Nutrients For Which Intake Should Be More Than 100%"

   Answer: d) 10 – Vitamin A, Vitamin D, Vitamin B6, thiamin, riboflavin, niacin, Vitamin B12, calcium, potassium, zinc (Note: if you have different nutrients displayed, additional nutrients such as magnesium, pantothenic acid, etc could also be in this list making the total count greater but 10 would still be the closest answer.)

4. What is the approximate cost of 250 ml of 2% partly skimmed milk?
   a) $0.05 b) $0.40 c) $0.60 d) $1.00

   Hint: On the "Nutrient Analysis for One Food" window, read the Cost value (repeat the steps in question #1 if you need to redisplay it).

   Answer: b) $0.40 is closest to $0.39/250 ml (Note: You can easily update the cost data and if you have done so, the question or answer may have to be adjusted.)

5. If instead of 250 ml of 2% partly skimmed milk, the woman drank a can of orange soda, for how many nutrients would she get at least 5% of her nutrient recommendations? Count only those nutrients for which we should get at least 100% of the nutrient recommendations. Do not count the macro (big) nutrients- protein, carbohydrates and total fat.
   a) 1 b) 2 c) 5 d) 10

   Hint:
   A. Select Food by Type | Beverages | Beverages Non-Alcoholic to get a list of foods.
   B. Double click on " CARBONATED DRINK, ORANGE SODA"
   C. On the "Enter Quantity for a new food" window, click on "Show Nutrient Data".
   D. At the top of the "Nutrient Analysis for One Food" window, click the " 1 can (355 ml)" quantity and then click on the '% Daily DRI'display option.
   E. Count those nutrients listed under "Nutrients For Which Intake Should Be More Than 100%"

   Answer: d) 1 – zinc (Note: copper, if displayed, would also meet the 5% threshold.)

6. How do the cost of 250 ml of 2% partly skimmed milk and a can of orange soda compare?
   a) Milk is a lot more expensive b) About the same price c) Soda is a lot more expensive

   Hint: On the "Nutrient Analysis for One Food" window, read the Cost value (repeat the steps in question #5 if you need to redisplay it).

   Answer: b) Milk costs $0.39 from question #4 and the soda costs $0.29. (Note: You can easily update cost data and if you have done so, the question or answer may have to be adjusted.)

7. Human breast milk is considered to be the perfect food for babies. Some fatty acids classified as polyunsaturated fats are considered essential for proper brain development. How much polyunsaturated fat is found in 1 liter of human milk compared to 1 liter of 2% partly skimmed milk?
   a) 100% b) 200% c) 500% d) 1000%

   Hint:
   A. Select Food by Type | Milk, Cream, Cheese | Milk Fluids to get a list of foods.
   B. Double click on " MILK, FLUID, HUMAN (BREAST MILK), WHOLE, MATURE"
   C. On the "Enter Quantity for a new food" window, click on the "ML" drop down box in the "3. Use other sizes and the density..." amount option and select the "LITRE" option.
   D. Enter a value of "1" in the field to indicate one litre.
   E. Click on "Show Nutrient Data".

F. At the top of the "Nutrient Analysis for One Food" window, click the " 1 L (1040 grams)" quantity and then click on the 'Scientific Units' display option.
G. Record the number of grams of Total Polyunsaturates.
H. Repeat the above procedure for one litre of 2% milk.
I. Calculate the ratio of Total Polyunsaturates in human milk and in 2% skim milk as a percentage.

