1938

Frozen Foods for Zero Weather

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Recommended Citation
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W O U L D N' T it be fun to serve fresh asparagus tips with Christmas turkey instead of the traditional peas, beans or carrots? And why not plan to have corn on the cob for a buffet supper some wintry Sunday evening?

It sounds revolutionary, and it certainly is. The frozen foods industry has wrought this miracle. Banished is the old tradition of oysters only in the months with "r.s." They can now be served safely in July or August. Seasonable foods will soon be a thing of the past.

The frozen foods industry has been established for the past four or five years, and in spite of the depression has been doubling its production each year. It's hard to understand how a food can be frozen and kept for any length of time in good condition. Most of us can remember having accidentally frozen some vegetable, which consequently became brown, soggy and tough—totally unfit for use.

If we were to examine under a microscope a very thin slice of a carrot which had been slowly frozen, we would see that long jagged ice crystals had formed which had pierced the structure of the carrot. Of course such treatment would make it unfit for use. When the vegetable thaws, the liquid runs out, leaving a flabby carrot.

But if we examined a similar carrot slice which had been frozen very rapidly at extremely low temperatures, we would discover that only tiny crystals had formed which had pierced the structure of the carrot but merely formed a sort of protective coating around each little cell throughout the vegetable. When the carrot thaws now, it will be in as good condition as if it had just come from the garden.

The story of frozen fruits and vegetables from the time they are grown until they reach the consumer is a story which has been clarified by years of experiment and research. Practically all fruits and vegetables can be frozen, but only certain qualities in each class are suitable. For instance, the variety of peas best for canning are those which are high in starch, but those best for freezing are the high-sugar garden variety.

After the producer has found the right quality, he discovers where the product grows best and leases land in that area. Then the seeds are planted.

Cartons are ready for packing the vegetables, and then they are hurried to the freezer. All this takes place in less than five hours. The frozen products are taken by the refrigerator cars for storage to the big central warehouses, where workers wear sheepskin coats, woolen helmets, and mittens.

Now let's have a geography lesson in frozen foods. The refrigerator cars, in which the fruits and vegetables are packed, follow the sun north through the country. They may begin in Texas in January, where crops of broccoli, spinach and peas are taken on. The train then travels to New Orleans to pick up strawberries and shrimp in March. In Virginia there are strawberries in April and May. June finds the train in New Jersey, where spinach, peas and beans are at their best.

Other vegetables are taken on in upper New York in July. Maine contributes corn and squash in August. September and October are good months for oysters and scallops, which come from Halifax, Canada. Some cars may be sent to Indiana for chickens and turkeys, and some out to Oregon for peaches and berries.

How long frozen foods may be kept is not completely determined. Recently at a luncheon of executives, foods were served which had been frozen as an experiment ten years ago.

The equipment needed to keep frozen foods for any length of time is expensive; this has been an important factor in hindering retail distribution. In some instances the dairies have taken over the handling of quick-frozen foods, since they already have much of the necessary cold storage equipment.

The housewife who is fortunate enough to be near a market for frozen foods will find that they are not at all difficult to handle, although certain precautions must be observed. The directions on the package must be followed accurately, for they are the result of careful, exact experiments made by the research kitchens of the producers. They are ready to be put into a pan and cooked, or in the case of fruits and berries, they are sweetened and ready to be served. The housewife must make allowance for this in using them in her favorite recipes.

Quick-frozen foods should be kept, after buying, in the very coldest spot of the refrigerator so that they will stay as completely frozen as possible. After they have been removed for use and thawed, they cannot be refrozen in the family refrigerator, for the original freeze was given them almost instantaneously, and no home refrigerator can attempt to do this.

A few hours before the product is ready to be used, it may be partially defrosted by moving to a warmer spot in the refrigerator. Thawing can be completed later at room temperature.

The Iowa State College Institution Management Department has used frozen foods and has found them to be highly satisfactory. They are especially useful for serving large groups, since they are ready to cook and conserve much time and labor. Considering this saving, frozen foods are not so expensive as it would at first seem. They have been tried out in the hospital, dormitories, and wherever large groups are served on the Iowa State campus; in all cases they have proved successful.

Probably one of the first questions in the mind of any housewife is, "But aren't they expensive?" Quick-frozen foods are more expensive than canned foods and fresh foods in season, due to the special care and processing that they need. They cost less than fresh fruits and vegetables out of season, and they have a more pleasing taste, since they were frozen at the height of their maturity. In many cases they represent an economy when compared with year-round prices for the same quantity. In saving time and labor, they represent an inestimable economy. Nothing since the advent of the tin can has brought the housewife a more effective aid.

FROZEN FOODS FOR ZERO WEATHER

by Harriett Beyer

December, 1938