

# North Carolina Junior 4-H Enriched Corn Meal Activity



THE ENRICHED CORN MEAL ACTIVITY  
for Junior 4-H Club Members

YEAR.....

\_\_\_\_\_

Name of Member

\_\_\_\_\_

Age

\_\_\_\_\_

County

Address .....

Name of Parents .....

Name of 4-H Club ..... Years in Club Work .....

Name of Adult 4-H Leader ..... Address .....

# The Enriched Corn Meal Activity

## Why Have This Program?

The purpose of this activity is to encourage 4-H club members between the ages of 10 to 14 years old to achieve the following:

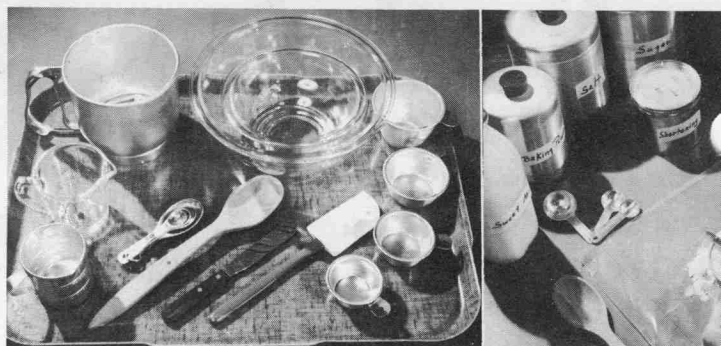
- (1) Know the value of enriched corn meal in the diet as a good low cost food.
- (2) Influence others to use enriched corn meal and make better corn muffins.
- (3) Learn skills in food preparation.
- (4) Develop an appreciation for good quality muffins.
- (5) Improve personal and family health through the development of better food habits.

## Who Can Take Part?

Any Junior 4-H club member enrolled in the food preparation project may also enroll in the corn meal activity.

## What Do I Do?

- (1) **MAKE** corn muffins or bread at home or in a cookshop using enriched corn meal by a family size recipe using at least 1 cup of enriched cornmeal.
- (2) **SCORE** your enriched corn meal muffins, or bread, from six different bakings and keep a record of detailed scores, using the score card. This might be done at home or in a group judging contest. Ask your mother, leader or another adult person to judge one of the 6 bakings.
- (3) **TAKE PART IN** a county-wide "Bake-Off". Your Home Agent will let you know where and when you will make your muffins or bread using enriched corn meal, before local judges, who will select a county winner. You will furnish your own small equipment and supplies. You do not have to talk while making your enriched corn meal muffins or bread. You should have a clear understanding of what you are doing and be able to answer general questions related to the use of enriched corn meal.
- (4) **WRITE** down the number of times you have made enriched corn muffins or bread, and the number of people served each time. Write a story on the value of enriched corn meal, giving a list of books or pamphlets from which you obtained your information. List the different ways you used to get this information to people. (Give one or more examples of how others were influenced to make better corn bread or to use enriched corn meal.)
- (5) **TURN IN** a report to your Home Economics Agent. (It should include the items under No. 2 and No. 4 above).
- (6) Show an exhibit of 6 of your muffins at a special event such as a community or county fair. Use any recipe for making your muffins



Assemble all needed equipment . . . .

And measure all ingredients you begin to make

at home. *The following recipe may be used:*

### BASIC CORN MEAL MUFFIN RECIPE

1½ cup enriched corn meal	3 teaspoons baking powder
½ cup enriched flour	1 egg
1 teaspoon salt	1½ to 2 cups sweet milk*
	3 tablespoons melted fat

\* Buttermilk can be used—Use only 2 teaspoons baking powder and 1/4 teaspoon soda to 2 cups of buttermilk.

1. Set oven control to 450° F.
2. Sift dry ingredients together to mix.
3. Return the bran coats that didn't sift through.
4. Mix together beaten egg, milk and fat.
5. Add all at once to the dry ingredients, and mix until all ingredients are blended.
6. Fill piping hot greased muffin pans 2/3 full.
7. Bake at 450° F. for 20 minutes.

