

Many New Dehydrated Foods

Problem of Food Distribution Is a Long Step Nearer Solution As a Result of the Researches of Modern Science

The great need of Canada for means of distributing foods so that places producing can get rid of their surplus readily, and places where food is scarce can obtain it quickly and in a fresh condition, is being solved by modern chemical research. In many parts of Canada there is a surplus of food products which never reach a consumer while in other places, just because they are unable to get food transported from the producing area, the people are paying almost famine prices.

Meats, Eggs, vegetables and fruits can now be dried in a manner which preserves their original properties and nutritive value and still have an appearance of freshness when prepared for the table. Although in former years there were dried fruits and vegetables that had a fine appearance, it was often found that they had been treated with sulphites and other materials the use of which had been questioned by food experts.

Dr. K. George Falk, of the Harriman Research Laboratory, Roosevelt Hospital, New York, N. Y., explained the new methods as worked out at that institution in an address before the New York Section of the American Chemical Society of which he is a member. He announced that following the experimental stage in this process that meats and vegetables had been thoroughly dried in the Industrial Chemistry Laboratory of Columbia University under the supervision of Professor Ralph H. McKee and had been shipped to different parts of the world, where they have been used with success. One consignment of the meat dried in this manner gave great satisfaction in Armenia, where it was distributed by the Near East Relief Fund. Other products of the new dehydration process had been taken to distant parts of the world by exploring parties and had been found to answer all the requirements.

Dr. Falk said that from these meats and other foods which were dried in a vacuum delicious dishes could be made and the taste of which would commend them to any housewife. From the dried meat, savory stews and hashes are made, while the vegetables which may be incorporated with the meat have a fine flavor as if they had only recently come from the garden.

It would be possible by means of this process to dry beef in vacuum ovens in parts of the earth where cattle may be raised very cheaply as in the Argentine and to transport the dried product for many thousands of miles at very low freight cost. As canned fruits contain considerable moisture and are placed in metal containers, the advantages of the vacuum dried products become manifest according to the view of Dr. Falk.

"Transportation," said he, "has been a question of vital importance. The agents of transportation such as ships and other common carriers are always at a premium and again certain kinds of food require special equipment such as cold storage. For example, the plentiful supply of sheep in New Zealand, where the cost is said to be 25c an animal, might benefit the rest of the world to a greater extent if more transportation facilities were available."

Dr. Falk said that usually sun dried meats and other foods were discolored and that their nutritive values were impaired. While even with fairly good methods of dehydration it would have been found necessary to use bleaching agents, a recourse which was not required according to the process developed at the Harriman laboratories.

The incentive to develop this method of preservation for food products was given early in November 1917 by Colonel John R. Murlin, in charge of the Division of Food and Nutrition of the U. S. Army, and was developed by Dr. Falk, Dr. Edward M. Frankel and Professor Ralph H. McKee.

"In the dehydration of meats," said Dr. Falk, "the temperature must be kept below the point at which the proteins coagulate for if there is too low a temperature the process of dehydration will be unnecessarily prolonged with the result that often spoilage will occur and the overhead cost will be greatly increased. It is possible to solve this problem of dehydration by the use of a suitable vacuum drier in which the meat or other food product is introduced after having been cut in pieces of suitable size and kept in the vacuum at a temperature which is below that of cooking or which makes any appreciable change."

Dr. Falk said that a large variety of foods had been dehydrated by the vacuum method and that a number of others will probably be subjected in time to the same process.

He said that the mechanism used was not complicated and that it could be easily installed at remote places.

"In considering food preservation methods in general, it may be stated," he said, "that such methods will come into use more and more. The Government estimated that fifty per cent of the fruits and vegetables grown in this country never reach the consumer as a result of poor transportation facilities, irregularities in marketing or other causes. At the same time, greatly because of recent work on such questions as food hormones, the tendency is to use fresh foods wherever possible. The newer dehydration processes approach more nearly the requisite standards of fresh foods than do the older methods of preservation. The whole question is in a state of development. Dehydration, greatly because of the transportation factors, offers the most promising outlook for the future. Air dehydration marks a great advance over the older methods of food preservation, and it would appear now that vacuum dehydration possesses in its turn certain advantages over air dehydration."

