

RECEIVED  
FEB 11 1918  
INT. DEPT. AGR.

1918 FOOD PRODUCTION BULLETIN NO. 2

ON

# BEAN GROWING IN NOVA SCOTIA

BY

P. J. SHAW, PROFESSOR OF HORTICULTURE  
COLLEGE OF AGRICULTURE  
TRURO, N. S.

WITH AN APPENDIX ON

## COOKING BEANS

BY

MISS JENNIE A. FRASER

SUPERINTENDENT OF WOMEN'S INSTITUTES  
PROVINCE OF NOVA SCOTIA

PUBLISHED BY ORDER OF

The Development of Agricultural Resources  
Committee

OF THE

Legislature of Nova Scotia



"SPEED THE PLOW"

KING'S PRINTER

1918

630.4

• N936 FPB no. 2

Ms. A. 9. 2. 1.

## Bean Growing in Nova Scotia.

---

Beans are grown in this Province both for green string beans and for dry shell beans. For the first purpose the green and wax podded varieties of dwarf or bush beans are used and also the pole beans. For ripened dry beans various kinds of field and garden dwarf beans are used.

The following article deals with the growing of dwarf beans for the ripened dry seed. The object is to call attention to the desirability of increasing the area in beans in Nova Scotia next year as a special war-time measure and to make a few suggestions as to varieties, source of seed supply and general culture of the crop.

As a field crop in Nova Scotia beans are grown most extensively in the counties of Annapolis, Kings, Hants and Lunenburg. It is probable that in these counties the soil and climate are better adapted to bean culture than in other parts of the Province, although North Queens, parts of Colchester, Cumberland, Pictou and Antigonish seem well adapted to this crop. The following table taken from the Census of 1910 shows the acreage and the yields of beans in the different counties of the Province:—

Counties.	Acres.	Bushels.
Annapolis	267	4088
Kings	220	3197
Hants	75	1279
Lunenburg	70	1220
Queens	23	403
Halifax	13	339
Antigonish	19	301
Digby	8	221
Pictou	8	204
Guysboro	12	192
Yarmouth	7	104
Colchester	4	71
Cumberland	4	64
Shelburne	2	23
Cape Breton & N. Victoria	1	28
Cape Breton South	1	20
Inverness	1	12
Richmond	0	0
	735	11,766

The above figures are for the year 1910, the latest year for which the census gives the statistics. In 1917 the area in beans in Nova Scotia was estimated at 1,000 acres or more. The Province may be divided into two parts. (1) The part comprising those counties in which 1,000 bushels or more of beans per county are produced each year and (2) the rest of the Province where the yield per county is a few hundred bushels or less. In the first area the problem of growing ripe beans presents no serious difficulties. If reasonable attention is given to cultural details any one of several varieties can be grown with success. In the other part of the Province it is necessary to give more attention to the choice of suitable varieties and to the selection of the soil, its preparation and cultivation.

One of the most important matters is to obtain a supply of good seed. Home-grown seed, if well grown and free from disease, is better than imported seed, since it is more likely to be of a variety suited to local conditions. There is now an abundance of this seed for sale in the bean growing sections of the Province. In order to insure a supply of the early varieties for sections of the Province with short seasons the Horticultural Division of the Agricultural College has bought a number of bushels to sell at cost to planters wishing these varieties next spring. At the end of this circular will be found a partial list of those who, in addition to the usual trade, have seed beans for sale.

Every one who intends to grow beans next year should provide himself with a supply of seed as early as possible. Seed beans are likely to advance in price before planting time in 1918. Seed merchants now say that there will be a shortage in the supply of seed beans next season. One large seed firm states that their seed growers this year report a yield of only 15 to 25 per cent of a full crop of beans, due to early fall frost. The important point is not to delay in getting your seed beans. Buy now and be ready with the best seed when planting time comes.

With some families baked beans in the past have formed a regular article of diet twice a week, Saturday night and Sunday morning. In the lumber camps and where men are engaged in hard, physical, out-door labor they are served oftener than this, constituting one of the most important parts of the rations. When beans of the right variety are chosen and cooked as some good cooks know how to do it and served with brown bread and butter, they not only constitute a wholesome food but a delicious treat, something to be looked forward to.

