

**THE
MACARONI
JOURNAL**

**Volume 41
No. 8**

December, 1959

Macaroni Journal

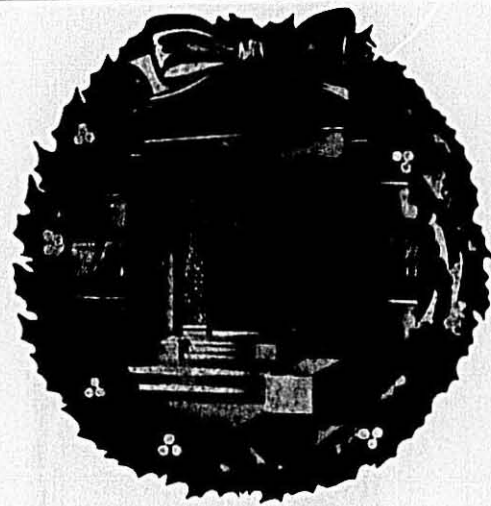
THE OFFICIAL PUBLICATION
OF THE
NATIONAL MACARONI
MANUFACTURERS ASSOCIATION
OF THE UNITED STATES OF AMERICA



Durum Meeting
Versatile Foods
Testing Tools

DECEMBER, 1959





As we approach the threshold of another year our thoughts turn gratefully to those whose courtesy, good will and loyalty have helped make our progress possible. In this spirit we extend to you the

SEASON'S GREETINGS

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"FIRST IN MACARONI PACKAGING"

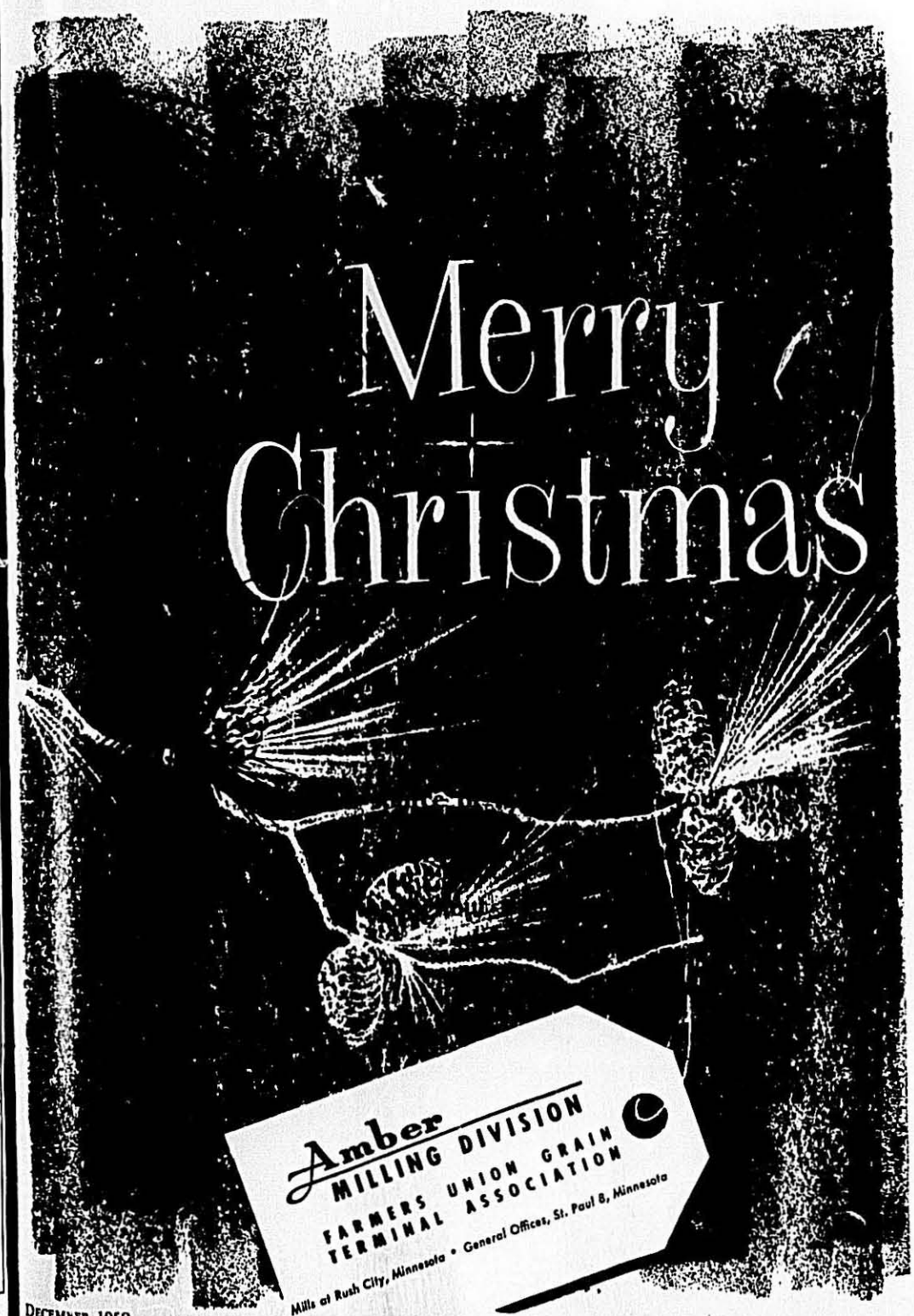
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The MACARONI JOURNAL

December, 1959
Volume 41, No. 8

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Cover Photo

Stuff the holiday bird with noodle and sausage stuffing. Garnish the platter with spiced crab apples and water cress. National Macaroni Institute photo.

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THE MACARONI JOURNAL

DURUM MEETING

More than forty durum growers, durum millers, macaroni manufacturers and their representatives met at the Grain Exchange October 27 to review the durum situation and industry requirements.

Representatives of the Durum Growers Association led off the discussion with brief comments on the following subjects:

Ole Sundeen, elevator manager at Lakota, North Dakota, said that there has been more inquiry for durum seed in the outlying areas than for quite some time. He sees this as an indication of increased planting in 1960 particularly if spring weather is good, the price differential of 30 cents between durum and hard spring wheat holds, and demand continues to be strong.

On "the grower's attitude", Harold Hofstrand of Leeds, said it is tied up with the overall wheat acreage and allotment picture. Most growers prefer the law of supply and demand to legislation; but if there is legislation the North Dakota grower wants a part in writing it up. More was said on this subject later.

Dick Saunders, secretary of the Durum Growers Association, reported that the Association has sponsored an increase of two new varieties, LD-389 and 392, in Arizona this winter. 190 acres at an individual cost of \$225 per acre for irrigation and contracting, should produce about 40 bushels to the acre or 7,600 bushels in total. These new varieties are attractive to growers because they have considerably shorter straw than the present stop-gap varieties and primarily for their resistance to 15-3 rust. Earl Hetherington of General Mills reported that these new varieties have good milling qualities.

On Legislation

Commenting on the status of legislation, Jake Geritz of Lakota and Dick Crockett of Langdon observed that North Dakota has lost 380,000 wheat acres in the last few years because of government programs. They urge passage of the House of Representatives Bill No. 5443, a companion to Senate Bill No. 1282 which has already passed. In essence, this legislation would authorize the Secretary of Agriculture to increase acreage allotments to growers who would plant their acreage 100% to durum when durum was in short supply; percentages of increase would be determined by industry need.

This point of restricting the action of the durum incentive bill to those who are willing to plant all of their



At the Durum Meeting: Seated left to right are Howard Lampman, Charles Hoskins, Gene Hayden, Walter Villame, Jr., Dick Crockett, Gene Villame, Jim Winston, Cam Sibbald, Dick Saunders, Tony DePasquale (obscuring Maurice Ryan), Ole Sundeen (partially obscuring Lloyd Skinner), Tony Basile. Standing: Bill Lohman, Les Swanson, Jake Geritz, Phil Fossen, Ray Wentzel, Gene Kuhn, Lee Merry, Tom Ridley, Al Kenner, Harold Hofstrand.

acres to durum is objected to by Congressman Leroy Anderson of Montana. His contention is that an incentive bill should apply to all counties that have the requisite history of durum production. In March he proposed that any qualifying grower with a durum history should be entitled to plant an additional one-half acre outside his allotment with a limitation on this outside incentive of 60 acres to a grower.

North Dakota growers did not like Anderson's bill because it would bring in marginal producers that would possibly produce too much and depress prices. They contend by limiting the increase to 100% growers of durum you get specialization that is desirable from a quality standpoint as well as quantity. Crockett observed that members of the House Agricultural Committee would have to be sold on this point of view.

Al Kenner, chairman of the Association's marketing committee, reported that committee discussions have confirmed the grower's intention to supply the industry with its necessary requirements as to quantity and quality; that

this must be done at a profit to all parties concerned; and that the group would be willing to study contract farming as a possibility for production stabilization.

On Promotion

Tom Ridley of the North Dakota Wheat Commission committee on durum promotion observed that the average consumer does not associate durum with macaroni. This may be true in many sections of the country - it is not true where the Italian influence has been felt. They know and want durum. In any event, the Commission is seeking ways to promote and increase the consumption of durum in this country. They are presently levying 2 mills a bushel on all wheat grown in North Dakota. Durum will account for about twenty percent of the 200,000 bushels produced.

It was recommended that the Wheat Commission be kept fully informed of the work of the National Macaroni Institute and the Durum Wheat Institute so that there could be complete coordination of the three approaches.

Continued on page 20

William Lohman, chairman of the Durum Millers Committee, presented the following figures on estimated supply and usage for the crop year 1959-60:

Estimated Durum Wheat Supply for Crop Year 1959-1960	Bushels
Estimated carryover July 1, 1959	20,000,000
Less estimated durum under loan July 1, 1959	11,200,000
Balance	8,800,000
Government October 1 crop estimate	20,546,000
Total supply outside government stocks	29,346,000

DECEMBER 1959

5

MACARONI PRODUCTS—VERSATILE FOODS

History of Macaroni

The art of making macaroni is so old that its exact origin is lost in the pages of history. The Chinese recorded the eating of macaroni products in various forms as early as 5000 B.C.

Among the most popular legends is the one about the Chinese maiden who was lured from her breadmaking by her lover, a member of the famous Marco Polo expedition to the Orient. While the maiden neglected her bread dough, the wind blew leaves from an overhanging tree into the batter. In an attempt to help her save the dough from waste, the sailor forced the dough through a wicker basket which served as a sieve. The thin strands of dough dried in the sun and, when the sailor departed, the maiden presented him with the dough in this new shape. He cooked the strands of dried dough on his ship and found the dish so delicious that he made it many times thereafter. The food came to be favored by all the members of the crew and finally by the great explorer himself, Marco Polo.

