

Lesson Plan

TEACHER COPY

EATING COUNTS

Adding up the nutrients in your diet

CURRICULUM EXPECTATIONS

Adopt personal food plans, based on nutritional needs and personal goals, to improve or maintain their eating habits.

OBJECTIVES:

Students will:

- A. Keep a record of all foods eaten in one day.
- B. Evaluate the food recall as compared to the Canadian DRIs.
- C. Incorporate changes to their diet to make it healthier.

RESOURCES:

Print Materials:

- Eating Well with Canada's Food Guide¹
- Student Handouts



Software:

- FoodFocus software for nutrition education



PROCEDURES/ACTIVITIES:

A. Food Recall

1. Emphasize the importance of accuracy when doing a food recall. Students are simply recording the food they ate and not worrying about ideal eating habits for this first exercise. They will keep a record of food eaten on one to three separate days using the "Food Recall for One Day" sheets (student handout #1) and then choose one of those days to enter into the FoodFocus program.
2. Review use of the software.
3. Students enter the items from their chosen record to create a food list in the FoodFocus program as described in student handout #2. The food list should be saved to a file under that student's name in the event that the student will do additional work with that food list.

B. Evaluate

1. Review with the students how to identify the person for whom the analysis is being done as well as the different ways of looking at the analysis: i) percentages and pictographs on the food list screen or ii) the 3 different buttons on the analysis window which appears when you click on analysis - Scientific Units, Daily DRIs and Nutrient Balance.

2. Have students make some initial comments about the food lists by looking at the percentages and graphics on the food list screen and record these on student handout #2 question 1.
3. Next students click on **ANALYSIS** and ensure that the analysis is appropriate for them by clicking on **SHOW PEOPLE**. At this point the students can have a look at the required daily DRIs and compare them to the nutrients present in their food recall lists. By examining the graphs under the daily DRIs and the nutrient balance buttons they can continue the evaluation of their diets and record the assessment on the form provided.

C. MODIFY

1. Review **SORT** feature of FoodFocus program. Students will need to sort both their food lists and the existing data by nutrients. Discuss the importance of being realistic in choosing nutrition alternatives.
2. After reviewing the analysis, students will determine which nutrients are lacking or which exceed the recommended limits and make appropriate changes to their food lists. The new lists should be saved as well. Both lists can then be printed out and attached to the assignment sheet.
3. Students should complete student handout #2 and hand in with the printouts.

PRE-WORK/HOMEWORK:

1. To prepare for the assignment, students record their food intake over the period of several days and record them on student handout #1. They should keep track of the following:
 - Exact food items eaten each day divided into breakfast, lunch, dinner and snacks
 - Exact quantities
2. After the assignment, students should reflect on their analysis of their food recall and complete the Personal Goals Sheet (student handout #3).

EXTENSION/ALTERNATIVE ACTIVITIES:

Have students work in pairs and interview each other about what foods they have eaten and possible dietary improvements. (Some teachers find that students are more thorough and realistic when working with a peer.)

Using the FoodFocus software, students consider the following:

- What happens when the analysis is based on a pregnant 16 yr. old person? What problems could result from any nutrient deficiencies? (The diets of many students would be deficient in folate, which is associated with neural tube defects as well as deficient in calories, which can result in low birth weight babies with increased risk of health and development problems.)
- How would you be able to meet daily DRIs as a vegetarian? (Vegetarians may require efforts to consume adequate meat alternatives)

- How does your food intake compare to detailed dietary recommendations?

(Select the DRI Nutrient Recommendation Details Report from the button of that name on the People display. For more analytical students, detailed information including such values as Upper Limits, whether a recommendation is a DRI, a WHO recommendation, etc is available.)

- Would you be able to meet the Dietary Reference Intakes (DRIs) if you only ate foods available in fast food restaurants or processed snack foods?

(Fast foods and snack foods generally don't include fruits and vegetables and typically provide too much fat, and too much sodium. This can contribute to obesity, high blood pressure and less resistance to disease.

Students receive a completed food list to analyze and modify.