Answer: d) 1000% since there are 5.2 grams of Total Polyunsaturates in 1 litre of human milk and 0.4 grams of Total Polyunsaturates in 1 litre of 2% milk and 100 * 5.2/0.4 = 1300%

8. What **raw** fruit commonly grown in Canada has the most Vitamin C per 100 grams?
a) apples b) blackberries c) strawberries d) watermelon

Hint:
A. Select Food by Type | Fruits, Related Products | Fruits to get a list of foods.
B. On the "Resorted by Food Name" window, click on the "Search" menu option. (Do **not** chose 'Search' on the FoodFocus main window as that will close the window with the list of fruits and you will have to start over.)
C. In the "Search in this list by keywords" window, enter a keyword of "raw" and click on the "Start Search" button. Our objective is to keep only raw foods in the list and this search will keep only foods that have "raw" in the name. You should note that foods like frozen st**raw**berries will still be in the list which are obviously not a raw fruit but the foods are included because the letters "r-a-w" are part of the name. Thus the search technique is helpful but it does leave a few foods in the list that are not raw.
D. On the "Resorted by Food Name" window, click on the "Sort | by Vitamins | by Vitamin C" menu option. This sorts the foods so that the foods that have the most Vitamin C per 100 grams are listed at the top of the list and those that have the least are at the bottom of the list.
E. Click on the food names in the list and, in the lower right hand corner of the window, read the amount of Vitamin C in 100 grams of the food. You can also use the up and down arrows to move up and down the list selecting different foods.
F. Search down the list starting from the top until you find a raw fruit that matches one of the options listed in the possible answers.

Answer: c) strawberries (59 mg/100g) have more Vitamin C than apples (5 mg/100g), blackberries (21 mg/100g) and watermelon (8 mg/100g)

9. If you were choosing between canola, corn, olive and sunflower oil to choose the oil with the least saturated fat, your best choice would be:
a) canola b) corn c) olive d) sunflower

Hint:
A. Select Food by Type | Fats & Oils | Oils to get a list of foods.
B. On the "Resorted by Food Name" window, click on the "Sort | by Fat | by Fatty Acids Saturated" menu option. This sorts the foods so that the foods that have the most saturated fatty acids are listed at the top of the list and those that have the least are at the bottom of the list.
C. Click on the food names in the list and, in the lower right hand corner of the window, read the amount of saturated fatty acids in 100 grams of the food.

D. Search **up the list starting from the bottom** until you find an oil that matches one of the options listed in the possible answers.

Answer: a) canola (7 g/100g) has less saturated fatty acids than corn oil (12.9 g/100g), olive oil (13.5 g/100g) and sunflower oil (10 g/100g)

10. Considering the amount of saturated fat which oil would be your worst choice (eg. The most saturated fat):
    a) almond b) coconut c) palm d) peanut

    Hint:
    A. On the "Resorted by Food Name" window list of oils sorted by saturated fatty acids as displayed for the previous question, search **down the list starting from the top** until you find an oil that matches one of the options listed in the possible answers.

    Answer: b) coconut (87 g/100g) has more saturated fatty acids than almond oil (8.2 g/100g), palm oil (49 g/100g) and peanut oil (17 g/100g)

11. If an adult consumes a bowl of tomato vegetable soup (made from a dehydrated soup mix) which is 10 cm in diameter and is filled to 5 cm deep, how much of her food energy did she consume?
    a) 1% b) 5% c) 10% d) 100%

    Hint:
    A. Select Food by Type | Soups to get a list of foods.
    B. On the "Resorted by Food Name" window, click on the "Search" menu option. (Do **not** chose 'Search' on the FoodFocus main window as that will close the window with the list of foods and you will have to start over.)
    C. In the "Search in this list by keywords" window, enter a keyword of "tomato" and click on the "Start Search" button. This search will keep only foods that have "tomato" in the name.
    D. Double click on "SOUP, TOMATO VEGETABLE, DEHYDRATED, WATER ADDED"
    E. Under amount option #4, select "CYLINDER (CM)" on the shape drop-down list.
    F. Enter "1" piece of a shape with diameter of "10" cm and a height of "5" cm.
    G. Click on the "Show Nutrient Data" button. At the top of the "Nutrient Analysis for One Food" window, click the " 10 cm X 5 (400 grams)" quantity and then click on the '% Daily DRI'display option.
    H. Read the value of the Food Energy.