On account of the probable shortage of meat in the near future, it is not unlikely that beans may have to form a larger part of our diet than in the past and be served oftener than twice a week. Because of their composition, they are better adapted to take the place of meat than almost any other vegetable. Besides containing fat, meat is chiefly valuable for its protein, the material used in building up muscular tissue. Beans also are rich in protein and compare favorably with other foods, as the following figures for their analysis show:—

### Composition of Navy Beans Compared With Other Foods.

(From Cornell Reading Course for the Farm. Lesson 124.)

Food	Percentage of Water	Percentage of Protein	Percentage of fat	Percentage of Carbohydrates	Percentage of Ash	Fuel Value per lb. in Calories
Navy Beans	12.6	22.5	1.8	59.6	3.5	1,605
Potatoes	78.3	2.2	.1	18.4	1.0	385
Lean Meat	70.0	21.3	7.9	0.0	1.1	730
Milk	87.0	3.3	4.4	5.0	.7	325
Eggs	73.7	14.8	10.5	0.0	1.0	720

Even though one cannot grow beans for sale, it is possible on a small area to grow enough to supply the family for the greater part of the year. A pound of beans when baked is sufficient for 10 helpings. For a family of five, then, a bushel would be sufficient for 120 meals. A bushel can be grown under ordinary conditions on 8 square rods. Under garden conditions it might be grown on 4 square rods. That is, a piece of ground of the right kind and situation, about 33 feet square, might produce enough beans to serve a family of 5 for 120 meals. If served at four meals a week they would be sufficient for 30 weeks.

If the conditions are right, beans are one of the easiest crops to grow. They are a short-season crop, planted after danger of frost is past, and should reach maturity before the first fall frost. When failure with this crop occurs it is often due to the beans not having reached maturity before the first fall frost. This may be due to one or other of several causes. The beans may not have been of the right variety, they may not have had a sufficient amount of a needed plant food, the land on which they were planted may have been too cold and wet, the season may have been unfavorable, or the seed infested with disease. The important thing for the farmer to do is to make all the controllable

conditions as nearly right as possible. With a normal yield of beans, at present prices, there is not a more profitable cash crop to grow. The growing of beans also furnishes one of the most effective means of adding to the food supply of the country and reducing the cost of living. They can be grown profitably on a large or a small scale, whichever is more convenient to the grower.

### VARIETIES OF BEANS.

The varieties of field beans grown in Nova Scotia comprise the following: Yellow Eye (including the ordinary Yellow-Eye and Improved Yellow-Eye), Pea beans (including Snowflake Field bean and California pea bean), the Soldier bean, the Early Yellow Six-weeks, a large white marrow bean and several varieties with local names, or no names except beans. Among the local varieties are a white bean mottled or speckled with dark purple, called sometimes Speckled wax, or Turkey bean, and a reddish brown bean with dark markings on the sides resembling Improved Goddard, but smaller than the Goddard. The former bean is grown in considerable quantities in the Annapolis Valley, the latter quite largely in Antigonish County.

The horticultural classification of beans includes four types,—pea, medium, marrow or marrowfat, and kidney. For the purposes of this article beans grown in this Province are divided into early, medium early, and late, according to the length of season required and the time of ripening. Early beans are represented by such kinds as Early Yellow Six-weeks, and the reddish brown Antigonish bean, medium Early by the early Yellow Eye, Soldier bean, and Snowflake Field bean and other white pea beans, late beans by the Improved Yellow eye. For the Annapolis Valley and parts of the Province with similar soil and season any one of the early or the medium early varieties is safe.

For most parts of Eastern and Northern Nova Scotia, except a few specially favored sections, one of the early maturing varieties of the first group should be chosen.

The Early Yellow Six-weeks includes two strains, a kidney-shaped bean of pale yellow color and somewhat flat in shape and a bean of the same color but shorter and more nearly round, called locally Six-weeks Round. Both strains of the Six-weeks ripen in a short season and seem to be well adapted to all sections of the Province.

The ordinary Yellow Eye, is a white bean with a yellow area around the seed scar and belongs to the marrow or marrowfat group of beans. It is extensively grown in the

western part of the Province and to some extent in the Eastern part.

The Improved Yellow Eye is somewhat longer and larger than the ordinary Yellow Eye and requires a season ten days or two weeks longer. It is not recommended as a safe variety even in Western Nova Scotia, although it is grown and ripened in that section.

The Soldier bean, so named because of the fancied resemblance of the colored area about the seed scar to a soldier, is earlier than the Improved Yellow Eye but not as early as the early Yellow Eye. It is a good yielder and comparatively free from disease. It is a good variety for the Annapolis Valley and similar areas.