A thirteenth century king is credited with naming the food. When he was served the delicious dish, he declared "Ma Caroni" which means "How very dear."

Definition of Macaroni

The generic term "macaroni" or "macaroni products" includes macaroni, spaghetti and egg noodles in an astonishing number of shapes and sizes. The most frequently used shapes of macaroni products are: macaroni, the tubular shape in short elbows and long lengths; spaghetti, the solid rod form available in varying degrees of thickness; and egg noodles, the ribbon-like pieces in varying widths. Among the other shapes are corrugated elbows, coiled or bunched rods, alphabets, shells, bows, stars and seeds.

Best quality macaroni and spaghetti are made from a mixture of semolina and water. Semolina, the purified middlings of durum wheat, is a granular substance which is amber in color and about as fine as sugar. Durum is the hardest wheat known to man. In this country, it is grown principally in North Dakota, South Dakota, Minnesota and Montana.

Egg noodles may be made from the same mixture of semolina or durum flour and water but, in addition, contain 5.5 per cent egg solids as required by law. Egg solids may be added in fresh, powdered or frozen form. Yolks are usually used, since the whites tend to change the texture.



How Macaroni is Made

Under carefully controlled conditions in today's macaroni manufacturing plants, semolina is mixed with water and kneaded to give a smooth and elastic dough that will pass through dies, which are metal discs full of holes.

As the dough is forced through the dies, it is extruded in the solid rods known as spaghetti. When a steel pin is placed in the center of each hole in the die, the dough comes out in the hollow rods known as macaroni. For elbow length macaroni, a pin with a notch on one side is used. The notch allows the dough to pass through more quickly on one side, causing it to curve slightly. A revolving knife attached to the die, cuts the dough at frequent intervals into short lengths.

Long strands of macaroni and spaghetti are collected on racks and taken to drying ovens. Short lengths, such as elbow macaroni and shells, are collected on trays or drawers and placed in drying cabinets.

Macaroni products are not baked but are dried slowly in the presence of constantly circulating, filtered air. Drying is the "ticklish" operation of macaroni production, for if it is dried too fast, the food will check and break easily; if not dried fast enough, it is likely to spoil.

Egg noodles are mixed and dried in a similar way, but they are shaped differently. Instead of forcing the dough through dies, it is pressed through rollers in thin sheets and cut into various widths.

How to Cook Macaroni

Some people like macaroni quite tender; others prefer it fairly firm or "al dente", hard enough to be chewed. For the degree of tenderness desired, the

cooking time varies from 5 to 10 minutes, according to the shape and brand of macaroni used. As a general rule, cooking directions on the package should be followed. The most important thing to remember is to avoid overcooking for overcooked macaroni is too soft and shapeless.

To cook eight ounces of macaroni, add a tablespoon of salt to three quarts of rapidly boiling water. Gradually add the macaroni so that water continues to boil. Cook uncovered, stirring occasionally, to prevent sticking, until macaroni is tender.

When macaroni is tender, drain it immediately in a colander or large sieve. If the macaroni is to be served hot, dot it with butter or margarine. If the macaroni is to be used for salads, cool it by rinsing with cold water.

Macaroni products are best when cooked just before serving. Left-over macaroni or that cooked intentionally beforehand may be kept for future use in a covered dish in the refrigerator, then "freshened" when ready to use by rinsing with hot or cold water.

Macaroni, spaghetti, and egg noodles approximately double in volume when cooked. That is, one cup uncooked product will give two cups after it is cooked.

Is Macaroni Fattening?

The total intake of food determines whether a person gains or loses weight. An ounce of uncooked macaroni, which is enough for a serving, contains 100 calories - no more than a small apple. Other foods combined with macaroni increase the calorie count.

Only a moderate number of calories are added when lean meat, eggs, seafood, fowl, or vegetables are used. If fats and other high-calorie foods are used generously, the calorie count naturally rises quite quickly.

To be effective, reducing diets must supply nutrients necessary to maintain health and a satisfying quality which will lessen the desire for between-meal nibbling. Calorie-counters will find that macaroni products fill these requirements.

Macaroni products are among our most economical and nutritious foods. They are valuable providers of protein and energy-giving carbohydrates. Macaroni products are six times richer in protein than potatoes, contain four times as much carbohydrate and are almost completely free of by-products toxic to the body.

Unlike bread and crackers, macaroni products are seldom served alone. In

Continued on page 32



Seasons Greetings

to all our friends associated with
the Macaroni Industry

International
MILLING COMPANY

Controlling costs is a management job that never ends.

The boss calls you into his office. "Costs," he says, "are out of line. We've got to reduce them 10 to 20 percent, and when we get them back in line, we've got to keep them there!"

How does the boss know that costs are too high? That's easy. The profit and loss statement usually tells the story. Whenever the proper figures over a period of time start diminishing toward zero, the boss begins to worry. But how do you know you can reduce your costs 10 to 20 percent?

Why not compute your percentage of profits to sales for the past ten or twenty years? This will show you your best and worst years and give you a hint as to how well you can do. Or why not figure your return on net worth for ten or twenty years, or the income to capital ratio, as it is sometimes called? This is merely the percentage relationship of net profits to the capital that your stock holders have invested in the company. It also will tell you how much you can expect to improve. Cost relationships point the way to cost reduction. An indicated procedure might be to set goals, analyze major expense items, plot needed improvements.

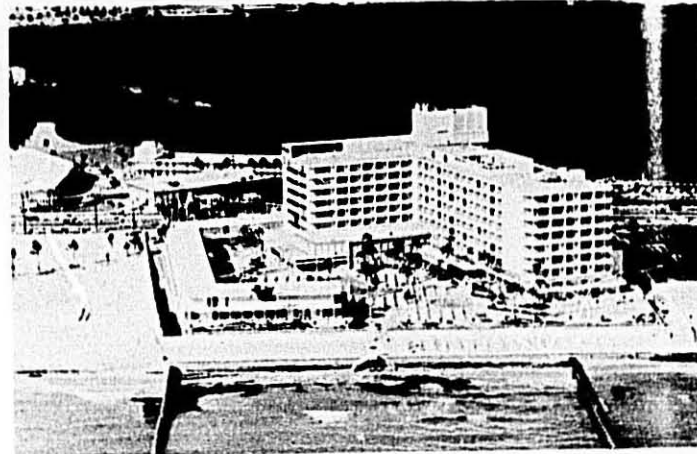
Analysis of costs for materials and direct labor is fairly simple. It becomes more complex with items of overhead and indirect expense. Here's where the experience of others can help you in determining a course of action.

Seminar Format

Last year's January meeting of the National Macaroni Manufacturers Association was a seminar on "Developing Executive Skills". This successful format will be used again this year with reports, round-tables, and case studies where possible, to put the spotlight on costs.

Tentative topics for the conference include the following: Attacking the Cost Reduction Problem - Setting

COST CONFERENCE



Aerial view of Hotel Diplomat

Goals, Making Comparisons, Using Guides to Cost Improvement.

Some approaches to reducing overall costs in the production department include getting the most from direct and indirect labor expenditures; working through first line supervision with a plan for expense forecasting; and re-adjusting to lowered rates.

Areas of potential cost reduction, where management has not concentrated their efforts as much as on direct labor, primarily because work standards are hard to measure and because there is more of a tendency to excuse poor performance in these areas, include: paper work, purchasing, materials handling, production planning, indirect labor, traffic, inventory management, and maintenance.

By analyzing each cost in turn, noting its trend and asking searching questions as to why it may have gotten out of bounds, you will uncover many leads for additional analysis and the

setting up of target figures for each item of expense. This calls for the use of an enormous amount of judgment and a stick-to-itiveness to follow through until the targets are achieved.

Trimming waste from selling costs is possible with analysis of salaries of sales personnel, travelling expenses, advertising, samples, home office operations, and such distribution functions as transportation and warehousing. Measuring results against costs in every department of the business can do much to help in the battle against inflation. Comparing notes with competitors on similar problems should be a profitable experience for all participants.

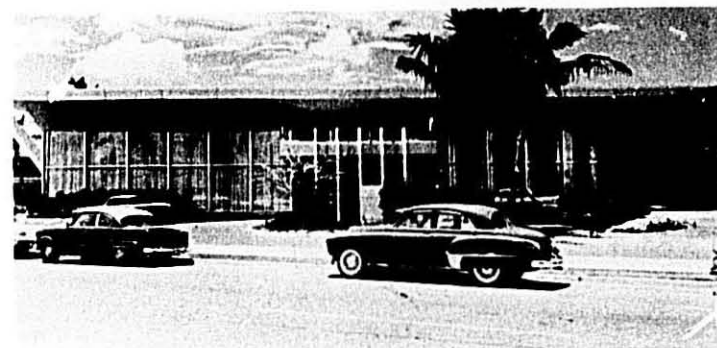
Social Activities Planned

A complete social schedule will be planned including the traditional Spaghetti Buffet and the final Banquet.

Scene of the conference will be Diplomat West, Hollywood-by-the-Sea, Florida. Diplomat West sits just a sparkling waterway boat-span away from the 18-hole golf course. There are many facilities for relaxation including the congenial lounge, the huge swimming pool, and all the facilities of Diplomat East.

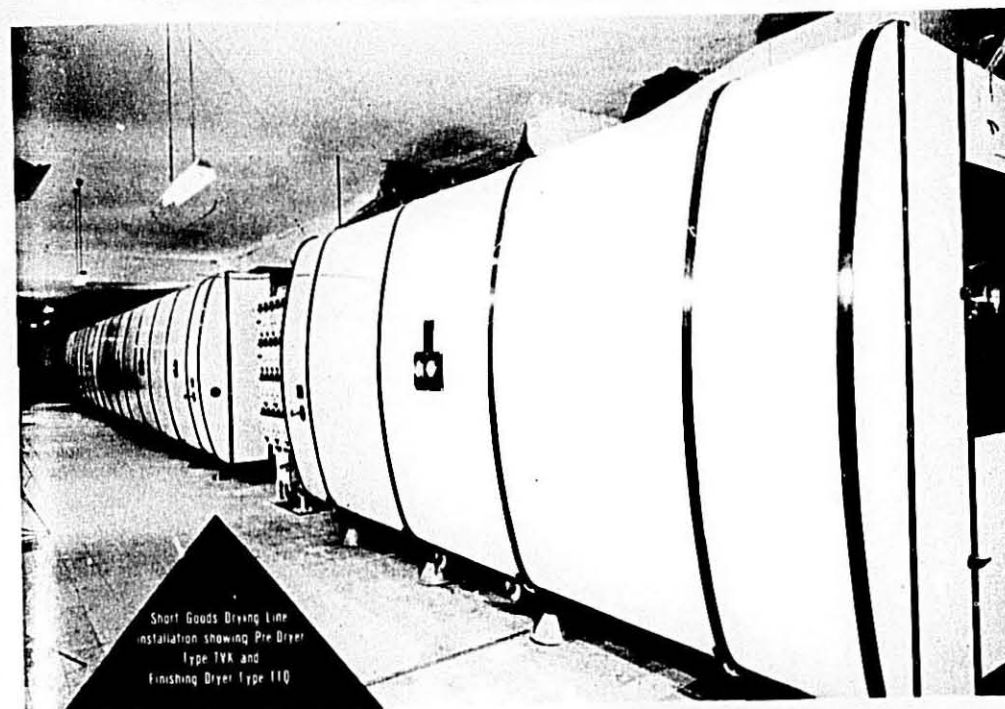
Jai alai, deep sea fishing, thoroughbred and greyhound racing are just minutes away from the estate setting of the hotel.