    Answer: b) 5% is closest to Food Energy = 5%

12. If an adult consumes a bowl of tomato vegetable soup (made from a dehydrated soup mix) which is 10 cm in diameter and is filled to 5 cm deep, how close is she to her sodium DRI?
    a) 1% b) 5% c) 10% d) 50%

    Hint: Using the "Nutrient Analysis for One Food" window from the previous question, read the fraction of the sodium DRI.

    Answer: d) 50% is closest to 35% of the sodium DRI (which in this case is the Recommended Daily Allowance/Adequate Intake).

13. If an adult consumes a bowl of **low sodium** tomato soup which is 10 cm in diameter and is filled to 5 cm deep, how close is she to her sodium upper limit?
    a) 1% b) 5% c) 10% d) 50%

    Hint:
    A. Using the steps for question except double click on "SOUP, TOMATO, LOW SODIUM, WATER ADDED"
    B. On the "Nutrient Analysis for One Food" window, read the fraction of the sodium DRI.

    Answer: b) 6% is closest to 5% of the sodium DRI.

14. If an adult woman consumes a bowl of Post Sugar Crisp for breakfast which is 10 cm in diameter and is filled to 5 cm deep, how much fibre does she consume? (Note the cost of this amount of cereal as it will be needed in a later question.)
    a) 1 gram b) 2 grams c) 4 grams d) 8 grams

    Hint:
    A. Select Food by Type | Breads, Cereals, Related Products | Breakfast Cereals to get a list of foods.
    B. On the "Resorted by Food Name" window, search down and double click on "CEREAL, READY TO EAT, SUGAR CRISP, POST"
    C. Select the cylinder shape option and enter the diameter and height as in previous questions.
    D. Click on the "Show Nutrient Data" button. At the top of the "Nutrient Analysis for One Food" window, click the " 10 cm DM X 5 (41 grams)" quantity and then click on the 'Scientific Units' display option.
    E. Read the value of the Fibre.

    Answer: a) 2 is closest to Fibre = 2.0 grams

15. If an adult woman consumes a bowl of hot cereal (Roger's Large Flake Oats prepared) for breakfast which is 10 cm in diameter and is filled to **3 cm** deep, how much fibre does she consume? (Note the cost of this amount of cereal as it will be needed in a later question.)
    a) 1 gram b) 2 grams c) 4 grams d) 8 grams

    Hint:
    A. Use the same approach as in the previous question but double click on "CEREAL, HOT, OATS, LARGE FLAKES, PREPARED, ROGERS".
    B. Select the cylinder shape option and enter the diameter and height as in previous questions. Note that the height is 3 cm – she eats a smaller volume of hot cereal than of cold cereal in the previous question.
    C. Click on the "Show Nutrient Data" button. At the top of the "Nutrient Analysis for One Food" window, click the " 10 cm DM X 3 (194 grams)" quantity and then click on the 'Scientific Units' display option.
    D. Read the value of the Fibre.

    Answer: c) 4 is closest to Fibre = 3.8 grams

16. If a family of four persons made the switch between the cold cereal in question #14 and to the higher fibre hot cereal in question #15 for 250 days of the year, how much would their annual cost for breakfast groceries decrease?
    a) $50/year b) $100/year c) $250/year d) $500/year

    Hint: Use the cost values noted in questions #14 and #15.

    Answer: d) $500/year is closest to the value of 4 *250 breakfasts/year * ($0.71 for Sugar Crisps - $0.08 for hot cereal) = 1000 breakfasts/year* $0.63 saving/breakfast = $630 savings/year

17. If the family of four persons in the previous question was a single income family with a tax situation such that only 50% of each additional dollar earned was actually take home pay, what salary increase would be equivalent to the savings in breakfast groceries due to the switch from cold cereal to a hot cereal in the previous question?
    a) $100/year b) $200/year c) $400/year d) $1000/year

    Hint: No hint- you are on your own for the calculation. Just remember that the cheapest foods are sometimes also the healthiest. It is often easier to avoid unnecessary expenses than to try and earn the extra money to pay for them.