Several varieties of white pea beans are grown in Nova Scotia with success. These are generally good yielders and earlier than the Yellow Eye or Soldier bean. Among the pea beans are the small Snowflake Field bean, an early variety of excellent quality and prolific, the Prolific Tree bean, a bean somewhat larger than the Snowflake, and a somewhat larger white bean called the medium pea bean. Pea beans are usually in good demand on the market and yield better on the poorer soils than do the marrow and kidney beans.

There is also a large white marrow bean, called the White Marrowfat, which has been grown successfully for a number of years near Milford, Halifax County. It is also grown to some extent in the Western part of the Annapolis Valley. This bean because of its white color and the plumpness of the seed and good quality is a favorite wherever it is known. It is said to ripen fairly early, to be quite free from disease and an excellent yielder. The Agricultural College has a few bushels of this variety for sale for seed.

### **Fertilizing the Soil.**

Beans belong to a group of plants called nitrogen gatherers. They, in common with other members of their botanical family, the Leguminosae, including peas, clover, and vetch, have the power of getting part of their nitrogen from the free nitrogen of the air and of adding to the store of nitrogen in the soil. The result is that the bean crop may leave the soil richer in this important fertilizing material than it was before. It is well, however, to have a fair supply of nitrogen in the soil when the beans are planted, otherwise the crop will not get a good start or grow well enough to make much use of the nitrogen of the air. This nitrogen may be provided by plowing under a clover sod the fall before or by applying a light coat of manure, say eight to

ten tons per acre. If neither of these ways of adding nitrogen is convenient, a light dressing of nitrate of soda, say 50 to 100 pounds per acre, just after the plants are up will give them the needed start. Both clover sod and manure are valuable for the humus which they add to the soil, improving its texture and making it more retentive of moisture.

The plant food which needs to be added in largest quantities to most soils is phosphoric acid. It may be applied in the form of acid phosphate, slag or bone meal. Sevey in his book on Bean Culture says: "It seems that phosphoric acid in the form of dissolved South Carolina rock (acid phosphate) is more likely to give profitable results than the application of any other fertilizing material." If beans do not ripen early enough, or if they ripen unevenly, it may be due to a lack of phosphoric acid in the soil.

Potash is a useful fertilizer for beans on most soils but good results can be and are obtained without making special applications of this material to the soil. The usual commercial form of potash not being obtainable now, it would be well to save and apply whatever wood ashes can be got. Unleached wood ashes contain from 5 to 8 per cent of potash. Potash is also contained in well preserved manure. Some authorities claim that it may be set free from the inorganic material of the soil by the application of lime. Since soils differ greatly in fertility no definite recommendation as to the amount of fertilizer to be used per acre on all soils can be given. This would be a matter to be determined by the owner according to the character of the soil as to productiveness. Good bean crops can be grown by the application of a phosphatic fertilizer, such as acid phosphate, slag or bone meal, 400 to 500 pounds per acre and a nitrogenous fertilizer such as nitrate of soda, say 50 to 100 pounds per acre, provided the soil is fairly well supplied with humus.

Except in the case of nitrate of soda, fertilizers for beans should be applied when harrowing at the time of fitting the land for the crop. They should be well mixed with the soil, otherwise they are liable to injure the germinating seed.

### **The Soil and Its Preparation.**

Beans require a warm, well-drained soil, and one which does not suffer from lack of moisture. The bean crop is particularly sensitive to external conditions and may readily fail with insufficient heat or with too much or too little moisture. Under the conditions of our climate, with its short growing season, the land for beans should not be too heavy or too cold. A light or medium loam with a southern exposure is more likely to give success than a heavy clay



soil, especially if it has a northern slope or is poorly drained. The marrow and kidney varieties of beans are said to require slightly heavier and richer soil than do the pea beans. The latter will give heavier yields than the marrow and kidney beans on light and relatively poor soil. But in this Province where the natural conditions are not always most favorable for bringing a crop of beans to maturity the greatest care should be exercised in the selection of the most suitable soil and in its preparation.

Beans, may come in the rotation after clover, or they may come after potatoes or other hoed crops, provided there is sufficient humus in the soil. A clover sod provides humus and nitrogen. A hoed crop, such as potatoes or corn, leaves the soil in good condition for the preparation of a seed bed.