Make reservations directly with Edward Vecchione, Diplomat West, Hollywood-by-the-Sea, Florida, for the Winter Meeting of the National Macaroni Manufacturers Association, January 19, 20, 21, 1960.



Entrance to Diplomat West, Hollywood, Florida

BUHLER introduces the entirely new SHORT GOODS DRYING LINE TVK / TTQ with Pre-Dryer and Finishing Dryer for Noodles and Short Goods of all sizes



Short Goods Drying Line installation showing Pre-Dryer Type TVK and Finishing Dryer Type TTQ

n e w

- Sanitary off-the-floor construction prevents condensation.
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- Positive air circulation provides efficient drying and accurate control.
- Aluminum alloy S-element design gives drying conveyors added strength and reduces down-time.



New S-element conveyor design.



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EASY FIXIN' CASSEROLE

A special pre-Lenten promotion scheduled for January and February has been planned by Van Camp Sea Food Company for Chicken-of-the-Sea Tuna and Elbow Macaroni or Broad Noodles.

Van Camp reports that January through April is the highest four month tuna consumption period of the year and very important to both buyer and seller. The January-February period in 1960 is of particular importance since Lent does not begin until March 2, so their promotion was planned to cover these nine weeks.

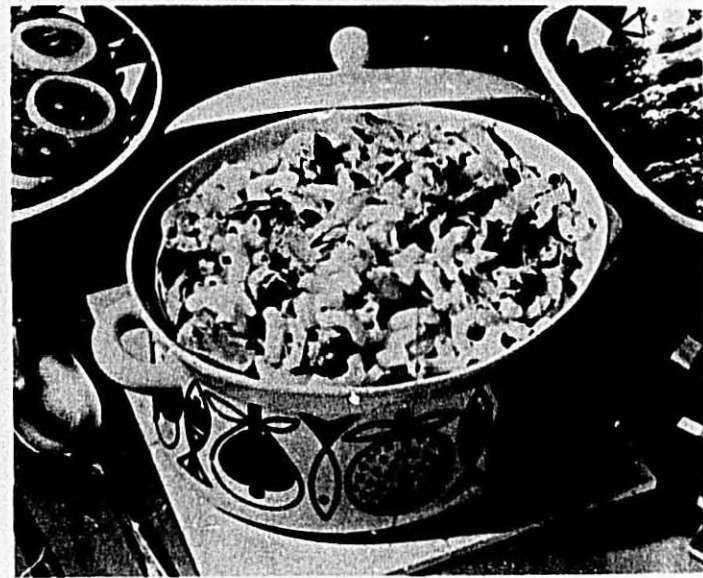
Van Camp will pay 25 cents to the consumer for trying an "Easy Fixin' Casserole" just by sending one label each from Chicken-of-the-Sea or White Star tuna (brand name in Northern California, Oregon, Washington, Nevada, Idaho, Montana and Utah) and her favorite brand macaroni product. The order pads give the consumer all details for the refund and carry the recipe for "Easy Fixin' Casserole" on the reverse side. The recipe follows.

Easy Fixin' Casserole

1/4 cup butter
1 cup chopped onion
1/4 cup flour
2-1/2 cups milk
1/3 cup prepared mustard
1 teaspoon salt
1/8 teaspoon pepper
3 cups (two 9-1/4 ounce cans Chicken-of-the-Sea Tuna
3 cups cooked well-drained broad noodles or macaroni
1 cup grated process-type American cheese

Melt butter in a saucepan. Saute onion in butter. Remove from heat. Stir in flour. Gradually add milk. Cook over low heat, stirring constantly, until sauce thickens and comes to a boil. Add all ingredients except cheese. Pour tuna mixture into foil-lined 2-quart casserole. Bake in moderate oven (350° F.) 20 minutes. Top with grated cheese. Bake 15 minutes longer. Garnish with parsley.

All redemption costs for the promotion are being handled by Van Camp. In addition, they are making available store material in individual kits. These contain a full-color cart-soft sheet with stand measuring 24 inches high and 19 inches wide with order pad affixed and a place to attach the macaroni package the grocer plans to feature. The sheet is pleasingly colorful with a yellow background, brown lettering, contrasting black casserole, with the ingredi-



A tempting combination of tuna, macaroni and cheese.

ents in appetizing orange, brown, green and a dash of red. Tie-in newspaper mats are supplied free if you work with a Van Camp broker, and their order deadline is December 15. Four weeks should be allowed for material availability. The display period is announced as January 4 through February 26.

Van Camp brokers will control this promotion and coordinate chain selling in each market. The promotion is open on an equal basis with no macaroni manufacturer receiving exclusive tie-in franchise.

Advertising support will appear in Better Homes & Gardens, Good Housekeeping, Sunset, and Improvement Era magazines; on television with "Art Linkletter's House Party" and "The Verdict Is Yours."

Macaroni-noodle participants in the promotion are requested to lend their support through (1) an advertising allowance for a feature ad; or (2) a display allowance; or (3) any promotional allowance directly related to this tie-in promotion.

Betty Crocker Supports Macaroni Week

General Mills, looking for every opportunity to further the consumption of macaroni foods and with the thought

of tying in with National Macaroni Week, sent four releases to food editors of important newspapers throughout the country in late August.

Each of the four tempting menus included macaroni products in one form or other. "Lunch For a Rainy Day" going to 600 food editors had as its main dish a Dried Beef Casserole using elbow macaroni, accompanied by broccoli, brownie marshmallow dessert and beverage.

Another menu release giving the recipe for the Hungarian dish lamb kabobs, featured Noodles Romanoff as an unusual accompaniment. The noodle dish was a delicious blending of cottage cheese, sour cream and seasonings with hot boiled noodles.

"Regal in color as well as taste is Ruby Red Salad", said a third release. The salad recipe contains elbow macaroni, chopped beets, dill pickles, anchovies, onion, sour cream and French dressing.

For a "Buffet Before the Game", Betty Crocker suggests a Spaghetti Pie, a tasty combination of spaghetti, eggs and cheese, baked to a custard-like consistency. Served in wedges and topped with a perky tomato sauce, it makes a very unusual main dish.

Additional releases with macaroni product recipes are being planned throughout the year by General Mills.

Merry Christmas

and

A Healthy, Prosperous and Happy New Year



D. MALDARI & SONS, INC.
557 THIRD AVE. BROOKLYN 15, N. Y., U.S.A.

DECEMBER 1959

THE MACARONI JOURNAL



MORE ON MACARONI WEEK



National Macaroni Week Proclaimed by Scranton's Mayor. Two National Macaroni Institute members, Megs Macaroni Company of Harrisburg, Pennsylvania, and Procino-Rossi Corporation, Auburn, New York, cooperated in obtaining more publicity for Macaroni Week in their marketing area. Shown is Scranton's Mayor James T. Hanlon, handing his official proclamation to Nick Rossi, president of the Procino-Rossi Macaroni Corp. The proclamation pointed out that Americans eat 1,000,000,000 pounds of macaroni a year, stressed the important contribution the industry makes in employment. Seated from left: Tom Jones, Scranton Broadcasters, Inc.; Mayor Hanlon, Mr. Rossi and Paul Kelley of Megs (Pennsylvania Dutch brand) Macaroni Company. Standing, from left: James Damenti, P-R Macaroni Corporation; Joseph May, manager, Economy Wholesale Grocery Co.; James Merritt, assistant manager, Banner Stores, Inc.; Ren Nesta, assistant manager, Roma Wholesale; Joseph Marchese, Peter Taras and Joseph Hagan, all of P-R Macaroni; Jack Hodin, advertising manager, Giant Markets, and Irvin DeRemer, zone advertising manager, American Stores.

Macaroni Goes With Everything

National Food Products of New Orleans, Louisiana, used the theme "Luxury Macaroni Goes With Everything" in its consumer advertising in New Orleans newspapers during National Macaroni Week.

Combinations suggested in the advertising were with meats and poultry, cheese and eggs, seafoods and vegetables, salads and fruits.

Robert Kottwitz Advertising, Inc. is the company's agency.

Sage Saying

The time to be happy is now. The place to be happy is here. The way to be happy is to make other people happy. — Robert Ingersoll.



Big Eaters

Americans rank sixth among the world's big eaters. Ireland leads the parade with a daily per capita calorie intake of 3510; its small population shares hefty homegrown supplies of butter, eggs, meat and potatoes. Denmark is second, followed by New Zealand, Switzerland, Australia, United States and Canada. The trend toward sedentary living lets Americans get by on 3100 calories a day.

Ideal Tie-In

Mayor Celebrezze issued an official proclamation for National Macaroni Week in Cleveland, and Ideal Macaroni Company took the occasion to celebrate the opening of their new plant in Bedford Heights.

Kay DeCaro, dark-eyed Wisconsin beauty, was named Miss Ideal Macaroni. She delivered Ideal products to local dignitaries, columnists and disk jockeys and was a guest on radio station WGAR. She was a prime attraction in the Columbus Day parade (see picture below).

Leo Ippolito, president of Ideal, appeared on the "Prize Cook" radio show with Miss Ideal to display some Italian dishes and to promote National Macaroni Week. Mrs. Williams, WABQ home economist, gave macaroni recipes to her listeners and awarded Ideal products to telephone quiz winners.

Mr. Ippolito also delivered cases of assorted macaroni products to the United Appeal luncheon for captains of teams reaching their goals.

