

Fish Sticks Are Capturing Taste Of Consuming Public

The phenomenal success of frozen fish sticks following their introduction in the United States has captured the imagination of the entire frozen food industry.

Consumer acceptance of fish sticks on the Canadian Market was immediate although it has taken somewhat longer to reach a comparative state of consumption and production.

In 1954, the first full year of production, the Canadian output of fish sticks was 1.6 million pounds. In 1955 the production was approximately 6 million pounds, a staggering increase of 375 percent in just one short year.

The American production of fish sticks for 1955 was approximately 65 million pounds. A quick calculation here will indicate that the consumption of fish sticks per capita in Canada closely parallels that of the United States.

Although Canadian manufacturers are prevented from shipping ready-to-cook and pre-cooked fish sticks to the American market by a prohibitive U.S. tariff, they have grasped and held the lead as suppliers of fish blocks and slabs.

In 1954 over 33 million pounds of fish blocks were produced in approximately 25 Canadian fish plants on both the Atlantic and Pacific coasts.

The remaining 32 million pounds of fish blocks were produced in approximately 25 Canadian fish plants on both the Atlantic and Pacific coasts.

Flour From Fish Latest Development In Research

Those who foresee an expanding world population eating itself off this planet in the predictable future might revise their thinking if they were able to live in the sea or pursue the less unpleasant and absorbingly interesting alternative of visiting the Technological Station of the Fisheries Research Board of Canada at Halifax, N.S.

In the sea they would find, says Station Director Dr. Henri Fougere, "everything that man needs for nourishment". At the Technological Station they would be surrounded by scientists and engineers busily engaged in proving that there's far more of value than meets the eye in the resources of the sea.

Actually, the staff at the Halifax Station and their counterparts elsewhere in the world are working in a frontier land. For, although it is one of the oldest of man's endeavours, the fishing industry is still experiencing growing pains in the field of development.

Evidence of this is seen in the studies and experiments that are constantly going on to devise new methods and new vessels for catching fish and to find new ways of processing, preserving and utilizing the teeming sea resources.

How best to utilize the fish resources—the popular food species, the left-overs from the food processing operations and unexploited species of low commercial value—to manufacture a wider range of more valuable products than those now coming from the fisheries.

How best to retain the fresh, flavoursome, nutritious qualities in the wide variety of food products that the Canadian fishing industry markets at home and abroad.

Progress in the attainment of these objectives would not only result in better returns for the thousands of seagoing and shore workers who rely on the fishing industry for the whole, or part, of their livelihood, it would also lead to a fuller appreciation of the incalculable resources available in the seas.

Comparisons are sometimes valuable in crystallizing a point. Thus, the Halifax Station scientists note the likeness between the meat packing and the fishing industries: both have large quantities of offal which, chemically speaking, have many similarities.

However, whereas the meat packing business is a highly efficient one, utilizing all the offal (e.g., hogs: "Everything but the squeal") to produce a variety of edible and other products, the fishing industry generally makes little use of its left-overs. This results from the intensive research and experimentation that has been going on for a great many years with meat and the relatively short period of similar studies on fish.

Nevertheless, it is encouraging to note that greater emphasis is now being placed on technological research into the utilization of fish than ever before, and noteworthy results have been already attained.

A notable example of a new use for fish, one that has understandably captured the public imagination, is the development of a process for manufacturing so-called fish "flour". Fisheries scientists are quick to point out that the term "flour" used in this connection is a misnomer; the product is, in reality, a rich protein which makes conventional

Atlantic and Pacific coasts. Of this total production approximately 1.2 million pounds were used to produce fish sticks for our domestic market.

The remaining 32 million pounds were exported almost exclusively to the United States. This quantity of fish blocks would be sufficient to produce approximately 40 million pounds of fish sticks or 20 percent of the fish sticks produced in the United States in 1954.

The Canadian fishing industry is indeed closely tied in with American fish stick production. The American fish stick industry has shown unprecedented growth since 1953. In that year 7.5 million pounds of sticks were produced; in 1954 production rose to 50 million pounds and as previously stated the 1955 production will be approximately 65 million pounds.

The new form of sea food has helped to raise the per capita consumption of fish in the United States in 1954 from 10.8 to 11.1 pounds per year.

ANNUAL CONSUMPTION

Canadians consume about 14 pounds of fish products per capita annually. The industry has good reason to feel optimistic about the future. The future of fish sticks has, however, been jeopardized to some extent by an increasing wave of price cutting. Price has become the big factor. In order to obtain a more favorable price some producers have abandoned the 10 oz. package.