Beans to succeed best, require a continuous supply of moisture throughout the growing season. If the soil becomes very dry at a critical time it will greatly lessen the yield. The grower can, to a certain extent, guard against this danger by preparing the soil so that it will absorb the maximum amount of rainfall during the dormant season and by practising proper after-tillage so as to retain this moisture as much as possible. Fall plowing is an advantage in that it makes the land earlier in the spring and puts it into a condition to better absorb and hold the moisture. If the land has not been plowed in the fall it should be plowed and harrowed early in the spring, or at least three weeks before the time of planting. It should receive several harrowings at intervals of a week or so in order to bring it into good tilth, to give the air admission, to retain the moisture and to kill as many weeds as possible before the beans are planted. If this work is properly done the beans will grow much better than they otherwise would and it will greatly lessen the necessary tillage later. Much of the tillage for this and other hoed crops could be given before the crops are planted and would be done much more cheaply than after the crops are up.

### **Planting.**

Beans should not be planted until after settled warm weather arrives and danger of frost is past. In Nova Scotia they are planted from the first until the 20th of June. Some growers in the Annapolis Valley claim that the best results follow from planting during the first week in June. Beans are often planted too deep. In light soil they should not be covered more than two inches; in heavier soil one inch is enough. The rows should be placed 28 to 30 inches apart and the seeds about 3 inches apart in the row.

About one bushel of medium sized beans is required to plant an acre. Of the smaller kinds, such as the Snowflake pea bean, half a bushel is sufficient. One pound of the Early Yellow Six-weeks, a medium sized bean, contains about 530 seeds. Planted four inches apart these would occupy about 176 feet of row. Probably to allow for loss by insects, diseases and accidents the usual recommendation is about twice this amount, or 1 quart to 162 feet of row. Usually beans are planted too thick and are not sufficiently thinned to allow the plants to properly develop. Having the plants too thick in the row favors the development of bean diseases and delays ripening. Plants of those varieties which grow to average size should be thinned to about 8 or 9 inches apart in the row.

Where beans are grown on a large scale the planting is sometimes done by means of a grain drill, a sufficient number of tubes being stopped to bring the rows the right distance apart. Special bean planters are made for planting this crop. The ordinary garden seed sower may be used for small areas or the land may be furrowed out with a small plow and the beans dropped by hand and covered lightly with the plow or with a hoe. In small garden areas the drill may be made by drawing the corner of the hoe along a tightly stretched garden line and the beans covered with the hoe.

Cultivation should be frequent and fairly deep early in the season and shallower later in the season. Deep cultivation late in the season is liable to cut off or disturb the roots of the plants. Cultivation should be given only when the plants are dry, otherwise the spores of anthracnose will be scattered through the crop and much injury result from the disease. Usually about four or five cultivations are sufficient for the crop and many bean crops are grown with only two or three. When the soil has been thoroughly prepared so as to be in good tilth, moist and free of weeds, the bean crop can be and is sometimes grown without any cultivation.

#### **Harvesting.**

In countries where beans are grown in large areas they are harvested by bean pulling machines. In this Province they are pulled by hand and left in small bunches for a short time until thoroughly dry. They are then either stacked outside or hauled immediately under cover. When grown on a small scale, as in this country, they are thrashed by hand. If thrashed in the fall they should be spread out and thoroughly dried before they are put into storage. The

thrashing is often deferred until a convenient time in the winter. In this case the beans do not need so much care in drying before going into storage as when thrashed earlier.

### **Yields.**

The average yield of beans is from fifteen to twenty bushels per acre. Occasionally a yield of from 30 to 40 bushels is obtained.

### **Anthracnose.**

One of the worst diseases with which the bean grower has to contend is anthracnose. This is a ~~bacterial~~ *fungus* disease which attacks the stem, the leaf, the pod and the seed of the bean. It produces an appearance on the bean plant like rust, but it not the same disease as bean rust. The disease may exist in the seed or in the soil and thus be carried over from the crop of one season to that of another. When infected seeds are planted the young plants from these seeds become diseased and from these diseased plants the infection may spread to the whole crop if the conditions are favorable for such spread. One good remedy for anthracnose is to plant clean seed on ground free from the disease and to cultivate the crop only during dry weather. If the foliage is wet from rain or dew the spores are readily spread to healthy plants when worked among in hoeing or cultivating.