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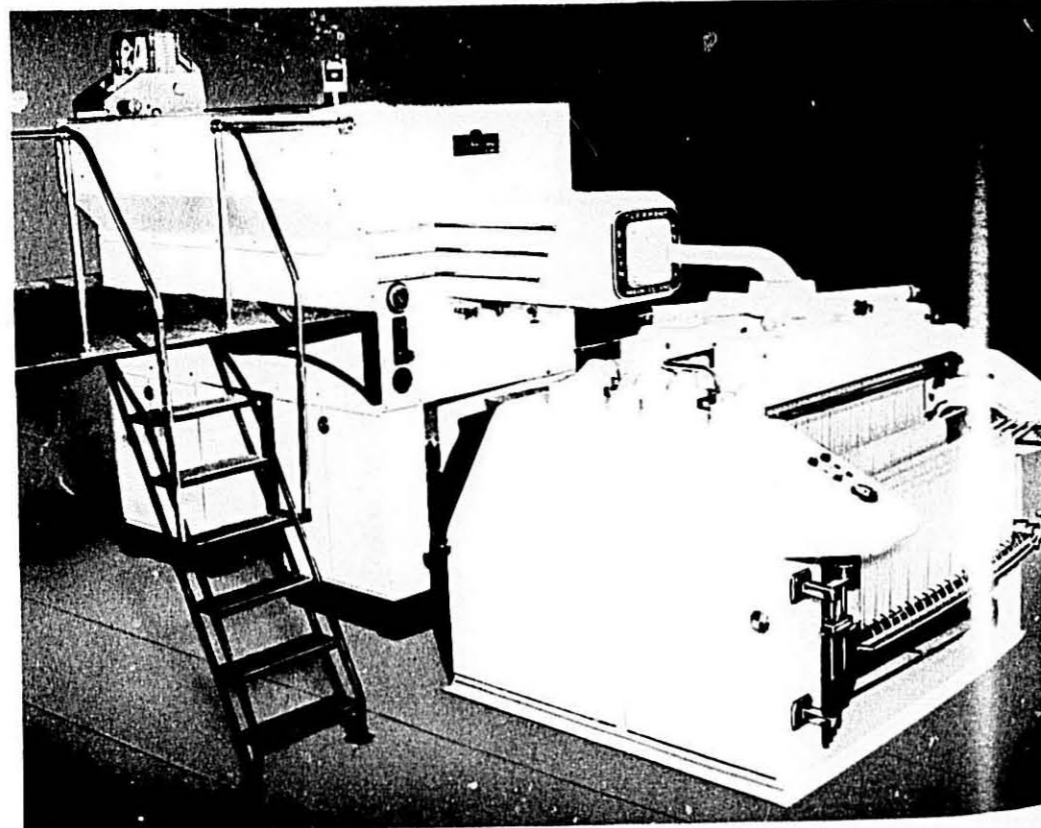
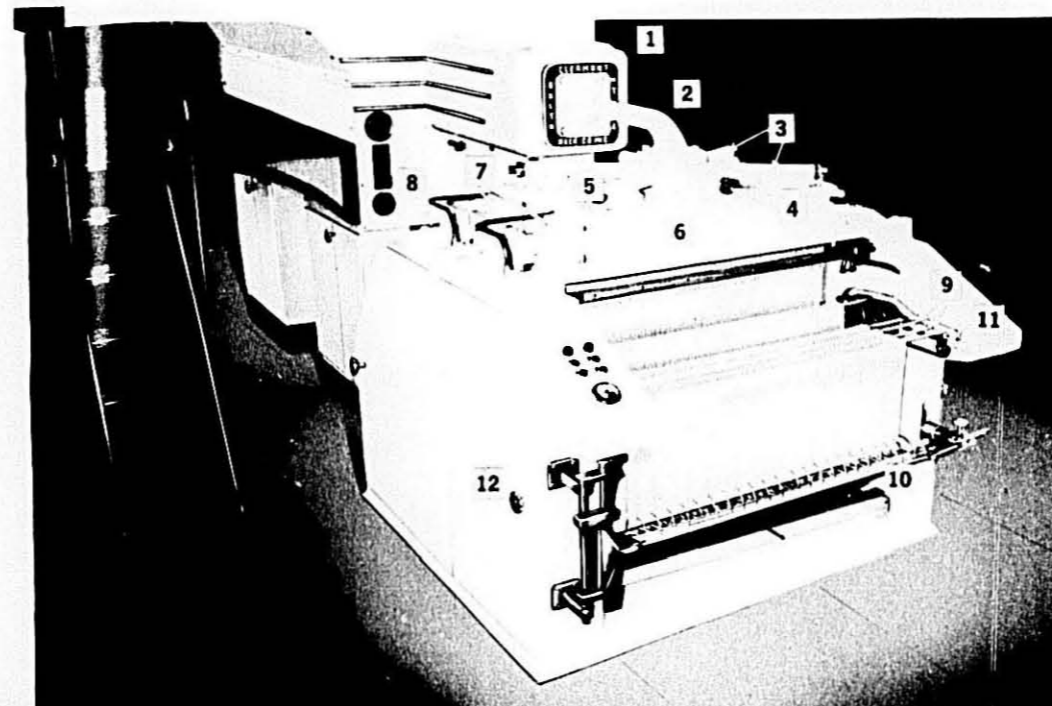
AFTER YEARS OF RESEARCH, EXPERIMENTATION AND ENGINEERING,

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TO ITS DISTINGUISHED CHAIN OF COMPLETELY AUTOMATED MACARONI PRODUCING EQUIPMENT.

a SPREADER which combines slow extrusion for a superior quality product with top production for increase in volume; a SPREADER which extrudes uniform stick patterns for minimum trim and an eye-appealing product of invariable smoothness, color and consistency; a SPREADER which produces continuously on a 24 hour daily operation with the Clermont VMP-5A, 2000 lbs/hr press— "The Greatest of All Long Goods Presses."

This SPREADER is destined, like other Clermont long goods equipment, to meet the exacting requirements of particular manufacturers. After you have studied the features of this machine only a personal inspection can reveal the full measure of its superiority.



FEATURED COMPONENTS

- | | | |
|-----------------------------|------------------------|-------------------------|
| 1 VMP-5A, 2000 LBS/HR PRESS | 5 SPREADER HEADS | 9 SPREADING STICKS |
| 2 ELBOW FEEDER | 6 WATER JACKET | 10 TRIMMING DEVICE |
| 3 RADIAL FEEDERS | 7 DIE RETAINING BLOCKS | 11 CHAIN STICK DELIVERY |
| 4 EXTRUSION ADJUSTING CAPS | 8 STICK FEED MAGAZINE | 12 MOTORS & CONTROLS |

This matchless 4 stick—2000 lbs/hr spreader was designed, as shown, to work in conjunction with the Clermont VMP-5A, 2000 lbs/hr Long Goods Press. This press, like its counterpart the spreader, is distinguished by its radically advanced design to give consistently high performance which shows up—where it counts—in the product. Increased capacity, more product, less maintenance expense for added net profit are the economic end results to the Macaroni Industry.

THE MACARONI PLANT OF THE 60's TAKES SHAPE TODAY AT CLERMONT! COME SEE FOR YOURSELF.

RADIAL FEEDER CLEANOUT

TRIMMING DEVICE OPENED



2 HEADS AND 4 STICKS

The first spreader which extrudes through 2 heads and on 4 sticks. Each head, with its own die and 2 sticks, produces 1000 lbs/hr on high speed for a total of 2000 lbs/hr and 750 lbs/hr on low speed for a total of 1500 lbs/hr.

ELBOW FEED WITH RADIAL DISTRIBUTION

The first spreader to eliminate complicated piping. Has one elbow feeder from the press supplying the radial feeders going to the 2 spreader heads. Each radial feeder is of the same length to insure equal distribution of pressure to give constancy in product texture, tenderness and flavor. Each radial feeder is easily adjusted to regulate flow of mixture through each die by turning the extrusion adjusting caps with a wrench.

WATER JACKETED HEADS

The first spreader to have 2 extrusion heads totally enclosed in water jackets to maintain a fixed, stable temperature on each die. This also contributes to equalizing flow of mixture for an evenly extruded product with only minimum trim required.

TRIMMING DEVICE PREVENTS CHECKING

The trimmer has sickle blades to prevent crimping or closing of holes on tubular products and trims product straight and even with no ragged edges. It is easily raised or lowered to trim products 18 to 24 inches long. Designed for long, efficient, trouble-free performance.

RAPID FEED MAGAZINE

The magazine holds and feeds approximately eighty 3/4" dia. ribbed aluminum sticks but is designed to also handle any type and size of stick. The 3/4" aluminum sticks, which are straight and have just enough give under product load to prevent rolling, are more adapted to rapid magazine feeding and elimination of excessive waste.

SIMPLE AND FAST DIE REMOVAL

Each die is quickly removed by sliding it out of its head after simply loosening and removing the die retaining blocks.

ULTIMATE IN SANITATION

Meets the most demanding sanitary requirements — stainless steel and chrome plated construction with streamlined, bright, clean appearance. Cleaning greatly simplified since only the elbow feeder requires removal. Each radial feeder is easily cleaned by simply removing the extrusion adjusting caps and using a cleaning rod.

VERSATILITY AND COMPACTNESS

Extrudes all types of long goods: round, solid, flat, fancy and tubular. Operates with all existing long goods presses and dryers. Designed to occupy a minimum of space and fit into any existing long goods line. All motors, controls and mechanisms are neatly housed in the frame and completely accessible. The chopper-blower is housed in the frame to eliminate the hazard of personal injury.

WHAT TO PUT ON THE PACKAGE?

In today's channels of retail commerce, the Rossotti Self Service Merchandiser reports, the package is the most direct bridge from manufacturer to consumer. It must speak for him, and guide the shopper to the purchase. It must provide all possible information about the product, and it must do this briefly, concisely, in clear and simple terms, in language the consumer readily understands. To be wholly effective, the information must be factual, never misleading or inaccurate, since the satisfied customer is the one who finds the purchase to be "as advertised". The buyer who gets all that she has been led to expect returns to buy again.

The package itself should tell the American homemaker everything she needs to know about the product before she buys it. And for maximum merchandising power it may also volunteer certain information not legally necessary but valuable nonetheless, such as recipe variations, nutritional qualities, number of servings or pieces. It may also be used as a powerful advertising aid to promote another product in the line, to herald the introduction of a new product, to tie in with related ones, to promote premiums or special offers.

Aside from the colorful attention-getting and promotional aspects of package design, there are certain questions that call for affirmative answers in the process of producing successful packaging: Are brand name and product easily identified? Has all necessary product information been presented? Has the outstanding promotional feature been utilized? Have government requirements been met?

