

# Chapter 30



Assorted yeast breads.



## Foods 1020 – CONTEMPORARY BAKING

<b>1. identify the role of baked goods in the Canadian diet</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
1.1 discuss the ethnic diversity of baked goods		
<b>1.2 describe baked goods in relation to <i>Eating Well with Canada's Food Guide</i>, considering:</b>		
1.2.1 macronutrients		
1.2.2 micronutrients		
1.3 evaluate personal considerations; e.g., healthy choices, allergies		
<b>2. identify and describe the factors involved in the preparation of baked products</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
<b>2.1 examine the role of key baking ingredients, including:</b>		
2.1.1 flours		
2.1.2 fats		
2.1.3 sugars and sugar substitutes; e.g., white/brown sugar, molasses, sweeteners, honey, applesauce		
2.1.4 eggs		
2.1.5 chemical leavening agents; e.g., baking soda, baking powder		
2.1.6 liquids		
2.1.7 flavouring agents		
2.1.8 optional ingredients; e.g., raisins, cheese, vegetables, chocolate chips		
2.2 identify mixing methods employed in the preparation of baked products		
2.3 recognize the need for accuracy in measuring		
2.4 demonstrate safe and correct use of tools and equipment in the baking area		

<b>3. demonstrate correct preparation methods for the production of a variety of baked goods</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
<b>3.1 examine quick breads, categorizing them by their characteristics and preparation techniques, including:</b>		
3.1.1 muffin method		
3.1.2 biscuit method		
3.1.3 conventional cake method		
<b>3.2 differentiate among the various categories of cookies, including:</b>		
3.2.1 dropped		
3.2.2 rolled		
3.2.3 molded		
3.2.4 refrigerator		
3.2.5 pressed		
3.2.6 bar		
3.3 compare the one-bowl method and the creaming method for shortened cakes		
<b>3.4 identify the proper use of baking equipment related to:</b>		
3.4.1 accuracy in measuring/scaling		
3.4.2 correct mixing procedures		
3.4.3 appropriate pan preparation		
3.4.4 baking and determining doneness		
3.4.5 altering and varying recipes according to instructions/wellness		

3.4.6 compensating for failures and defects		
<b>4. identify contemporary methods of baking that emphasize wellness in baked goods</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
4.1 discuss the use of fats and alternatives in baking; e.g., applesauce, puréed prunes		
4.2 discuss the use of whole grains and fibre in baking		
4.3 analyze a baked product that has been modified; e.g., gluten free, low fat		
4.4 identify a current nutritional issue related to baked goods; e.g., fat substitutes, food labelling, allergies, obesity, trans fats		
<b>5. demonstrate knowledge and skills in the planning, preparing and evaluating of contemporary baked products</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
<b>5.1 prepare a minimum of five recipes that emphasize:</b>		
5.1.1 muffin method		
5.1.2 biscuit method		
5.1.3 conventional cake method		
5.1.4 a baking method focusing on ethnic diversity		
5.1.5 a modified recipe to focus on creating a healthier alternative		
5.2 alter and vary basic recipes according to instructions		
5.3 identify and describe characteristics of quality baked products		
5.4 compensate for failures and defects		

<b>6. identify and demonstrate safe and sanitary practices</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
6.1 maintain a clean, sanitary, safe work area		
<b>6.2 apply universal precautions related to</b>		
6.2.1 personal protective equipment (PPE); e.g., hair coverings, aprons, gloves		
6.2.2 hand-washing techniques		
6.2.3 infectious diseases		
6.2.4 blood-borne pathogens; e.g., minor cuts, blood spills		
6.2.5 bacteria, viruses, fungi		
6.2.6 safety and first-aid applications; e.g., back safety, cuts, slip and trip hazards		
6.3 use all materials, products and implements appropriately		
6.4 clean, sanitize and store materials, products and implements correctly		
6.5 dispose of waste materials in an environmentally safe manner		