## North Carolina Corn Meal and Grits Facts

About 50 per cent of the people in North Carolina eat corn meal and grits daily. An average of one-third of the daily consumption of cereal products are made of corn. Some of the corn meal and grits used in our State is not enriched. The people who eat these products do not receive the benefits from the enrichment process as those in other areas where little or no corn meal and grits are eaten.

(1) *How can good corn breads be made better?*

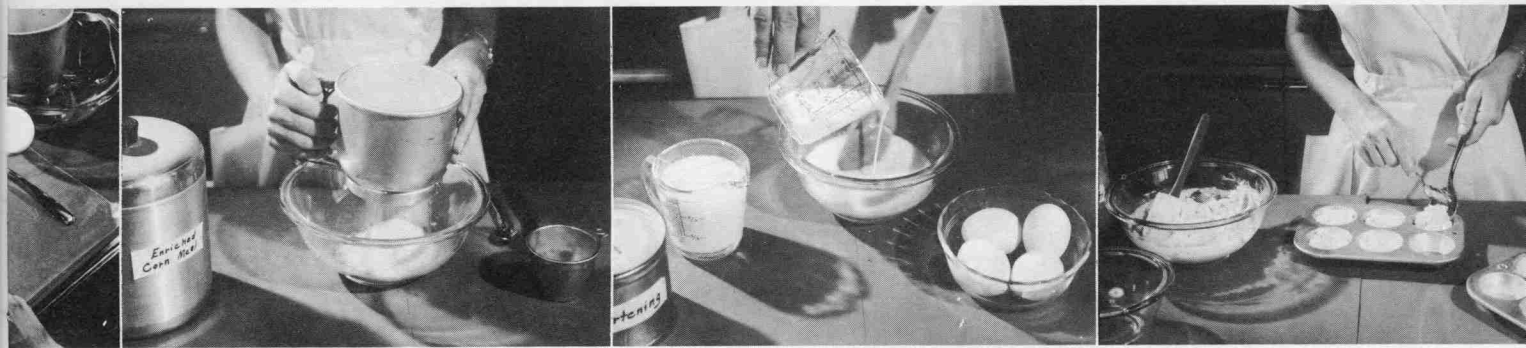
Good corn breads can be made better by using enriched corn meal and standard recipes.

(2) *Isn't all corn meal sold or milled in North Carolina required by law to be enriched?*

No. The North Carolina law requires all white bread and flour and degermed corn meal and grits milled or sold in the state to be enriched. Many people eat little flour and bread, but much whole corn meal. They do not get the full health value from the present enrichment program.

(3) *Why should whole corn meal be enriched?*

Extra food value is added to the corn meal in the form of minerals and vitamins. Corn by nature lacks enough of the minerals and vitamins which whole wheat has and enrichment adds. Actually some of



before  
muffins.

Sift dry ingredients, returning all  
bran coats that didn't sift through.

Mix beaten egg, milk and fat—Add  
all at one time to dry ingredients.

Fill hot, greased muffin pans 2/3  
full. Bake 20 minutes at 450° F.

the B vitamin, Niacin, must be taken from other foods for the complete digestion of corn products. People who eat corn meal and grits that are not enriched need more—not less niacin.

(4) *Exactly what is added to enrich corn meal?*

The three B vitamins—thiamine or B<sub>1</sub>, riboflavin or B<sub>2</sub>, and niacin, the food mineral, iron and sometimes calcium are added.

(5) *Why are these particular vitamins and minerals added?*

All minerals and vitamins are important for good health. It is not, however, as hard for most people to get enough of the others as it is the three B-vitamins and iron.

(6) *Why are flour, corn meal, and grits enriched and not some other foods?*

The minerals and vitamins are added to flour, corn meals, and grits because they are eaten by more people in larger quantities than any other food.

(7) *How is corn meal enriched?*

A little inexpensive feeder is placed on the mill. It mixes the enrichment into the meal.