    Answer: d) $1000/year is closest to the $1260 (=$630/50%) pretax income that would be needed to generate $630 of extra take home income equivalent to the $630 savings in expenditures

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Student Questionnaire

Start the FoodFocus program using the Start|Programs menu on your computer or select the FoodFocus icon on your desktop.

1. How many grams of protein are there in 250 ml of 2% partly skimmed milk? Choose the closest answer.
   a) 2 b) 5 c) 9 d) 25

   Hint:
   A. Select Food by Type | Milk, Cream, Cheese | Milk Fluids to get a list of foods.
   B. Double click on " MILK, FLUID, PARTLY SKIMMED, 2% M.F."
   C. On the "Enter Quantity for a new food" window, click on "Show Nutrient Data".
   D. If a pop-up window appears which states that "No group of persons was defined so one adult female is used as a default", click 'OK'.
   E. At the top of the "Nutrient Analysis for One Food" window, click the " 250 ml" quantity and then click on the 'Scientific Units' display option.
   F. Read the number of grams of protein.

2. What fraction of an adult woman's daily Dietary Reference Intake for Vitamin D is met by 250 ml of 2% partly skimmed milk?
   a) 5% b) 15% c) 35% d) 55%

   Hint:
   A. On the "Nutrient Analysis for One Food" window (repeat the steps in question #1 if you need to redisplay it), click on the '% Daily DRI' display option.
   B. Read the '% DRI' for Vitamin D.

3. For how many of the nutrients shown in FoodFocus would an adult woman get at least 5% of nutrition recommendations from 250 ml of 2% milk. Count only those nutrients for which we should get at least 100% of the nutrient recommendations. Do not count water or the macro (big) nutrients- protein, carbohydrates and total fat.
   a) 1 b) 2 c) 5 d) 10

   Hint: Count those nutrients listed under "Nutrients For Which Intake Should Be More Than 100%"

4. What is the approximate cost of 250 ml of 2% partly skimmed milk?
   a) $0.05 b) $0.40 c) $0.60 d) $1.00

   Hint: On the "Nutrient Analysis for One Food" window, read the Cost value (repeat the steps in question #1 if you need to redisplay it).

5. If instead of 250 ml of 2% partly skimmed milk, the woman drank a can of orange soda, for how many nutrients would she get at least 5% of her nutrient recommendations? Count only those nutrients for which we should get at least 100% of the nutrient recommendations. Do not count the macro (big) nutrients- protein, carbohydrates and total fat.
   a) 1 b) 2 c) 5 d) 10

   Hint:
   A. Select Food by Type | Beverages | Beverages Non-Alcoholic to get a list of foods.
   B. Double click on " CARBONATED DRINK, ORANGE SODA"
   C. On the "Enter Quantity for a new food" window, click on "Show Nutrient Data".
   D. At the top of the "Nutrient Analysis for One Food" window, click the " 1 can (355 ml)" quantity and then click on the '% Daily DRI'display option.
   E. Count those nutrients listed under "Nutrients For Which Intake Should Be More Than 100%"

6. How do the cost of 250 ml of 2% partly skimmed milk and a can of orange soda compare?
   a) Milk is a lot more expensive b) About the same price c) Soda is a lot more expensive

   Hint: On the "Nutrient Analysis for One Food" window, read the Cost value (repeat the steps in question #5 if you need to redisplay it).