Hand selection of seeds while in the ripened pod is the best way in which to get clean seed. Pods that show no trace of the disease should be chosen. It is considered advisable also to select the longer pods containing the largest number of seeds in order to increase the productiveness of the strain.

The Horticultural Division of the Agricultural College will be able to supply a limited amount of seed beans of the earliest varieties to growers in 1918. Intending bean growers are advised to get their seed from the nearest source, provided the beans are good and of the right variety. It is not the intention of the Department of Agriculture to interfere in the least with the regular trade but the object has been to save some of the best seed beans from being consumed as food by buying and holding these in reserve in case the usual supply becomes exhausted. The beans at the Agricultural College will be available to seed merchants and dealers as well as to growers at cost price.

Below will be found the names and addresses of some growers and dealers who have seed beans for sale.

Names.	Variety.	No. Bushels
G. P. Raymond, Berwick, N.S.	Soldier, and	25 Bus.
	Flageolette	10 "
W. A. Ritchie, Auburn, N. S.	Soldier	25 "
F. A. Parker, Berwick, N. S.	Speckled Wax or	
	Turkey	60-75 "
G. W. Eaton, Auburn, N. S.	Soldier	10-12 "
Monastery, Big Tracadie, N.S.	White Beans	10 "
	Antigonish Bean	50 "
H. Watts, Waterville, N. S.	Early Yellow Eye	15 "
	and Wax Chief.	
Wm. Smythe, Waterville, N.S.	Early Yellow Eye	8 "
H. B. Magee, Auburn, N.S.	Purple	4 "
	Early Yellow Eye	5 "
Wallace Kaiser, Billtown, N.S.	Early Yellow Eye	1 "
Ira L. Cox, Canning, Kings Co.	Early Yellow Eye	10 "
W. P. Freeman, New Grafton,	Pea Bean and	
N. S.	Red Eye	4 "
S. H. Taylor, Stewiacke, N.S.	Early Yellow Six-	
	weeks	40 "
D. G. Kirk, Antigonish, N.S.	Antigonish Bean	50 "
W. M. Burbidge, Millville,		
Aylesford, N.S.	Early Yellow Eye	5 "
F. A. Hudgins, Aylesford, N.S.	Early Yellow Eye	5 "
A. D. Whitman, Aylesford, N.S.	Early Yellow Eye	5 "
Burgess McMahon, Waterville,		
Kings Co., N. S.	Wax Chief	20 "
Frank B. Troop, Granville Ferry	Pea Beans	3 "
F. E. Harris & Co., Ltd.,	Yellow Eye and	
Aylesford, N. S.	Soldier Bean	50 "
W.H. Woodworth, Berwick, N.S.	Soldier and	
	Speckled Wax	30 "
John Roland, Morrystown,		
Kings Co., N. S.	Soldier	30 "
A. Fitzrandolph, Bridgetown,		
Anna. Co. N. S.	White Marrowfat	20 "
Ira C. Vincent, West New An-		
nan, N. S.	Early Yellow Eye	25 Lbs.
J. J. Clark, Tatamagouch, N.S.	Golden Wax	25 "
	"Brown Six weeks"	25 "
	Indian Chief	3 "
Norman R. Ward, Kentville,	Asparagus (pole)	10 "
N. S.	Wardwell's Kidney	
	Wax	60 "
J. R. Pearman, Berwick, N. S.	Imp. Yellow Eye.	

A. W. Hebb, Bridgewater, N. S. 2 bus. Mohowka.  
College of Agriculture, Truro 100 bus. of several Early  
Varieties.

### **Method of Selling College Beans.**

The beans for sale at the Agricultural College are chiefly Early Yellow Eye, Early Yellow Six-weeks and a large white marrow bean, White Marrowfat and several kinds of early white pea beans the exact names of which have not yet been definitely determined. These are for sale at cost in bushel lots, or larger quantities, to the trade as well as to growers. Where bean growers wish only a few pounds they are recommended to club their orders, or to order through their local seed dealer in order to save the trouble and expense of shipping in small quantities. The dealer's profit will usually be less than the extra expense of shipping in small quantities. Town planting organizations are urged to club their orders.

---

### **COOKING DRIED BEANS.**

By Miss Jennie A. Fraser.