Highlights of government requirements under the Federal Food, Drug, and Cosmetic Act of 1938:

- Required information must not only be conspicuously displayed but must be in terms the ordinary consumer can read and understand under ordinary conditions of purchase and use. This information is to appear in prominent positions on the principal display panels of a package. The statements required by the law are these:
1. The name and address of the manufacturer, packer, or distributor. If the food is not manufactured by the person or company whose name appears on the label, the name must be qualified by the terms "Manufactured for", "Distributed by", or similar expressions.
 2. The net contents. This statement must be expressed in terms of



Consumers read labels.

weight, measure, or numerical count, as generally understood by the consumer. The statement of weight must be in terms of the avoirdupois pound and ounce. A statement of liquid measure must be in terms of the U.S. gallon or its subdivisions in quarts, pints, and fluid ounces. The statement must be in terms of the largest unit of measure, such as "1 pound" not "16 ounces", and "1 pint" not "16 fluid ounces". Common abbreviations may be used.

3. The common, legal name of the food. This is the usual name by which the consumer knows the food. If the product is one of several ingredients, the common name of each ingredient must be shown, and the ingredients are to be listed in the order of their predominance in the food.
4. Foods intended for special dietary purposes must bear certain additional information concerning their vitamin, mineral, and other dietary properties.
5. Foods must bear labeling stating the presence of any artificial flavoring, artificial coloring, or chemical preservative, if any are used.
6. Imitations must be labeled as such. The word "imitation" should be placed immediately preceding the name of the food imitated.
7. If a standard of quality has been established for a specific product, and the product fails to meet the standard, it must bear a statement of substandard quality.
8. If a standard of fill of container has been established, and the prod-

uct fails to meet the standard, it must bear a statement of substandard fill of container.

9. If the package carries any statement in a foreign language, then all the legally required information must also be given in the foreign language, as well as in English. (All imported articles are required to be marked with the English name of the country of origin.)

This is the gist of what the Food, Drug and Cosmetic Act specifies must be on the package. It places no restrictions on the inclusion of other consumer information as long as the information is truthful and not misleading, and that it doesn't interfere with the placement of the mandatory information. Any brand name may be used providing it isn't deceptive (such as the name "Yellow King" for white sweet corn), and if it hasn't already been appropriated by someone else. The law requires only the minimum amount of information necessary for the guidance and protection of the consumer.

The question occasionally arises, must every new package design be checked and approved by the Food and Drug Administration? The law does not authorize the Administration to approve foods, drugs or cosmetics, or their labeling. However, this body is always willing to offer comment on proposed labels and packages, or to answer inquiries as to the applicable requirements of the law. Inquiries may be addressed to the Food and Drug Administration, U. S. Department of Health, Education, and Welfare, Washington 25, D.C.

The responsibility of the package or the label to the consumer doesn't end with the information that aided her in making her buying decision. It still has the assignment to ensure the most satisfactory use of the product by providing precise instructions for preparing and serving. In addition, it can offer practical suggestions in the form of easy-to-make recipes for additional uses of the product. Today's homemaker welcomes any information that enables her to serve old familiar foods in new and interesting ways.

Mandatory or promotional (or both), the information carried on an ever-increasing number of packages is steadily becoming more descriptive, more enlightening, more useful to the consumer. And Mrs. Consumer is becoming more and more aware that her best guide to buying is the information that is put on the package.

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TOOLS FOR TESTING MACARONI PROCESSING

by C. W. Brabender, C. W. Barbender Instruments, Inc.

Rheology is the science dealing with the flow of matter. In the macaroni industry it is related to tests on macaroni dough in all stages as well as on the raw material.

The most impressive demonstration of ideal macaroni structure is a microtome cut through an amber durum kernel, previously exposed to high pressure in a suitable mold. Before it was compressed the moisture content was brought up to 25% to simulate the water content of a macaroni dough at the extruder part of a press. In its simplest concept, macaroni manufacturing consists of the following steps:

1. The miller in producing semolina, takes the wheat endosperm apart and tries to obtain uniform granules.

The miller may start out with a moisture content of wheat of 11%, wet his wheat to put it in proper grinding conditions, to say, 16% and then lose 2% in the mill to turn out a finished semolina product with about 14%.

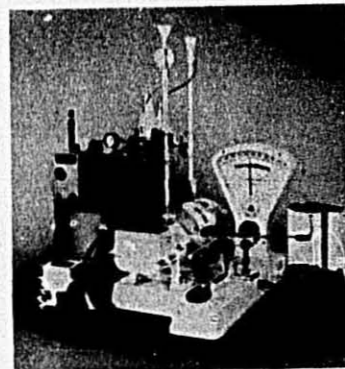
2. In the macaroni manufacturing process, the semolina is wetted again up to a moisture content of say 25-26%, then extruded under high pressure and consequently dried out to the original or lower than the original water content of the wheat received by the miller.

Thus, macaroni manufacturing technology in its most simple concept is nothing else than re-shaping the structure of the wheat kernel endosperm. The different steps involved in milling wheat into semolina in wetting, mixing and compressing the resulting dough into macaroni, involves steps which forceably lead into a deterioration of structure and cooking properties which cannot be avoided but which can be kept to a minimum if we apply our knowledge at every single step of the process.

In Dough Making

Let's look at the first step of macaroni processing - the dough making.

The first decision to be made is the quantity of water to be added to semolina in order to get the desired dough consistency. This always must be calculated on the basis of consistency at the extruder dies. Too much water added, the gluing properties of the dough would be excellent, but mechanical strength would be too low and too much drying would be necessary.



Farinograph

Semolina produced from the best qualities of sound amber durum wheat take on water quickly and once the proteins are swollen by this water, the consistency stays stable for a considerable period. This is not so if semolinas are produced from lower grades of amber durum wheat or even from hard winter or hard spring wheat. Doughs made up from this type of raw material will either slacken or stiffen during a considerable period and therefore it is difficult to maintain the desired consistency or stiffness of dough at the extruder die which in turn results in a too soft, or a product with undesirable texture and streaks. This phenomenon was already known in the old times before the invention of the continuous press. Skilled macaroni makers would time their batches in such a way that the first and the last part of the batch would still be within the tolerance in which swelling changes of the proteins took place.

The old process consisting of three steps, the pre-blender, the gramola, and the press in itself gave a skilled macaroni maker many ways and means to control dough consistency, and thereby choice in timing of batches in accordance with their swelling characteristics.

Another important factor in dough making is the uniform distribution of water over the surface of all semolinas, be they coarse, medium or fine. Old timers have objected for many years against the continuous press and maintained that it would not permit such excellent quality as the old time batch

process could produce. If water comes into contact with semolinas, and if too many and too big lumps are formed, the result is a dough which will turn out streaky products.

This is because the water content in a macaroni dough is about half as great as the water content of a baker's dough. Once some parts of the semolinas are wetted, they will not give water off easily any more to unwetted or under-wetted particles. No matter how much mixing you put into a dough mass which has been un-uniformly wetted, it is difficult to turn out a uniform dough. Thus, the so-called hydration of dough is the most important step to obtain uniform finished products. If particle size of semolina vary over a wide range, uniform hydration of dough is difficult.

A medium fine semolina with a minimum of fines produces the best most uniformly hydrated dough. One of the greatest improvements after the invention of the continuous press was the pre-wetter. It had been found that the water-semolina-blending conveyors ahead of the extruder head were insufficient and had to put in too much mechanical abuse on the non-homogeneous dough in order to try and distribute water uniformly all over the surface.

One of the oldest devices for this purpose is an Italian invention of a machine which will spray on the water in such a way that lump formation of the semolina cannot take place. There are many such devices in use and for many years they were home-built and kept secret. Today they are in general use all over Europe, but are in little use in this country.

Some processors run the pre-wetted semolina through a tunnel containing a conveyor band on which the swelling process takes place without mixing and where, therefore, oxidation and discoloration is minimized. The most important rule in dough making is to carry the water incorporating and swelling process out at a minimum of mixing and mechanical abuse and avoid contact with air as much as possible. This swelling time would be such that once the material has entered the kneading and compressing system of the press, no further swelling takes place. The function of the kneading and compressing part of a continuous press should be strictly limited to gluing the properly wetted particles into an homo-

genous mass. There is a tremendous knowledge available in macaroni dough making, but very little or nothing has been published. Some thirty years ago, when European dictators began to make their countries self-sufficient, they forced their macaroni industry to produce merchandise from even such wheats like European soft wheat. The quality turned out in the beginning was inferior beyond description. Over the years, however, tremendous experience was accumulated and today it is possible to make as good qualities of macaroni from soft wheats as from amber durum except, of course, for color.

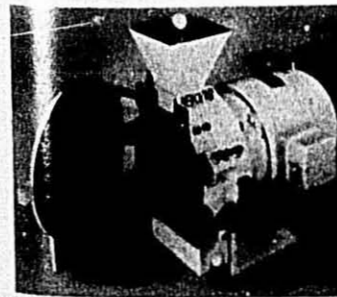
The main changes which have made this possible are uniform, medium particle size of raw material and elevated water temperature. One of the world's three greatest macaroni plants produces its top notch quality from soft wheat and its cheap quality from amber durum. The idea is that the top qualities contain eggs and therefore get their color without any difficulties, whereas the cheap qualities do not contain eggs, but still need color.

Farinograph Measurements

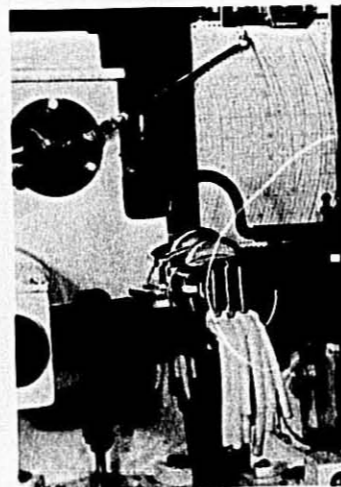
The properties which we have discussed so far can be measured with the Farinograph. The Farinograph was originally designed for the milling and baking industry for the purpose of evaluating bread doughs. It is basically a recording dough mixer. The Farinograph permits determining of the following characteristics valuable to a macaroni technologist:

1. Water absorption necessary to reach a certain designated consistency.
2. Swelling time or imbibing time of the water to reach this consistency.
3. Swelling stability, which is the behavior of the dough after the protein has absorbed all the water.

We prefer to test semolina with about double the water absorption we use in macaroni making because the dough is more pliable and the absorption measurement is more accurate. By



Wiley type of mill for moisture determination.



Extensigraph

dividing through a factor inherent to every shop, the actual water absorption for a given press and a given product is obtained.

A macaroni processor who studies incoming raw material can soon learn the swelling behavior of the different products. He may blend different semolinas to get a uniform behavior in the press and he also may pre-determine the exact amount of water necessary to arrive at the desired consistency at the extruder die.

The farinograph measures the dynamic properties of a dough from the time the semolina and water are brought into contact until the time the dough is ready - or even overworked - for the purpose of determining stability.