7. Human breast milk is considered to be the perfect food for babies. Some fatty acids classified as polyunsaturated fats are considered essential for proper brain development. How much polyunsaturated fat is found in 1 liter of human milk compared to 1 liter of 2% partly skimmed milk?
   a) 100% b) 200% c) 500% d) 1000%

   Hint:
   A. Select Food by Type | Milk, Cream, Cheese | Milk Fluids to get a list of foods.
   B. Double click on " MILK, FLUID, HUMAN (BREAST MILK), WHOLE, MATURE"
   C. On the "Enter Quantity for a new food" window, click on the "ML" drop down box in the "3. Use other sizes and the density..." amount option and select the "LITRE" option.
   D. Enter a value of "1" in the field to indicate one litre.
   E. Click on "Show Nutrient Data".
   F. At the top of the "Nutrient Analysis for One Food" window, click the " 1 L (1040 grams)" quantity and then click on the 'Scientific Units' display option.
   G. Record the number of grams of Total Polyunsaturates.
   H. Repeat the above procedure for one litre of 2% milk.
   I. Calculate the ratio of Total Polyunsaturates in human milk and in 2% skim milk as a percentage.

8. What **raw** fruit commonly grown in Canada has the most Vitamin C per 100 grams?
   a) apples b) blackberries c) strawberries d) watermelon

   Hint:
   A. Select Food by Type | Fruits, Related Products | Fruits to get a list of foods.
   B. On the "Resorted by Food Name" window, click on the "Search" menu option. (Do **not** chose 'Search' on the FoodFocus main window as that will close the window with the list of fruits and you will have to start over.)
   C. In the "Search in this list by keywords" window, enter a keyword of "raw" and click on the "Start Search" button. Our objective is to keep only raw foods in the list and this search will keep only foods that have "raw" in the name. You should note that foods like frozen st**raw**berries will still be in the list which are obviously not a raw fruit but the foods are included because the letters "r-a-w" are part of the name. Thus the search technique is helpful but it does leave a few foods in the list that are not raw.
   D. On the "Resorted by Food Name" window, click on the "Sort | by Vitamins | by Vitamin C" menu option. This sorts the foods so that the foods that have the most Vitamin C per 100 grams are listed at the top of the list and those that have the least are at the bottom of the list.
   E. Click on the food names in the list and, in the lower right hand corner of the window, read the amount of Vitamin C in 100 grams of the food. You can also use the up and down arrows to move up and down the list selecting different foods.
   F. Search down the list starting from the top until you find a raw fruit that matches one of the options listed in the possible answers.

9. If you were choosing between canola, corn, olive and sunflower oil to choose the oil with the least saturated fat, your best choice would be:
   a) canola b) corn c) olive d) sunflower

   Hint:
   A. Select Food by Type | Fats & Oils | Oils to get a list of foods.
   B. On the "Resorted by Food Name" window, click on the "Sort | by Fat | by Fatty Acids Saturated" menu option. This sorts the foods so that the foods that have the most saturated fatty acids are listed at the top of the list and those that have the least are at the bottom of the list.
   C. Click on the food names in the list and, in the lower right hand corner of the window, read the amount of saturated fatty acids in 100 grams of the food.
   D. Search **up the list starting from the bottom** until you find an oil that matches one of the options listed in the possible answers.

10. Considering the amount of saturated fat which oil would be your worst choice (eg. The most saturated fat):
    a) almond b) coconut c) palm d) peanut

    Hint:
    A. On the "Resorted by Food Name" window list of oils sorted by saturated fatty acids as displayed for the previous question, search **down the list starting from the top** until you find an oil that matches one of the options listed in the possible answers.

11. If an adult consumes a bowl of tomato vegetable soup (made from a dehydrated soup mix) which is 10 cm in diameter and is filled to 5 cm deep, how much of her food energy did she consume?
    a) 1% b) 5% c) 10% d) 100%

    Hint:
    A. Select Food by Type | Soups to get a list of foods.
    B. On the "Resorted by Food Name" window, click on the "Search" menu option. (Do **not** chose 'Search' on the FoodFocus main window as that will close the window with the list of foods and you will have to start over.)
    C. In the "Search in this list by keywords" window, enter a keyword of "tomato" and click on the "Start Search" button. This search will keep only foods that have "tomato" in the name.
    D. Double click on "SOUP, TOMATO VEGETABLE, DEHYDRATED, WATER ADDED"
    E. Under amount option #4, select "CYLINDER (CM)" on the shape drop-down list.
    F. Enter "1" piece of a shape with diameter of "10" cm and a height of "5" cm.
    G. Click on the "Show Nutrient Data" button. At the top of the "Nutrient Analysis for One Food" window, click the " 10 cm X 5 (420 grams)" quantity and then click on the '% Daily DRI'display option.
    H. Read the value of the Food Energy.