<b>7. demonstrate basic competencies</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
<i>7.1 demonstrate fundamental skills to:</i>		
7.1.1 communicate		
7.1.2 manage information		
7.1.3 use numbers		
7.1.4 think and solve problems		
<i>7.2 demonstrate personal management skills to:</i>		
7.2.1 demonstrate positive attitudes and behaviours		
7.2.2 be responsible		
7.2.3 be adaptable		
7.2.4 learn continuously		
7.2.5 work safely		
<i>7.3 demonstrate teamwork skills to</i>		
7.3.1 work with others		
7.3.2 participate in projects and tasks		
<b>8. make personal connections to the cluster content and processes to inform possible pathway choices</b>		
<i>The Goal</i>	<i>What I did</i>	<i>Teacher approval</i>
8.1 complete/update a personal inventory; e.g., interests, values, beliefs, resources, prior learning and experiences		
8.2 create a connection between a personal inventory and occupational choices		

# The Role of Baked Goods in the Canadian Diet

Grain products, particularly whole grains, are a source of fiber and typically are low in fat. Fiber rich foods can help people feel full and satisfied. A diet rich in whole grains may also help reduce the risk of cardiovascular disease.

Nutrients provided by grain products include carbohydrate, B vitamins (e.g., thiamin, riboflavin, niacin and folate), iron, zinc, magnesium and other components such as fiber. The health benefits associated with grain products cannot be attributed to any one nutrient. It is more likely that the nutrients work together with other naturally occurring components to provide an overall health benefit.

Whole grains and whole grain foods are composed of all three edible layers of the grain seed or kernel. Each layer provides a unique combination of nutrients. The outer bran layer provides all of the fiber as well as B vitamins, minerals such as magnesium, iron and zinc, phytochemicals and some protein. The middle endosperm layer accounts for the majority of the weight of the grain and is composed mostly of carbohydrate and protein. The inner germ layer provides B vitamins, unsaturated fats, vitamin E, minerals and phytochemicals.

**TIP:** Bake with whole wheat flour. In most recipes, you can substitute half of the white flour with whole wheat flour.

When whole grains are refined, both the bran and germ layers are removed. This results in a loss of fiber, vitamins, minerals and phytochemicals. When wheat is milled to make white flour, for example, only the grain's endosperm layer remains in the flour.

Baked goods such as cakes, croissants, doughnuts, pastries, pies and most cookies and muffins will add extra calories, fat, sugar or salt (sodium) to the diet and should be limited. These foods are typically low in fiber and are not usually made with whole grains.

***What are some ways you can reduce sugar and/or fat in baked goods and increase nutrients?***

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**Ethnic Diversity of Baked Goods:**

***As you look at the Canada Food Guide, what are some grain products and baked goods that reflect Canada's Ethnic diversity?***

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# Principles of Baking

1. Why is the recipe for a baked product similar to a chemical formula?

\_\_\_\_\_

2. Almost all baked products are made with the same ingredients but have different textures and appearances. What contributes to these differences?

\_\_\_\_\_

3. Provide a detailed explanation for the role of the following key ingredients used in baking:

1. Flour:

\_\_\_\_\_

2. Liquids:

\_\_\_\_\_

3. Leavening agents:

\_\_\_\_\_

4. Fats and oils:

\_\_\_\_\_

5. Sweeteners:

\_\_\_\_\_

6. Eggs:

\_\_\_\_\_

7. Flavorings:

\_\_\_\_\_

4. What is the difference between a batter and a dough?

\_\_\_\_\_

5. What is gluten? What is its role in baked products?

\_\_\_\_\_



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6. There are four basic leavening agents that help make baked products rise. List these and provide an explanation as to how each of them work. Then give an example of a baked product that would use that leavening agent.

1. \_\_\_\_\_

i. Example : \_\_\_\_\_

2. \_\_\_\_\_

i. Example: \_\_\_\_\_

3. \_\_\_\_\_

i. Example: \_\_\_\_\_

4. \_\_\_\_\_

i. Example: \_\_\_\_\_

7. Both baking powder and baking soda are used as leavening agents in baking. Compare and contrast these two ingredients.