(8) *How much does it cost to enrich meal?*

Only a few cents per bushel.

(9) *Can farmers take corn to a mill and ask for enriched meal in exchange?*

Yes. Everyday more farmers ask for enriched corn meal. The more progressive farmers and millers realize it is worthwhile.

(10) *Of what health value are these vitamins and minerals which are added?*

(a) Niacin (one of the B vitamins) prevents pellagra; (b) Thiamin or Vitamin B<sub>1</sub> is needed for health, nerves and digestion; (c) Riboflavin or vitamin B<sub>2</sub> helps keep the eyes and skin healthy and helps ward off old age; (d) Iron helps to build red blood and prevents anemia; (e) Calcium is needed for building strong bones and teeth and keeping the heart, nerves, and muscles in good working order.

(11) *Does enriched corn meal taste different from ordinary corn meal?*

No. The enriched corn meal looks, tastes, and bakes exactly like the corn meal you have always used. The only difference is that extra food value has been added which will help protect your health.

(12) *How can you tell enriched corn meal?*

The word *enriched* will be stamped on the box or bag. Refuse to buy corn meal that does not have "enriched" marked on the bag.

(13) *Are the "man-made" vitamins as good for you as natural ones found in food?*

Yes, they both help to protect health.

### How to Judge Your Muffins

#### OUTSIDE APPEARANCE (25%)

Golden brown in color	5
Crust slightly rough, small cracks on top	5
Each one seems light to lift	5
Tender crust	5
Uniform in size and shape	5

#### INSIDE APPEARANCE (25%)

Light creamy colored crumb	5
Tender, loose crumb	5
Small even air spaces, free from holes	5
Slightly moist—neither dry nor damp	5
Smells tempting	5

#### DELICIOUS TO EAT (50%)

Well blended, good nutty baked flavor	25
Tender and moist to bite or break, crunchy crust	25
(Perfect) Total Score	100

#### RATING FOR CORN MEAL MUFFINS

Excellent (100 — 90); Good (90 — 80);  
Fair (80 — 70); Poor (70 — down)

POINTS FOR JUDGING	DATE BAKED	DATE BAKED	DATE BAKED	DATE BAKED	DATE BAKED	DATE BAKED	DATE BAKED
5							
5							
5							
5							
5							
5							
5							
5							
5							
25							
25							
100							
Rating							

# Judging and Awards

## How Will They Be Judged?

County winners will be selected before June 1 on the basis of the muffins or bread made before local judges at a county-wide baking achievement round-up. —25% of score. 75% will be given for the report of your accomplishments (Item No. 5):

District winners will be selected from the record of accomplishments sent to the State 4-H Club Office on October 1.

A State winner will be selected from the District winners' record (75% and their participation in the State Baking Achievement Round-Up. 25% of total score).

## The Awards:

All members receive an added health protecting measure for themselves and others whom they influence to use enriched cornmeal.

## County Winners Will Receive:

25-50 participating in the County Program (local and County wide) 1st—Transistor Radio  
2nd—Trip to 4-H Camp

10-24 Participating 1st—Trip to 4-H Camp  
2nd—Electric Hand Mixer

Less than 10 Participating 1st—Trip to 4-H Camp

*State Winner*—\$200.00 deposited in local bank for a scholarship fund, can be withdrawn at age 18.

## Summary of Work

1. Total number of times you made enriched corn meal muffins at home. No. Served \_\_\_\_\_
2. Total number of individual persons, other than your immediate family, to whom you gave information about Enriched Corn Meal. \_\_\_\_\_
3. a. Total number of clubs or organizations to whom you gave reports or demonstrations. \_\_\_\_\_  
b. Names of organization or club. \_\_\_\_\_  
\_\_\_\_\_
- c. Approximate number attending. \_\_\_\_\_
4. Special events in which you entered your corn meal muffins—such as Community or county Fairs, etc. \_\_\_\_\_
5. Total number times you baked other corn meal dishes. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. How did your local leader help you? \_\_\_\_\_  
\_\_\_\_\_

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