REFERENCES:

1. Health Canada 2011, Eating Well with Canada's Food Guide; HC Pub.: 4651, Cat.: H164-38/1-2011E-PDF, ISBN: 978-1-100-19255-0 http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/order-commander/eating_well_bien_manger-eng.php accessed 2012-01-16

EATING COUNTS*Food Recall for One Day***Student Handout #1**

DATE:	Foods	Amount
Breakfast		
Snack		
Lunch		
Snack		
Dinner		
Snack		
Other		

EATING COUNTS

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Student Handout #2

BE ACCURATE

Record all the foods you ate as well as the exact quantity!



A. FOOD RECALL FOR ONE DAY

Enter the foods you consumed using **FOOD BY TYPE** or **BY SEARCH** on the menu line to select foods and proceed to identify the quantity you consumed.

Of the days you recorded your food intake, choose the day that is most representative of your usual eating pattern. Enter the foods listed into the FoodFocus program, making sure you do not forget anything. It's easy to overlook some of the foods we eat on a daily basis. Remember to add the butter or margarine you had on your bread and your vegetables, or the mayonnaise on your sandwich, the sugar and milk on your cereal, any snacks or drinks. If you don't find the exact food you ate, select one which is similar.



Click on **SAVE TO FILE** under **FILE** to save your data.

B. EVALUATE YOUR FOOD RECALL

Enter your age and other data using **PEOPLE** on the menu line.



As you will see, the main screen gives you immediate feedback when you enter a food. Percentages for fibre and calories from carbohydrates, fat, and protein appear. Pictographs of rainbow (food groups), happy face (daily DRIs), heart (heart health nutrients), or baby carriage (pre-natal health) also give you an indication of how well your choices meet recommendations. The variety of foods indicated by the rainbow and the nutrient content of those foods shown by other pictographs are both useful indicators.

1. What comments can you make regarding your food intake by simply looking at the percentages of calories from major nutrient groups and the pictographs on the main screen?

Analyze your diet using **ANALYSIS** on the menu line.



2. What percentage of food energy did you achieve? _____

3. List nutrients and DRI percentages for which your intake was consistent with healthy eating recommendations (ie Daily DRI bar graph was green).

4. List all nutrients for which your intake was not consistent with recommendations (ie Daily DRI bar graph was yellow or red.) Indicate if you consumed too much or too little of each nutrient.

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5. Indicate the percent of daily DRI for the nutrient in your diet which needs the most improvement.

Nutrient _____ % of Daily DRI _____

C. MODIFY YOUR DIET TO BE CLOSER TO HEALTHY EATING GUIDELINES

6. Select three nutrients which need improvement (see question 4 above) and try to suggest foods which would help you meet the recommended levels.

I think that:

Nutrient _____ is found in _____

Nutrient _____ is found in _____

Nutrient _____ is found in _____

7. If you did not meet healthy guidelines for fat, saturated fat, sodium, and cholesterol, what changes do you think you could make to your diet to lower the levels of these nutrients?

Use **SORT** to determine which foods are the sources for specific nutrients.



8. Indicate which foods in your food list provided you with the most of the following nutrient group?

- Protein _____
- Fat _____
- Carbohydrates _____
- Energy _____
- Fibre _____

9. Which foods provided you with the most of the following specific nutrients?

- Calcium _____
- Iron _____
- Vitamin A _____
- Vitamin C _____
- Riboflavin _____
- Folate _____
- Sodium _____
- Polyunsaturated Fats _____

Use **BY NUTRIENT** to find foods containing specific nutrients



10. Make realistic changes to your food list which you would be prepared to implement and record the changes in the nutrients identified in question C.1.

Nutrient	DRI% Before	DRI% After
_____	_____	_____
_____	_____	_____
_____	_____	_____

PERSONAL GOALS for HEALTHY EATING **Date:**

1. **My goal is**

2. **I will meet my goal by**

3. **I will monitor progress to meeting my goal by**

4. **I will adjust my goal if necessary when**

5. **I will reward myself for meeting my goal by**