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8. There are five tips for successful baking. What are these five tips and give a reason why these are important.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

# Quick Breads Review

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These are some basic facts that you should be familiar with in order to understand the preparation of quick breads.

- ❖ Quick breads are leavened with baking powder and/or baking soda rather than yeast
- ❖ These breads rise while they are baking
- ❖ The two methods for preparing quick breads are the muffin method and the biscuit method.
- ❖ These breads have a fairly low sugar and fat content and therefore cannot be mixed or kneaded very much.
- ❖ Quick breads include products such as muffins, waffles, pancakes, biscuits, and loaf breads (such as banana bread).



## Muffin Method Review Questions

1. Briefly describe the steps in the Muffin Method.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

2. What are the leavening agents used in making muffins and how do they make them rise?

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3. Lard or hard fats are measured using the Cold Water Method. Explain how to measure 75 ml of lard in this 250 ml measuring cup. Give complete instructions.



4. What type of fat was used in the muffins and what purpose did it serve?

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5. Over mixing causes quick breads to be \_\_\_\_\_ and \_\_\_\_\_.

1. Describe an over mixed muffin on the outside and the inside.

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6. Cake pans and muffin wells are filled \_\_\_\_\_ full to prevent running over. Pans are placed in the \_\_\_\_\_ of the oven for even heat circulation.

7. How can muffins be tested for doneness?

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## Lab #1 Muffins

Choose one of the following recipes to make individually. Each student must complete this lab *successfully* in order to move on. Each recipe makes 3 muffins. **Complete and hand in an evaluation form upon completion of your recipe.**

### G'Morning Muffins

30 ml beaten egg (1/2 egg)		1 ml baking soda
100 ml crushed pineapple	100 ml flour	2 ml cinnamon
30 ml grated carrot	40 ml rolled oats	Dash salt
25 ml pineapple juice	30 ml brown sugar	25 ml raisins (optional)
	4 ml baking powder	

### Bran Muffins

65 ml flour	65 ml natural bran (**Soak bran in the milk for 5 minutes before using)
2 ml baking powder	
1 ml baking soda	
25 ml brown sugar	25 ml cooking oil
Dash salt	15 ml molasses
25 ml raisins (optional)	30 ml beaten egg (1/2 egg)
	1 ml vanilla
65 ml buttermilk or sour milk	

### Cheese and Bacon Muffin

125 ml flour	
10 ml granulated sugar	30 ml beaten egg (1/2 egg)
4 ml baking powder	65 ml milk
Dash salt	15 ml cooking oil
40 ml grated cheddar cheese	
10 ml bacon crumbles	

### Banana Chocolate Chip Muffin

125 ml flour	40 ml margarine
1 ml baking soda	40 ml sugar
1 ml salt	30 egg (1/2 egg)
65 ml chocolate chips	2.5 ml vanilla
	65 ml ripe bananas, mashed

**USE THE MUFFIN METHOD FOR ALL RECIPES Preheat oven to 375° F.**

## Biscuit Method Review

Answer the following questions:

1. List the 4 steps in the biscuit method:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

2. Give the correct name for this tool \_\_\_\_\_



3. When a recipe says to cut in the shortening or margarine, what does this mean?

\_\_\_\_\_

\_\_\_\_\_

4. What size are the pieces of fat cut into the flour? \_\_\_\_\_

5. Explain how dough is correctly kneaded.

\_\_\_\_\_

\_\_\_\_\_

6. Explain how the layers or flakes are made in the biscuit.

\_\_\_\_\_

\_\_\_\_\_

7. If biscuit dough is over kneaded, what will happen to the final product?

\_\_\_\_\_

\_\_\_\_\_

8. What ingredient makes the biscuits rise? \_\_\_\_\_

9. Where do you place the baking sheet in the oven so there is even heat to bake the biscuit?

\_\_\_\_\_

\_\_\_\_\_



## Lab #2 Biscuits

This lab is to be prepared successfully by each student. You will not be able to do further labs until you can prepare biscuits correctly.