The only advantage of the new size is the illusion of lowered

price. No one gains. Price was can become very costly. Many packers will cut quality to reduce price still further, and to meet the challenge, others will have to follow suit.

It is timely, therefore, to seriously consider adopting the voluntary fish stick standards that were requested by the U.S. industry a year ago.

A recent survey conducted by the Fish and Wildlife Department of the United States indicated that 83 percent of the fishing industry are willing to try voluntary quality standards for fish sticks.

The adoption and utilization of standards would permit processors to place quality grades on their labels.

PAY PREMIUM

The public has always been willing to pay a premium for quality and the adoption of standards will eliminate the necessity of a Grade A product trying to meet the price of a Grade B. product to hold its market.

It seems very likely that voluntary standards will be in effect in the United States in the current year.

Because of the close alliance of the fish stick industry of Canada and the United States, the adoption of the standards could have an immediate effect on the Canadian fish block suppliers and in time the general fish stick market.

It would be to the advantage of fish stick producers to consider the proposed standards and methods of grading, keeping in mind the type of product they are currently producing.



FISHERIES PATROL BOAT

The 45-foot patrol boat of the Federal Department of Fisheries, M.V. Marcia is shown on trials on Canada's East Coast where she made a maximum speed of 17 knots.

Another pleasant way to acquire this protein would be in a popular refreshment such as a milkshake.

The most obvious way to utilize it, as an additive to wheat flour in making bread, has been tried many times using protein concentrations of 10, 15 and 20 per cent. The resultant loaves were excellent in quality, visually comparable to conventional bread, and completely odourless and tasteless insofar as the fish constituent was concerned.

A number of major food supply concerns have conducted their own tests with fish protein in making bread and have pronounced their approval of it. A prominent hospital is also experimenting with fish protein in the diet of hospital patients with the view that it should be especially beneficial for post-operative cases who require quick and easy supplies of protein as a boost towards recuperation.

WIDESPREAD NEED

In short, fish protein could be used in as many ways as the human imagination and ingenuity could conceive. And, while it holds exceptional promise for populous countries annually faced with food shortages, it also has a bright future in those with bulging pantries. This is apparent from recent dietetic studies which have indicated that even in such well-fed countries as Canada and the United States there is a need for additional protein in the diet, especially for people engaged in heavy manual work and those attaining old age. Fish protein offers a

simple and convenient answer to the problem.

Developed in the scientists' test tubes, fish protein has now moved forward to a preliminary practical stage of production in the Station's big pilot plant. There the engineers and scientists are combining their skills and knowledge to iron out problems of speeding up the process.

U. S. Fishermen Riot In Souris

"On the first of September, 1951, a fleet of 93 American and 79 British mackerel fishing vessels anchored in Souris Roads, and on the 15th we were visited by a fleet of 219 fishermen.

They report that there are at present 400 sail (British and American) fishing mackerel on the coasts of this Island, the Magdalen, mouth of Baie de Chaleur and Cape Breton, north shore. "I regret to add, that some of the disorderly of both nations made a considerable riot here, maltreated some of the inhabitants.

It is a pity one of Her Majesty's ships could not be spared to cruise specially on the above coasts during the months of August and September, as it effectually prevents any riots by the fishermen."

From a letter dated Souris, 17, September, 1851, appearing in Hazard's Gazette.

GREAT HARBOR

One of the world's great harbors, that at Rio de Janeiro in Brazil is 15 miles long.

FISH RECIPES

SANDWICH FILLING
2 cups flaked or canned fish, crab meat, lobster meat, or shrimp
1 cup chopped cabbage
1-3 cup grated carrot
1½ tablespoons catsup
1-3 cup mayonnaise or salad dressing
Salt, to taste
Drain fish. Flake. Combine all ingredients except salt. Mix lightly. Add salt to taste. Chill. Serves 6.

SEAFOOD COCKTAIL
36 shell clams or oysters or 1 pound cooked crab meat, lobster meat, shrimp, or flaked fish
3-4 cup chili sauce
¼ cup chopped celery
1 tablespoon lemon juice
1 tablespoon horseradish
½ teaspoon salt
Combine all ingredients except fish or shellfish. Chill. Serve with clams or oysters on the half shell or over chilled fish or shellfish in lettuce-lined cocktail glasses. Serves 6.

OYSTER STEW
1 pint oysters
¼ cup butter or margarine, melted
1 quart milk
1½ teaspoons salt
½ cup flour
½ cup dry bread crumbs
Heat oysters in liquor until edges curl. Add butter, milk, salt, and pepper; bring almost to boiling point. Garnish with paprika. Serves 6.