Extensigraph Measurements

The factors water absorption, developing time, swelling behavior and stability which the farinograph measures, are pertinent to dough making. If we could assume that raw material is constant from shipment to shipment, we could rely on the farinograph entirely and would not need any other measurement except for cooking properties. Since raw material, however, changes and since there are many possibilities to compensate for those changes by blending as well as proper selection, it is necessary to apply another type of measurement which we will call static measurement and which is carried out by the extensigraph. The extensigraph is comparable with a tensile strength tester as used in the metallurgical industry for the testing of steel and other metals. In the extensigraph, a small cylinder of dough

weighing about 150 grams is stretched until it breaks. During the stretching procedure, the force necessary to stretch the dough as well as the amount to which it can be stretched before it breaks, are indicated and registered on a chart paper. Thus, the extensigraph gives us information on the behavior of macaroni after it has arrived at its final shape, which means after the die or the press.

Doughs made from granular hard wheat flour take a rather severe mixing in order to get optimal swelling and this sometimes produces inferior quality of products, especially with regard to texture and appearance.

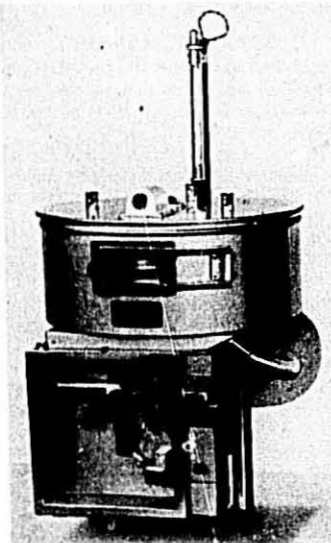
The most important step to correct this is proper adjustment of water addition in order to obtain optimal swelling. If optimal swelling is achieved and the timing between the blending and mixing and the extruding process are properly chosen, it is still possible to produce acceptable merchandise of undesirable qualities of raw material. The usual fault is that too little water is added and that the dough maker is misled by the initial appearance of the incomplete dough which then will swell more and turn out a too high consistency which produces inferior texture and color at the extruder.

The Amylograph

The third area in which rheological testing can help the macaroni maker is connected with cooking properties.

While all structural properties which determine shape stability and control

Continued on page 38



Semi-automatic Moisture Tester

Durum Meeting

Estimated Usage 1959-60

Mill Grind 7/1/59 to 9/1/60 (14 Mo.)	26,000,000
Seed	2,300,000
Cereal and Feed	2,500,000
Residue in Country Storage	2,000,000
Estimated Error in Government Figures	3,000,000
	35,800,000

Continued from page 5

Deficit -6,454,000

The deficit of 6,454,000 bushels will have to be secured from government owned stocks which were estimated at 11,200,000 on July 1. This would leave a carryover of 4,746,000 on September 1, 1960, providing no durum is exported. Commodity Credit Corporation sales since July 1, 1959 have totaled 1,452,374 bushels. Durum receipts since August 1, 1959 in the Minneapolis market have been 6,968,000 bushels.

There is a question as to the quantity and quality of government owned stocks. The trade is dubious about the amount the government states they have. They are even more skeptical of the quality that it might be. This should be clarified as soon as possible.

Robert Green of the National Macaroni Manufacturers Association distributed statistical tables on macaroni consumption as well as durum supply and distribution figures and observed that the consumption increase in 1958 was more than 10% over 1957. Currently the millgrind for the first 41 weeks of 1959 is running almost precisely with that of a year ago. The Hoskins macaroni production index shows the increase of 1%. Contributions to the National Macaroni Institute are up 2.8%. Business prospects for the final quarter of 1959 appear good, so there might be an increase of 2 to 3% for the entire year of 1959.

2,000,000 Acres Needed

On this basis and on the statistics submitted by the millers, it is apparent that some 2,000,000 acres planted to durum are needed in 1960.

It was decided that efforts should be made to hold a meeting of durum interests in Great Falls, Montana to discuss the matter with Montana durum growers, millers, and particularly Congressman Leroy Anderson, in order to eliminate any differences of opinion, so that legislation can be pursued successfully. After this is done, all elements of the industry will be urged to contact their representatives and the Department of Agriculture for passage of legislation that will make planting of 2,000,000 acres in 1960 possible.

Delegates attending the meeting were as follows: from North Dakota, R. C. Crockett and Tom Ridley, Langdon; Ole J. Sundeen and Jacob Geritz, Lakota; Harold R. Hofstrand and Alvin H. Kenner, Leeds; and Richard K. Saunders, Doyon.

William Lohman, Lee Merry, Royce Ramsland and E. V. Hetherington, General Mills; P. R. Fossen, North Dakota Mill & Elevator; A. L. DePasquale, Robert Bruning and Morris Ainsworth, International Milling; Ray Wentzel, Doughboy Industries, Inc.; Gene Kuhn and Jess Cook, Amber Milling Division; Cliff W. Kutz and A.

R. McRae, Commander Larabee Milling Company; Lester S. Swanson, Harry Deaver and Norton W. Rial, King Midas Flour Mills; Louis I. Roe and Clint Zinter, F. H. Peavey & Company; Howard Lampman, Durum Wheat Institute.

Lloyd E. Skinner, Skinner Mfg. Co.; James T. Williams, Jr., John Linstoth, Otto Koenig and Howard Johnson, The Creamette Company; Maurice L. Ryan and Tony Basile, American Beauty Macaroni Co., St. Paul; Walter F. Villaume, Jr. and Gene Villaume, Minnesota Macaroni Co.; C. L. Sibbald, Catelli Durum Institute; James J. Winston and Robert M. Green, NMMA; Rae H. Harris, North Dakota Experiment Station, Fargo; Gene Hayden, Rust Prevention Association; Charles M. Hoskins, Glenn G. Hoskins Co.

In Europe



British Meeting. Charles Hoskins, American industrial consultant, addressed the technical and managerial conference sponsored by the Chelsea Flour Mills and R. H. Clarke, Ltd., in conjunction with the British Macaroni Industry, Ltd. The meeting was held at the Kensington Palace Hotel on September 22. Some eight macaroni manufacturers sent 65 delegates.

Dr. Charles Hummel spoke on developments and trends toward complete automation, while Robert Ernst of Buhler Brothers and Mr. D. I. Toronto of Braintil commented on technological developments.

Hoskins commented on marketing opportunities in the restaurant field, research their organization is doing on additives for macaroni products; and American packaging methods. Mr. A. H. Elliott of John Haddon & Company, Ltd. reported on a market research survey made last spring in England. Twenty percent of the consumers contacted knew what pasta was. Ninety-six percent knew macaroni. Forty-three percent had eaten macaroni at least once in the last six months, while fifty-seven percent had eaten spaghetti, fifty-three percent had eaten canned spaghetti is eaten cold on toast as a snack or hors d'oeuvres. Macaroni is frequently used in pudding much as rice is used in the United States. Macaroni products are eaten in homes with children, and it is a home consumption item rather than on the bill of fare of restaurants. Best consumers are those who have traveled abroad and young people who like the connotation and association of macaroni products with sunny Italy.

Primary problems, according to the survey, center around the idea that some consumers have that macaroni is starchy, has no food value, is difficult to prepare and eat, and has a slippery or slimy texture. The conclusion was that the market was definitely under-developed with good possibilities of expansion.

The eight English firms have banded together to raise a \$30,000 promotional fund and retain the Leslie Frewin organization, Ltd. to publicize macaroni products. In addition to editorial placements, development of background, nutritional data, recipes and photographs, they have prepared a cinema pictorial and a film on the manufacturing process of macaroni.

There is something special about Macaroni products made from

King Midas

Let's have "something special" is the phrase that is heard more and more often from New York to L. A. Let's have a different kind of meal—but with lots of appetite and health appeal. Let's have a meal that satisfies all the family all the time.

Everyone knows that macaroni products are economical—but do they know that they can be "something special" dishes too.

They meet all the requirements of big-family budgets to the most exacting taste of the gourmet.

To obtain that "something special" in your products use the finest—use King Midas.



King Midas DURUM PRODUCTS

MINNEAPOLIS MINNESOTA

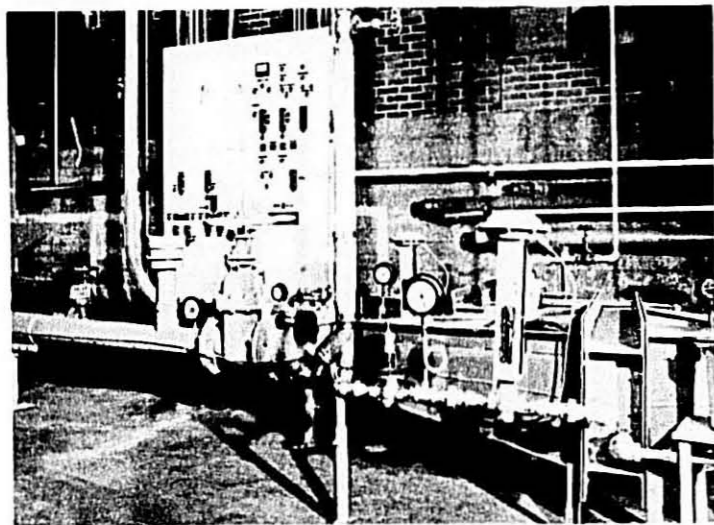
CHEF BOY-AR-DEE CUTS COSTS WITH AIR

The new automatic bulk flour unloading storage and transfer system at Chef Boy-Ar-Dee, Milton, Pennsylvania has resulted in faster handling, lower operating costs, simplified maintenance of rigid quality control standards, improved housekeeping and sanitation. In addition, it has relieved approximately 10,000 square feet of floor area for other manufacturing or storage operations. Increased economies have been realized due to freight savings, elimination of spillage or bag breakage, reduction in labor costs and product cost reduction.

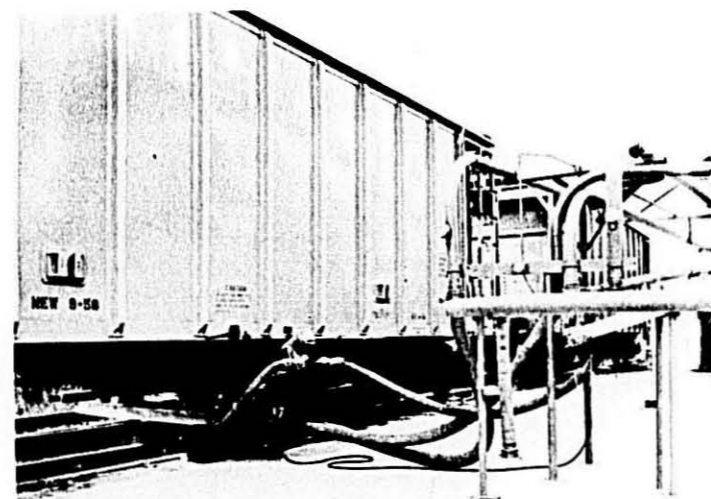
These advantages are in addition to the standard savings of 12 cents per bag which automatically applies when you shift from bag to bulk purchasing of flour.