Prepare two biscuits from the following recipe. Evaluate with the teacher BEFORE you eat the biscuits.

### Basic Biscuits

- 100 ml sifted flour
- 5 ml baking powder
- Dash salt
- 20 ml lard or margarine
- 35 ml milk

Preheat oven to 425° F. You do not need to grease your pan

USE THE BISCUIT METHOD FOR MAKING THESE BISCUITS

Write out the steps here if you need a reminder.

1.

2.

3.

4.

**WRITE THE QUICK BREADS QUIZ BEFORE CONTINUING ON TO LAB #3**

### **Lab #3 Biscuit Variations**

You may choose one of the following recipes to prepare. This lab will be done by a kitchen group

#### **Old Fashioned Coffee Cake**

(this lab takes the full class, so you must work quickly)

250ml flour  
125 ml sugar  
5 ml baking powder  
Dash salt  
65 ml cold margarine  
1 egg, beaten  
90 ml milk  
200 ml canned cherry pie filling

#### **TOPPING**

125 ml brown sugar  
125 ml flour  
65 ml cold margarine

Grease a 9x9 glass cake pan before making batter

Preheat oven to 375 ° F.

Mix first 4 ingredients in a medium sized bowl. Cut in margarine until mixture resembles coarse crumbs. Make a well in the center.

Add beaten egg to milk and whisk well. Add milk mix to well and stir just enough to moisten. Spread batter into cake pan

Spread pie filling over batter.

Make topping and sprinkle over pie filling.

Bake for 30-40 min.

## Jalapeno Cheese Swirls

375 ml flour  
15 ml baking powder  
1 ml salt  
4 ml cold margarine  
10 ml parsley  
125 ml milk

### SPICY CHEESE FILLING

65 ml ricotta cheese (65 ml mozzarella as a substitute)  
65 ml grated cheddar cheese  
65 ml salsa  
10-20 ml finely chopped jalapeno peppers  
1 ml minced garlic  
Sprinkle of pepper

Preheat oven to 375 ° F.

Combine dry ingredients. Cut in margarine until mixture resembles coarse crumbs. Add parsley. Add milk and mix to form a soft dough. Turn out onto a floured piece of waxed paper and gently knead 4-5 times, just until dough comes together. Roll dough into a rectangle about the size of a sheet of paper.

**Cheese Filling:** Combine all 6 ingredients. Spread over dough. Roll up like you would for cinnamon rolls. Pinch seam to seal and roll seam on the bottom of the roll. Cut dough into slices and place cut side up on a silicone mat to bake.

**Bake for 20 min. or until golden brown.**

## Creaming Method Review

1. Summarize the steps in the Creaming Method

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

2. What is meant by "creaming the fat"

\_\_\_\_\_  
\_\_\_\_\_

3. How does the air beaten in during the creaming stage lighten the baked product?

\_\_\_\_\_  
\_\_\_\_\_

4. Why should fat be used at room temperature for best creaming?

\_\_\_\_\_  
\_\_\_\_\_

5. Why does tub or whipped margarine (such as Becel) not work well for baking?

\_\_\_\_\_  
\_\_\_\_\_

6. Why should eggs be added to the creamed mixture one at a time?

\_\_\_\_\_  
\_\_\_\_\_

7. Dry ingredients are mixed together and added alternately with any liquid ingredients that are in the recipe. How is this done?

\_\_\_\_\_  
\_\_\_\_\_

8. There are 6 basic types of cookies differing in types of batter and how they are put on the pan. Provide an explanation for each of the six types and give an example.

a. Bar Cookies:

\_\_\_\_\_  
\_\_\_\_\_

b. Drop Cookies:

\_\_\_\_\_  
\_\_\_\_\_

c. Molded Cookies

\_\_\_\_\_  
\_\_\_\_\_

d. Pressed Cookies:

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e. Rolled Cookies:

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f. Refrigerator Cookies:

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9. It is important that all cookies in the same batch are the same size and thickness. Why?