BAKED FISH
3 or 4 pounds dressed fish
1½ teaspoon salt
Dash pepper
¼ cup butter or other fat, melted
3 slices bacon (optional)
Clean, wash and dry fish. Sprinkle inside and out with salt and pepper. Place fish in a well-greased baking pan. Brush with butter and lay slices of bacon over the top. Bake in a moderate oven, 350 degrees F., for 40 to 60 minutes or until fish flakes easily when tested with a fork. If fish seems dry while baking, baste occasionally with drippings or butter. Serves 6.

BROILED LOBSTERS
2 live lobsters (1 pound each)
1 tablespoon butter or margarine, melted
¼ teaspoon salt
Dash white pepper
Dash paprika
¼ cup butter or margarine, melted
1 tablespoon lemon juice.
Place lobster on its back; insert a sharp knife between body shell and tail segment, cutting down to sever the spinal cord. Cut in half lengthwise. Remove the stomach, which is just back of the head, and the intestinal

Protection Branch Acts As Watch Dogs Of Industry

The responsibilities of the Conservation and Development Service of the Department of Fisheries are numerous and varied. The Conservation Service is divided into two main branches—the Protection Branch and the Conservation and Development Branch.

The latter includes an Engineering Branch, employed in Fisheries Conservation and Development, and also the Fish Hatchery Service. The Conservation and Development Service is but one of several services required to carry out the responsibilities of the Department of Fisheries.

The personnel of the Protection Branch include Fishery Officers, who are full time employees; Wardens, who are employed from seven to eleven months of the year; patrol boat crews, some of whom are employed the year around while others are em-

ployed seasonally, depending on where the boat is operating and finally Guardians, who are used when a man is required for a certain job for a short period of time.

RESPONSIBILITIES
The responsibilities of the personnel of the Protection Branch are the enforcement of the provisions of the Fisheries and other Acts and the Regulations made thereunder which include: close seasons, size limits and other conservation measures.

The Protection Officers are also responsible for issuing of licences and permits for the different fisheries and the collecting of and accounting for the revenue derived from their sale. They collect statistical information concerning both commercial and sport fisheries, boats and gear used in fishing, etc. prepare reports and perform other related duties.

Educational work in the interest of conservation of our fisheries is also carried out by Protection Officers and fishermen are kept informed when any advancement or improvement in the methods of fishing or types of gear used are developed by the Fisheries Research Board.

The patrol boats operated are largely Department owned, being supplemented by four boats which are chartered seasonally to assist them. These boats are strategically located along the coast where they work in close cooperation with the local Fishery Officers and Wardens in the efficient carrying out of their duties.

Fisheries patrol boats also engage in Search and Rescue work whenever the necessity arises and on different occasions have rendered valuable assistance to crews of stricken boats.

Island Had Best Production In Maritimes 75 Years Ago

(Published at the Herald Office, Charlottetown, 1883)

"Prince Edward Island is, without doubt, the best fishing station in the Gulf of St. Lawrence, but the habits and feelings of the inhabitants are so decidedly agricultural, that the fisheries have not received from them the attention which they deserve.

"They consist chiefly of mackerel, lobsters, herring, cod, hake and oysters, while salmon, bass, shad, halibut and trout, are caught in limited quantities.

"Their value may be appreciated from the fact that during 1882, there were taken from the sea 16,000,000 lbs. weight of fish food, and 107,250 lbs. from the running waters, besides 5,500,000 of edible fish used as bait. In other words, there were taken, at the lowest calculation, for food, 8,000,000 of mackerel, 6,000,000 of herring, and 10,000,000 of cod and hake, 3,000,000 of oysters, and of lobsters 22,000,000, besides other fish.

"The present annual value of the oyster fishery is \$150,000, and this most valuable industry is capable of vast development. The export of Lobsters for 1882 was 100,522 cases, containing 4,825,104 lbs.

The following statistics compare the fisheries of 1880 with those of 1870:—

	1870	1880	Increase
Vessels and boats employed	1,183	2,729	1,546
Men	1,646	5,792	4,146
Quintals of cod, haddock, hake and pollock caught	15,649	26,392	10,743
Barrels of herring and gaspereaux	16,831	22,457	5,626
Barrels of mackerel	16,047	81,792	65,745
Barrels of other fish		706	
Barrels of oysters		175,408	
fish food, and 107,250 lbs. from the running waters, besides			
Lbs. of canned lobsters	6,711	3,275,316	3,268,605

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