Dr. Falk exhibited many specimens of meats fish, fruits, vegetables and eggs dried by the new dehydration process.

Montreal-Ottawa Grand Trunk Railway System.

Between the Metropolis and the Capital City, service now in effect is:—

	Daily.	Ex. Sun.	Daily.
Leave Montreal....	8.15 a.m.	4.00 p.m.	8.05 p.m.
	Daily.	Ex. Sun.	Daily.
Arrive Ottawa....	11.45 a.m.	7.30 p.m.	11.05 p.m.
	Daily.	Daily.	Ex. Sun.
Leave Ottawa.....	8.30 a.m.	3.30 p.m.	6.50 p.m.
	Daily.	Daily.	Ex. Sun.
Arrive Montreal....	12 noon	6.30 a.m.	10.20 p.m.

In addition to high grade coaches, buffet parlor cars are operated on all trains, and a special feature is cars with large observation room at the rear, that are popular with the ladies, and also have large smoking room for gentlemen. These cars will be on the 4.00 p.m. and 8.05 p.m. trains from Montreal, and the 8.30 a.m. and 3.30 p.m. trains from Ottawa.

Commission of Conservation Annual Report

Students of Canada's resources and of the problems associated with their efficient development will find a serviceable addition to the literature on this subject in the tenth annual report of the Commission of Conservation.

A concise review of the year's work is furnished by Mr. James White, Assistant to Chairman. A series of unusually informative contributions includes "Housing, Town Planning and Municipal Government" by Mr. Thos. Adams; "Medicine in War" by Dr. C. A. Hodgetts; discussions of various phases of forest conservation by Mr. Clyde Leavitt, Dr. C. D. Howe and Mr. Roland D. Craig; and of agricultural investigations by Mr. F. C. Nunnick. Particularly timely studies of the water-power and fuel situations in Canada are presented by Messrs. Arthur V. White and Leo. G. Denis.

This publication will not disappoint the very wide circle of readers to whom it affords an instructive annual résumé of problems of problems and progress in respect to the intelligent use and study of our natural resources.

Plight of Russian Textile Industry

According to the Ekonomitscheskaja Shisnj, the textile industry of Soviet Russia is in serious difficulties. Since 1913 linen prices have risen by 800 per cent, yarn by 1,100-1,500 per cent and ready-made goods by more than 2,000 per cent. In the Government of Jaroslav the yarn production has decreased by a third since 1918, and in Kostromer the textile output has gone down to a fourth. During the Soviet rule the working efficiency of all branches shows a decline of 80 to 95 per cent from peace production, whilst expenses and wages have risen by 3,000-5,000 per cent. Cloth factories employ 30 per cent more workers, produce 30 per cent less and prices are raised to 4,000 per cent.

Dividend Notices.

The Bank of Nova Scotia

Notice is hereby given that the Annual General Meeting of the Shareholders of this Bank will be held in the Banking House, Hollis Street, Halifax, on Wednesday, the 28th January next, at eleven o'clock a.m., for the purpose of receiving a statement of the affairs of the Bank, for the election of Directors and for other business.

By order of the Board.

H. A. RICHARDSON,

General Manager.

Halifax, N. S., December 15th, 1919.

The Montreal City & District Savings Bank

The Annual Meeting of the Shareholders of this Bank will be held at its Head Office, St. James Street, the ninth day of February next, at 12 o'clock noon, for the reception of the Annual Reports and Statements and the election of Directors.

By order of the Board.

A. P. LESPERANCE,

General Manager.

Montreal, January, 7th, 1920.

The Merchants Bank of Canada

QUARTERLY DIVIDEND

Notice is hereby given that a dividend of THREE per cent for the current quarter, being at the rate of TWELVE per cent per annum, upon the Paid-up Capital Stock of this Institution, has been declared, and will be payable at its Banking House in this city and at its Branches on and after the 2nd day of February next to Shareholders of record at the close of business on the 15th day of January.

By order of the Board.

D. C. MACAROW,

General Manager.

Montreal, 23rd December, 1919.