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10. What will happen if cookie dough is put on a hot cookie sheet and not put directly into the oven?

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11. What allowances must be made for baking on a dark cookie sheet?

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12. How are cookies generally tested for doneness?

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13. Cookies should be removed from the pan right away, why? And what is the best way to cool cookies?

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**YOU MUST CHOOSE TWO DIFFERENT TYPES OF COOKIES. (one drop and one other type)**

**THESE LABS WILL BE DONE OVER TWO DAYS.**



# BUTTERCAKES

## REFERENCES: "Cakes"

1. All cakes that contain fat are referred to as \_\_\_\_\_ cakes. Besides the air that is creamed into the fat, they also use \_\_\_\_\_ and \_\_\_\_\_ as a leavener.
2. Check the suggestions from the list below that would insure a successful butter cake.
  - a. \_\_\_\_\_ Preheat and prepare pan before beginning mixing.
  - b. \_\_\_\_\_ Accurate measuring is very necessary for proper texture.
  - c. \_\_\_\_\_ Ingredients are best mixed at room temperature.
  - d. \_\_\_\_\_ Over-mixing a cake may result in failure.
  - e. \_\_\_\_\_ Most of the mixing should occur during the creaming step and then the remaining ingredients lightly mixed in.
  - f. \_\_\_\_\_ Pan size is important when baking a cake.
  - g. \_\_\_\_\_ Pans should be in a staggered arrangement in order for proper heat circulation.
  - h. \_\_\_\_\_ Butter cakes shrink from the edge of the pan when finished baking.
  - i. \_\_\_\_\_ Butter cakes differ from cookies only in the proportion of ingredients.
  - j. \_\_\_\_\_ A cake baked in a shiny pan may require a longer baking time.
  - k. \_\_\_\_\_ An under baked cake will fall in the centre while cooling.
  - l. \_\_\_\_\_ An under baked cake may fall if the oven door is opened during baking.

3. Suggest three different ways a cake may be tested for doneness.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

WRITE THE CREAMING QUIZ BEFORE CONTINUING.

## LAB #6 BUTTER CAKES AND BUTTER CREAM ICING

Choose one from the following 4 recipes to prepare. Make one recipe of butter Icing.

### Marble Cake

225 ml	flour	1	egg
8 ml	baking powder	2 ml	vanilla
1 ml	salt	87 ml	milk
75 ml	margarine	37 ml	cocoa (added later)
125 ml	sugar		

### METHOD

Preheat oven to 350° F. Grease 1 bread pan. Cream sugar and margarine together. Add egg and vanilla and cream until light and fluffy. Alternately add the sifted dry ingredients (except the cocoa) and wet ingredients starting with the dry and ending with the dry. After white batter is mixed, divide the batter in half. Add cocoa to ½ of the batter and mix well. Drop chocolate and white batter by spoonful into the bread pan alternating white and chocolate. Take a table knife and swirl it through the batter. Spread batter evenly. Bake at 350° F. for 30-35 min. or until tested done.

### Chocolate Cake

200 ml	flour	125 ml	sugar
63 ml	cocoa	1	egg
8 ml	baking powder	2 ml	vanilla
1 ml	salt	87 ml	milk
75 ml	margarine		

### METHOD

Preheat oven to 350° F. Grease 1 bread pan. Cream sugar and margarine together. Add egg and vanilla and cream until light and fluffy. Alternately add the sifted dry ingredients and wet ingredients starting with the dry and ending with the dry. Pour into prepared bread pan. Spread batter evenly. Bake at 350° F. for 30-35 min. or until tested done.