The Sprout-Waldron automatic and flexible unloading and transfer system for the pneumatic handling of flour at Chef Boy-Ar-Dee is designed to convey from four railroad car locations to either of two storage structures at rates approximating 20 tons per hour and better. The flour can then be taken from either of the storage structures to respective inplant use bins. Operations are entirely automatic and the flour temperature is controlled throughout.

The Chef Boy-Ar-Dee pneumatic system is divided into three separate sections: an unloading system, a transfer system and an emergency system.



These heat exchangers thermostatically control the temperature of the air in the transfer systems, keeping the flour at best blending temperatures.



Unloading flour pneumatically at 20 tons per hour. Sprout-Waldron Portaflo takes flour from Airslide car and transfers it to storage structures or directly to inplant use bins.

The Unloading System

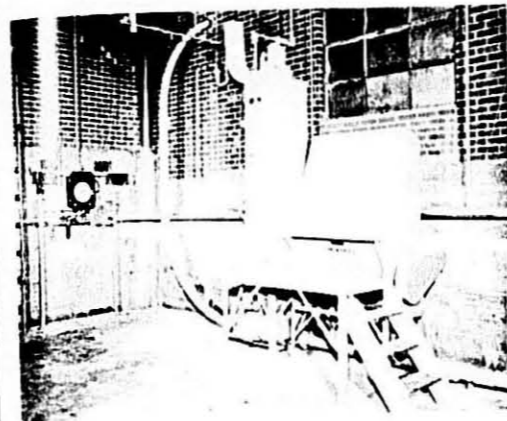
The Sprout-Waldron Pneu-Flo or positive pressure system is used to unload the flour from Airslide cars to either of two 17 inch diameter 50 foot

high storage structures. The unique Sprout-Waldron Portaflo, a portable pneumatic unloader consisting of two blow-through air-locks located in series is the control unit in this system. Positioned under the Airslide car, the Portaflo provides a dustless, leak-proof unloading mechanism capable of unloading the 50 ton Airslide car in approximately 2-1/2 hours. The only unusual aspects of this system are the location of the Portaflo unit beneath the car and the connection of the power flexible piping.

The piping is arranged so the flour can be unloaded into the storage tanks or can by-pass the storage tanks and be pneumatically loaded directly into inplant use bins. There is also an inplant bag dump hopper which conveys directly to the inplant use bins. This hopper supplements the bulk flour from the storage tanks or from the railroad cars with special bagged ingredients. All external piping is carefully insulated to help keep flour at proper temperatures.

Transfer System

The pneumatic transfer system is designed to convey the flour 600 to 700 feet from receiving stations to inplant use bins at an approximate rate of 6,000 pounds per hour. This system operates automatically upon demand from the

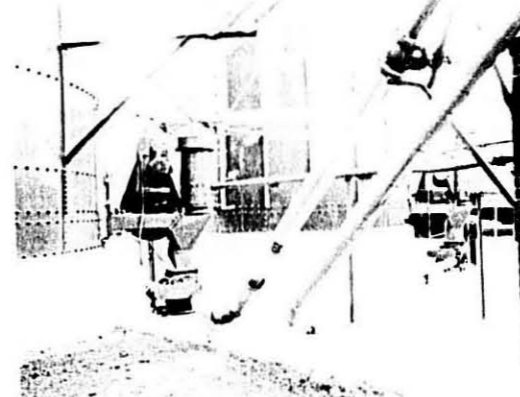


Inplant stationary bag dump. It permits addition of small quantities of ingredients to flour in storage tanks.

use bins, and incorporates equipment for pre-heating the conveying air. Thermostatic controls are used to see to it that the flour at the discharge point is always at a satisfactory blending temperature. As a protection against possible failure of the mechanical unloader in the storage tanks, the transfer system is designed to hook up with the emergency system with the same automation and temperature control features. When hooked directly to the Air-

slide cars instead of the storage bins, the car must remain on location until it is emptied or until the unloader is repaired.

Incorporated in the transfer system are two heat exchangers designed to bring the flour to the satisfactory blending temperature before it is discharged to the inplant use bins. As pointed out before, this temperature control is conducted while conveying by pre-heating of the conveying air.



Close-up view of pneumatic conveying lines showing insulated piping and sight gauges.

The Emergency System

The emergency system is designed to unload directly from Airslide cars to any of the inplant use bins with the same automatic operation and temperature control methods built into the regular system. Should it become necessary to receive flour in bags, there is a portable double bag dump hopper which can be positioned over the Sprout-Waldron Portaflo and located adjacent to the railroad box cars.

Design for Decision

The man in the poultry industry trying to decide what to do will get a fresh new approach at the 1960 Fact Finding Conference to be held in Kansas City February 12-14.

"Design for Decision" is the theme around which the Institute of American Poultry Industries is building its all industry meeting.

Program emphasis will be switched from production problems to consideration of problems in marketing, management and legislation.

Campbell, exhibit manager, says exhibits of the 1960 conference will be more comprehensive than they have ever been. Equipment and supply people are becoming increasingly conscious of industry needs, according to Mr. Campbell.

Looking to the future of the industry the Institute is again co-sponsoring the Junior Fact Finding Conference. Young people from the Future Farmers of America, the Future Homemakers of America, and the 4-H Clubs will see what big opportunities the poultry industry offers those people who make the right decisions today. The Juniors will have their own program and also attend some of the general sessions.

Other sponsors of the Junior Conference are the Cooperative Extension Service; Office of Education - Vocational Agriculture Branch; and the National Committee on Boys and Girls Club Work, Inc.

Appointment

The Wheat Flour Institute has announced the appointment of Miss Margot Copeland as Food Editor. She heads the WFI editorial program with additional responsibilities for nutrition and education materials.

She joined the Institute in mid-October, succeeding Ruth Behnke, who recently resigned to go with Farm Journal magazine.

Miss Copeland's professional skills include recipe development and production; product testing; quantity recipe development; development of nutrition education programs and exhibit planning and presentations. Her education background includes a BA degree in Dietetics from Miami University at Oxford; an MS degree in Nutrition from Iowa State University and journalism training at Northwestern University.

Miss Copeland formerly served as research assistant in nutrition and test kitchen with the Quaker Oats Com-

pany. She later worked for the Dairy Council in Iowa and advanced from there to serve with the National Dairy Council. At NDC she was state program coordinator and later food publicist.

Brokerage Appointments

Golden Grain Macaroni Company has made public the appointment of Otto Weber & Associates, Inc., Mount Vernon, New York, and Seavey-Florsheim Company, Chicago, to represent their products.

Puerto Rican Plant

Prince Macaroni reportedly is establishing a branch plant in Puerto Rico to produce macaroni and other products under the island's "Operation Bootstrap" development program.

Canned Sauce

National introduction of a canned sauce with meatballs has been launched by Buitoni Foods. The new sauce is the eighth in the firm's line of prepared sauces. The 15-3/4 ounce can retails for about 45 cents.

FOR YOU
ADVANCED TECHNOLOGICAL IMPROVEMENTS

Save Space — Increase Production
 Improve Quality

★ **NEW** POSITIVE SCREW
 FORCE FEEDER

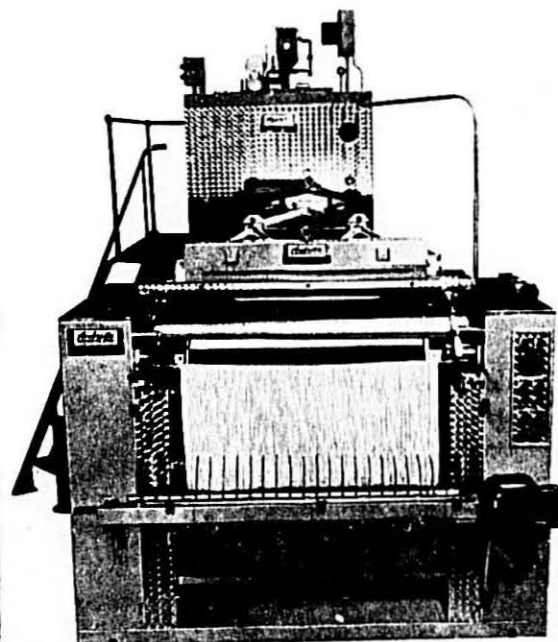
improves quality and increases production of long goods,
 short goods and sheet forming continuous presses.

★ ★ **NEW** 3 STICK 1500 POUND
 LONG GOODS SPREADER

increases production while occupying the same space as
 a 2 stick 1000 pound spreader.

NEW 1500 POUND PRESSES
 AND DRYERS LINES

now in operation in a number of macaroni-noodle plants,
 they occupy slightly more space than 1000 pound lines.



MODEL BAFS — 1500 Pound Long Goods Continuous Spreader

These presses and dryers
 are now giving excellent
 results in these plants.

★ Patent Pending
 ★ ★ Patented

Ambrette
MACHINERY CORP.
 156 Sixth Street
 Brooklyn 15, New York

NEW SUPER CONTINUOUS PRESSES

SHORT CUT MACARONI PRESSES

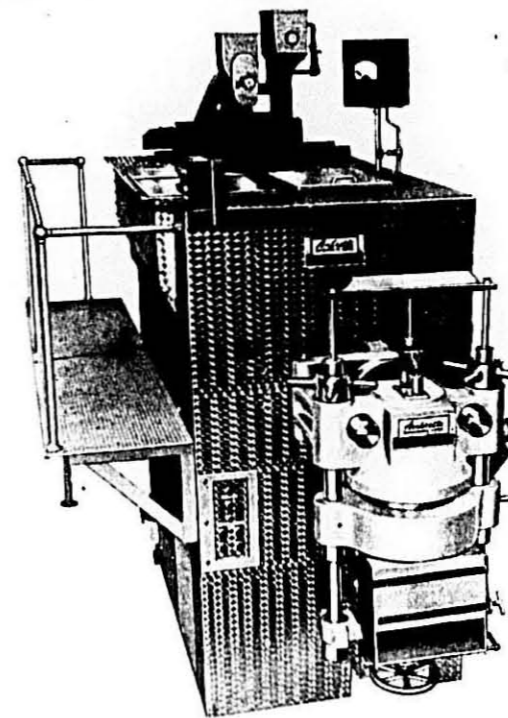
Model BSCP — 1500 pounds capacity per hour
 Model DSCP — 1000 pounds capacity per hour
 Model SACP — 600 pounds capacity per hour
 Model LACP — 300 pounds capacity per hour