Beans have been described as "the poor man's beef" and they do seem to possess almost all the necessary ingredients to build up the tissues of the body, supply the heat and energy necessary and to maintain life. The only principle they lack is fat, so for this reason it is better when serving them to use a fatty food with them, as bacon, pork or a sauce containing butter or butter substitute. Beans baked with pork, or as this dish is commonly known, "Boston Baked Beans," is a balanced ration and an excellent and nourishing meal in itself. Beans, as well as all the members of the pulse family (peas, lentils, etc.) require long and slow cooking and are the better for soaking before cooking and should be soaked in soft water. If that cannot be obtained and the water is very hard a pinch of bicarbonate of soda, common baking soda, should be added. It is claimed that this precaution will add to the digestibility of the beans. We append a few recipes and especially recommend the one for Boston Beans as being particularly excellent.

Level measurements are used in the following recipes.

#### **Boston Baked Beans.**

NOTE:—Almost any beans can be used for this recipe but the best for the purpose is probably the little yellow eyed bean.

Pick over one quart of dry beans, cover with cold water and soak over night. In the morning, drain, cover with fresh water, heat slowly (keeping water below boiling point) and cook until skins will burst. Drain beans. Scald rind of one-half pound of fat salt pork, scrape, remove one-fourth inch slices and put in bottom of bear pot. Cut through rind of remaining pork every one-half inch, making cuts one inch deep. Put beans in pot and bury pork in beans leaving rind exposed. Mix one tablespoon salt, three tablespoons molasses and one tablespoon sugar; add one cup boiling water and pour over beans; then add enough more boiling water to cover beans. Cover bean-pot, put in oven and bake slowly six or eight hours, uncovering the last half hour of cooking so that rind may become brown and crisp. Add water as needed while beans are cooking. Some people like to add one-half tablespoon mustard to the seasoning, thinking it an aid to digestion.

#### **Lima Beans.**

These make a most delicious vegetable served either with melted butter or with cream.

Soak one cup dried beans over night, drain and cook in boiling water until soft; drain, add three-fourths cup cream and season with salt. Reheat before serving or instead of the cream use enough butter for seasoning.

Any kind of dried beans may be treated as above but probably the Lima bean possesses choicest flavor.

#### **Cream Soup With Beans as a Basis.**

- 1 cup dried beans
- 3 pints cold water
- 2 slices onions
- 4 slices carrot
- 1 cup cream or milk
- 4 tablespoons butter
- 2 tablespoons flour
- 1 teaspoon salt
- $\frac{1}{2}$  teaspoon pepper

Soak beans over night, in the morning drain and add cold water, cook until soft and rub through a sieve. Cut vegetables in small cubes and cook five minutes in half the butter; remove vegetables, add flour, salt and pepper and stir into boiling soup. Add cream or milk, reheat, strain and add remaining butter in small pieces.

Two recipes recommended for the main dish at a beef-less dinner.

### **Boston Roast.**

- 2 cups dried beans
- 1 cup bread crumbs
- 2 cups cheese (grated)
- 3 teaspoons salt
- $\frac{1}{2}$  cup liquid
- 1 tablespoon chopped onion.

Soak beans 24 hours, cook in salted water until soft.

Drain, put through meat grinder, add onion, cheese, crumbs, more salt if needed and enough of the water in which beans were cooked to moisten (about  $\frac{1}{2}$  cup). Form into loaf, bake in moderate oven for 40 minutes. Baste occasionally with hot water and fat. This will make about ten servings.

### **Mock Chicken.**

- 2 cups cooked beans
- $1\frac{1}{2}$  cups stale bread crumbs
- 2 tablespoons butter or butter substitute
- $\frac{3}{4}$  cup milk
- $\frac{3}{4}$  teaspoon salt.

Press the beans through a fine strainer. Add the milk. Arrange alternate layers of bean pulp and buttered crumbs in a buttered baking dish. Cover with buttered crumbs and bake in a moderate oven 45 minutes. Serve with tomato sauce.

NOTE:--To butter crumbs: Melt butter and stir crumbs into it, thoroughly mixing the crumbs with the butter or butter substitute.

### **Tomato Sauce.**

- 2 tablespoons butter
- 2 tablespoons flour
- 1 cup tomato juice
- $\frac{1}{2}$  teaspoon salt
- $\frac{1}{4}$  teaspoon pepper.

Cook tomatoes until soft and press through strainer. Melt butter, add the flour mixing thoroughly, then add the hot tomato and bring to boil, stirring constantly. Add seasoning and serve. If liked, a little chopped parsley, a few cloves or a few bay leaves may be added to the tomato while cooking the first time.