### Spice Cake

225 ml	flour	75 ml	margarine
8 ml	baking powder	125ml	sugar
1 ml	salt	1	egg
2 ml	cinnamon		
1 ml	cloves	2 ml	vanilla
Pinch	nutmeg	87 ml	milk
2 ml	baking soda		

### METHOD

Preheat oven to 350° F. Grease 1 bread pan. Cream sugar and margarine together. Add egg and vanilla and cream until light and fluffy. Alternately add the sifted dry ingredients and wet ingredients starting with the dry and ending with the dry. Pour into prepared bread pan. Spread batter evenly. Bake at 350° F. for 30-35 min. or until tested done.

### Butter Cake

225 ml	flour
8 ml	baking powder
1 ml	salt
75 ml	margarine
125 ml	sugar
1	egg
2 ml	vanilla
87 ml	milk

### METHOD

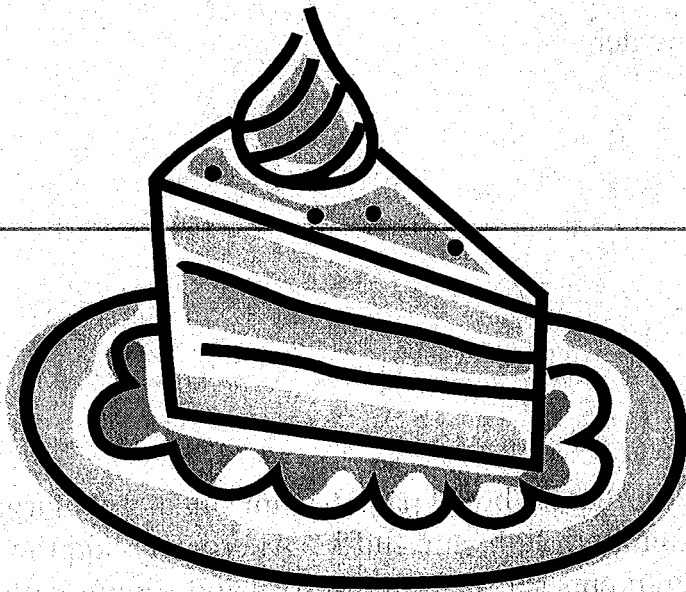
Preheat oven to 350° F. Grease 1 bread pan. Cream sugar and margarine together. Add egg and vanilla and cream until light and fluffy. Alternately add the sifted dry ingredients and wet ingredients starting with the dry and ending with the dry. Pour into prepared bread pan. Spread batter evenly. Bake at 350° F. for 30-35 min. or until tested done

## Butter Icing

30 ml margarine  
250 ml icing sugar  
3 ml vanilla  
25 ml milk  
30 ml cocoa (if chocolate)

### METHOD

Cream margarine until fluffy. Add icing sugar, vanilla, milk and cocoa (if chocolate). Beat thoroughly.



## Mixing Methods Chart

**Mixing Methods Comparison:** Compare the basic mixing methods for baking by filling in the following chart.

	Muffin Method	Biscuit method	Creaming Method
<b>Basic Mixing method</b>			
<b>Leaveners(s)</b>			
<b>Special Mixing Techniques</b>			
<b>Products made with this method</b>			
<b>Test for doneness</b>			
<b>Probably causes for failure</b>			



## Lab #7 BAKING MIXES

Using a prepared mix can save time and money in baking, but it can limit the variety of choices available to you. Most baking mixes tend to have a much higher sugar content than regular recipes do.

You can use prepared mixes to act as a base for many new recipes. During this lab you will combine prepared mixes with other food items you provide from your own kitchen to create a new product.

### QUESTIONS:

1. What steps saved time in the preparation of this quick bread recipe?

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2. How would shopping have been made easier by using a mix?

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3. How does this quality of this product compare to a homemade version of this quick bread in the following areas?

a. Texture: \_\_\_\_\_

b. Flavour: \_\_\_\_\_

c. Over all acceptability: \_\_\_\_\_

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MAKE SURE BOOKLET IS COMPLETE AND READY TO HAND IN.

WRITE FINAL EXAM