12. If an adult consumes a bowl of tomato vegetable soup (made from a dehydrated soup mix) which is 10 cm in diameter and is filled to 5 cm deep, how close is she to her sodium DRI?
    a) 1% b) 5% c) 10% d) 50%

    Hint: Using the "Nutrient Analysis for One Food" window from the previous question, read the fraction of the sodium DRI.

13. If an adult consumes a bowl of **low sodium** tomato soup which is 10 cm in diameter and is filled to 5 cm deep, how close is she to her sodium upper limit?
    a) 1% b) 5% c) 10% d) 50%

    Hint:
    A. Using the steps for question except double click on "SOUP, TOMATO, LOW SODIUM, WATER ADDED"
    B. On the "Nutrient Analysis for One Food" window, read the fraction of the sodium DRI.

14. If an adult woman consumes a bowl of Post Sugar Crisp for breakfast which is 10 cm in diameter and is filled to 5 cm deep, how much fibre does she consume? (Note the cost of this amount of cereal as it will be needed in a later question.)
    a) 1 gram b) 2 grams c) 4 grams d) 8 grams

    Hint:
    A. Select Food by Type | Breads, Cereals, Related Products | Breakfast Cereals to get a list of foods.
    B. On the "Resorted by Food Name" window, search down and double click on "CEREAL, READY TO EAT, SUGAR CRISP, POST"

C. Select the cylinder shape option and enter the diameter and height as in previous questions.
D. Click on the "Show Nutrient Data" button. At the top of the "Nutrient Analysis for One Food" window, click the " 10 cm DM X 5 (41 grams)" quantity and then click on the 'Scientific Units' display option.
E. Read the value of the Fibre.

15. If an adult woman consumes a bowl of hot cereal (Roger's Large Flake Oats prepared) for breakfast which is 10 cm in diameter and is filled to **3 cm** deep, how much fibre does she consume? (Note the cost of this amount of cereal as it will be needed in a later question.)
a) 1 gram b) 2 grams c) 4 grams d) 8 grams

Hint:
A. Use the same approach as in the previous question but double click on "CEREAL, HOT, OATS, LARGE FLAKES, PREPARED, ROGERS".
B. Select the cylinder shape option and enter the diameter and height as in previous questions. Note that the height is 3 cm – she eats a smaller volume of hot cereal than of cold cereal in the previous question.
C. Click on the "Show Nutrient Data" button. At the top of the "Nutrient Analysis for One Food" window, click the " 10 cm DM X 3 (194 grams)" quantity and then click on the 'Scientific Units' display option.
D. Read the value of the Fibre.

16. If a family of four persons made the switch between the cold cereal in question #14 and to the higher fibre hot cereal in question #15 for 250 days of the year, how much would their annual cost for breakfast groceries decrease?
a) $50/year b) $100/year c) $250/year d) $500/year

Hint: Use the cost values noted in questions #14 and #15.

17. If the family of four persons in the previous question was a single income family with a tax situation such that only 50% of each additional dollar earned was actually take home pay, what salary increase would be equivalent to the savings in breakfast groceries due to the switch from cold cereal to a hot cereal in the previous question?
a) $100/year b) $200/year c) $400/year d) $1000/year
Hint: No hint- you are on your own for the calculation. Just remember that the cheapest foods are sometimes also the healthiest. It is often easier to avoid unnecessary expenses than to try and earn the extra money to pay for them.