

# AGRICULTURAL EXPERIMENT STATION of The Alabama Polytechnic Institute, Auburn, Ala.

M. J. Funchess, Director

## ALAMALT -- ITS PROPERTIES AND USES

MILDRED S. VAN de MARK, Assistant Horticulturist

ALAMALT is one of several new products developed from sweetpotatoes at this Station. The product is a highly nutritious and concentrated food. It is especially high in sucrose and maltose sugars. Also, it is a good source of carotene, which supplies vitamin A. The product is made from fully prepared and cooked sweetpotatoes, toasted, and reduced to a flour.

ALAMALT absorbs and holds moisture when exposed to air. It was found that this characteristic can be used to advantage in bakery goods in which moisture-holding quality is of great importance. For instance, ALAMALT has been used in fruit cakes, layer cakes, southern brown bread, cookies, biscuits, muffins, candies, and icings. The moisture-holding property of the ALAMALT was very noticeable in the products prepared in the research kitchen. ALAMALT also has been used for pies or pre-mixed pies.

Cakes in which ALAMALT was used were fine in texture and grain, had an elastic quality, and held moisture twice as long as plain cakes. Similarly, ALAMALT gave candies and icings a very smooth, creamy texture, and freshness. Because of this moisture-holding quality, these products remained fresh in storage over a much longer period than those containing no ALAMALT.

It was found further that ALAMALT can be used to replace a portion of the eggs, butter, and sugar in cakes without loss in color, flavor, or texture. Thus, a considerable saving can be made. Also, ice cream and milk shakes can be made with ALAMALT in its natural form. These products have a very rich, creamy flavor.

In bakery goods the best results were obtained when the ALAMALT was mixed with warm water into a thin batter-like consistency. This mixture was then placed in refrigeration for 12 to 15 hours before using. However, satisfactory results were obtained without refrigeration of the batter.

Recipes developed in the research kitchen for use of ALAMALT in a variety of products are given:



Cream butter, add sugar, vanilla, well-beaten eggs, and Alamalt batter. Sift dry ingredients together and add to first mixture alternately with milk. Mix in nuts and raisins. Drop by spoonfuls on a greased tin, and bake in 350° F. oven 15 to 20 minutes.

#### Southern Brown Bread

3/4 c. Alamalt (batter)	2 t. soda
1 c. corn meal	1 c. molasses
1-1/4 c. whole wheat flour	2 c. buttermilk
1/2 c. bran	2 c. raisins
1 t. salt	

Mix the dry ingredients thoroughly. Add molasses, buttermilk, and Alamalt batter. Fold in raisins, slightly floured. Fill cans 3/4 full and steam for 2-1/2 hours in 4 well-greased No. 2 cans. Remove lids and dry bread 1/2 hour in a moderately hot oven.

#### Fudge (Alamalt and Fondant)

2 c. sugar	3 T. light corn syrup	2 T. butter
2/3 c. milk	3 T. Alamalt (batter)	2 t. vanilla
8 T. cocoa	3/4 c. fondant	2 c. pecans

Put sugar, milk, chocolate, Alamalt, and corn syrup in a sauce pan. Cook slowly until temperature of 236° F. is reached. Remove and add butter, vanilla, and fondant. Beat well. Add pecans, mix and pour on a buttered tin to cool. Cut.

#### Pralines

1 c. brown sugar	1 c. white sugar
1 c. milk	1/16 t. soda
2/3 c. Alamalt (dry)	1 T. butter
1/2 t. maple flavoring	1-1/2 c. pecan (halves)

Combine sugars, milk, and soda. Cook to 236° F. Remove from heat, add butter and flavoring. Whip until crystallization begins, and add Alamalt. Mix thoroughly and drop by spoonfuls over pieces of pecans that have been placed on waxed paper.

#### Chocolate Fudge Icing

2 c. sugar	1 t. vanilla	1 T. butter
1 c. milk	4 T. cocoa	2 T. Alamalt (batter)

Cook the sugar, Alamalt, milk, and chocolate until it forms a soft ball when tried in cold water (230° F.). Remove from fire, add butter and vanilla, and beat until of right consistency to spread on cake.

(Lemon-cheese icing also may be made successfully with Alamalt, using 1 tablespoonful Alamalt to 1 cup sugar. Moisture is retained twice as long as in standard recipes.)

### Caramel Frosting

1-1/2 c. brown sugar	1-1/2 c. milk
1-1/2 c. granulated sugar	2 T. butter
2 T. Alamalt (batter)	

Combine sugars, Alamalt, and milk and bring to a boil, stirring constantly. Then boil without stirring until a small amount of the mixture forms a soft ball in cold water (232° F.) Add butter and beat until of right consistency to spread on cake.

### Spiced Pie

2/3 c. Alamalt (dry)	1 t. lemon flavoring
1/2 c. sugar	1-1/4 c. milk
1 egg	2 T. butter
1-1/2 t. mixed spices	1/8 t. salt

Whip egg and mix in sugar. Combine Alamalt with other dry ingredients and add alternately with milk to egg and sugar. Add flavoring and butter, mix thoroughly, and pour into a baked pie shell. Bake for 45 minutes at 325° F.

### Biscuit

1-2/3 c. flour	1/2 t. salt
1/3 c. Alamalt (dry)	3 T. fat
1/2 t. soda	1-1/3 c. sour milk

Mix and sift all dry ingredients. Cut in fat with pastry mixer. Add enough milk to make soft dough. Knead to make smooth. Roll to 1/2 inch thick and cut. Bake in hot oven (425° F.) 15 to 18 minutes.

### Muffins

1-3/4 c. flour	1 egg
1/4 c. Alamalt (dry)	2 T. sugar
3 T. fat	1/2 t. salt
1-1/4 c. milk	4 t. baking powder

Mix and sift all dry ingredients. Beat egg and to it add part of the milk. Add this to dry ingredients. Mix in melted fat and remaining milk. Beat well and put into muffin rings filling them about half full. Bake in hot oven (400° F.) for 35 to 40 minutes.

### Ice Cream

1 qt. milk	10 T. Alamalt (dry)	1 t. vanilla
1 qt. cream	8 T. dry skim milk	1 t. kragel or gelatin
1-1/2 c. sugar		

Heat milk in double boiler to 80° F. Add the combined sugar, dry skim milk, kragel, and sweetpotato malt. Raise temperature to 150° F. and let remain for 30 minutes. Cool, add vanilla and cream. Freeze.

Alamalt Milk Shakes

1 c. milk (1/2 pint)

2 scoops ice cream

Place milk in mixer, add malt, flavoring, and ice cream. Whip thoroughly. Serve.