LONG MACARONI SPREADER PRESSES

Model BAFS — 1500 pounds capacity per hour
 Model DAFS — 1000 pounds capacity per hour
 Model SAFS — 600 pounds capacity per hour

COMBINATION PRESSES

Short Cut — Sheet Former
 Short Cut — Spreader
 Three Way Combination



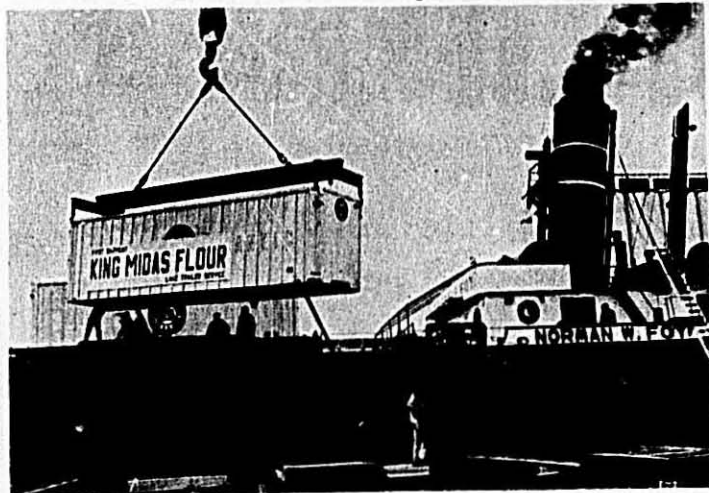
Model BSCP

- ★
- QUALITY** — — A controlled dough as soft as desired to enhance texture and appearance.
 - PRODUCTION** — — Positive screw feed without any possibility of webbing makes for positive screw delivery for production beyond rated capacities.
 - CONTROLS** — — So fine — so positive that presses run indefinitely without adjustments.
 - SANITARY** — — Easy to clean and to remove attractive birdseyed stainless steel housing mounted on rugged structural steel frame.

PLANT
 156-166 Sixth Street
 155-167 Seventh Street
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Ambrette
MACHINERY CORP.

Flour Takes a Fishy-Back Ride



Swinging aboard ship for a "fishy-back" ride is this demountable truck trailer filled with 100 pound sacks of King Midas Special Flour. The trailer is being lowered to the deck of a specially-equipped grain vessel at Duluth, Minnesota, for shipment to lower Great Lakes ports. This new form of water transportation returns packaged flour shipments to the Lakes for the first time since 1942, and does it in a novel way. Trailers are carried to the port of destination. Huge cranes lift the trailers to waiting trucks for area delivery. The new method does away with handling problems of "hold" shipments and offers King Midas' customers speedier service.

New Transparent Package

After successful test marketing in selected key areas, V. La Rosa & Sons, Inc. is introducing a new transparent package for La Rosa Egg Noodles in all of its market areas.

The new package is designed so that the clear plastic film locks in the flavor of the egg noodles at the same time permitting full view of the product inside.

"The advantage to the retailer is faster shelf movement because of smaller sized units and the eye-catching and colorful quality of the new package," says Peter La Rosa, company president. "The consumer gets increased freshness of noodles since the smaller pack can be used up at one sitting."

The new plastic-packed egg noodles will be available in both 6 and 12 oz. sizes, each of which are packed twelve to a case. For those who require larger servings, the regular 1 lb. package of La Rosa Egg Noodles will still be available.

V. La Rosa & Sons, Inc. is backing the introduction of its new cellophane package with TV and radio spots in local areas.

The company, which distributes in New England, New York, the mid-

Atlantic states, the mid-West, and Florida, is the producer of America's largest selling brand of macaroni, egg noodles, and spaghetti.



New Transparent Package

Jingle Contest

V. La Rosa & Sons has launched a national jingle contest for youngsters, offering a top award of a "backyard drive-in movie." Contestants will be vying for a Ferrari sports car, scaled to children's size, a moving picture camera and projector, 10 cartoon and travel films, and a popcorn machine for that final touch of authenticity.

Other awards include space-man helmets and dolls. In addition, there will be awards of still-photography sets given to the top winners in the individual La Rosa market areas.

The "Win Your Own Family Drive-In Movie" contest is being backed with commercials on children's TV programs in the company's major markets. Point-of-purchase posters and shelf talkers will also be provided.

To enter the contest, children have to fill in the last word of a three-line jingle and send it along with the red rose trademark from any La Rosa package, to their local TV stations.

Social Diet

Enter the "social diet" as the latest way to lose weight without foregoing the pleasure of dining with friends or even informing them that you are cutting down the calories.

Dr. Milton Plotz of the State University of New York Medical Center described the procedure in the Journal of the American Medical Association. The technique, he said, has been tested on 100 successive patients and resulted in a loss of "about 1,400 calories a day."

- Here is how it works:
1. Not more than one slice of bread at any meal.
 2. At breakfast, one slice of toast or cereal, but not both.
 3. No gravies.
 4. Portions of all servings to be reduced about one-quarter, with no seconds.
 5. Desserts to be limited to one portion of fresh fruit, one ounce of cheese, or a small slice of angel food cake.

Dr. Plotz said variety can be given to the lean meat, green vegetable fare prescribed for dinner by adding small portions of rice, noodles, cracked wheat, or spaghetti, a small baked potato, or portions of peas or lima beans.

On this routine, almost every determined person will lose weight, he said. Tests of the procedure have shown that in many instances the person's friends, and sometimes his family, did not know he was on a diet, Dr. Plotz said.

The dieter at first may need the help of a drug, to be given by a physician, to suppress his appetite. However, when the new eating habits are well established, the medicine frequently can be omitted, Dr. Plotz said.

THE MACARONI JOURNAL

FAVAN

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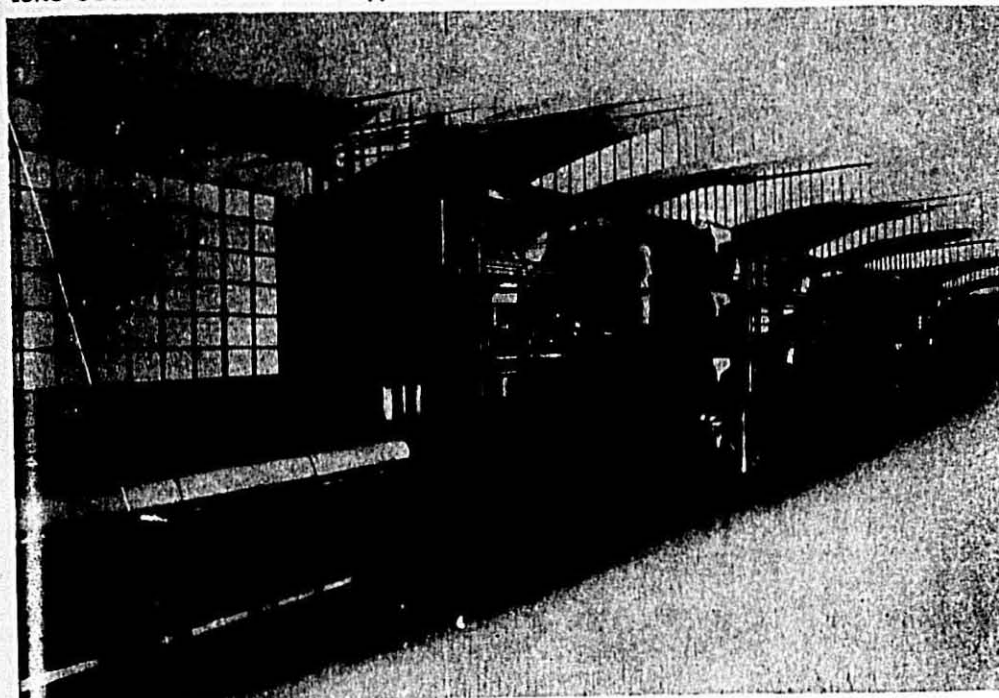
Worth 2-7636

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ALL ABOUT EGGS

A Question Of Color

In purchasing eggs for the egg noodle and baking industries, yolk color is often a vital factor. Some of the important facts presented by Henningsen Headlines follow.

High-color in eggs is directly proportional to the amount of carotene present in feed. Natural feeds such as alfalfa and yellow corn contain more carotene than most prepared feeds and therefore result in darker yolks.

The quantity of high-color eggs is limited because the peak season for production of high-color eggs is short, from about April 1 to June 15 when hens are fed on grass and other natural feeds. During the remainder of the year, the use of prepared feeds tends to produce much lighter colored eggs. Most noodle manufacturers prefer a NEPA 4 yolk or better, but because of limited quantities, large quantities of NEPA 3 are used during the year. National Egg Products Association scores color from 1 to 5.

There is no large scale movement by egg producers to use specially prepared feeds designed to increase egg color. An overwhelming percentage of eggs produced is for the consumer shell egg market where the lighter the color, the higher the grade. For this reason, production of eggs for color is impractical on a large scale. Farmers will continue to gear their production to satisfy the predominantly light-color demand as long as consumer shell egg demand dominates the market.

Dried Egg Color

When eggs are dried the color does not change. Under normal conditions, there is no measurable difference in color between egg solids and the original liquid egg.

There is a difference in color uniformly between liquid eggs and egg solids. Egg solids provide a higher degree of uniformity since any one run can be completely controlled for color. In the case of liquid eggs, color can vary even during a single day's run as different batches are frozen.

Color is measured by the widely accepted NEPA scale which is currently in use. In this system, color is extracted with acetone and measured by means of light transmission compared with a known standard. The NEPA scale has several disadvantages: the statistical variation is high, results are not easily reproducible between laboratories, and analysis cannot be performed on the finished product.

Many people in the industry are advocating the carotene method of analysis which overcomes all the disadvantages of NEPA. Here carotene is extracted and measured against a known standard carotene solution by light analysis. The carotene method is approved by the American Association of Official Agricultural Chemists.

The demand for high-color is increasing. The need for high-color yolks is increasing because of greater consumption of egg noodles and pound cake.

Shell color varies from white to deep brown and is determined by the breed of the hen. The nutritive value of the egg is not related to shell color in direct contradiction of the once popular belief that white eggs are more nutritious than brown eggs.

About Yield

How many eggs in a case? Thirty dozen, says Henningsen Headlines.

How much egg in a case? The answer to this question, known as "yield", varies during different times of the year.

Yield is defined as the weight in pounds of edible liquid egg derived from a case of shell eggs. The peak yield period of the year runs from February to June when yields in excess of 40 pounds are standard. During the remainder of the year yields fall well below this level to 36 pounds or less. Yield also varies geographically.

Because the egg market is a highly complicated one with literally hundreds of factors affecting price it is often difficult to point out a direct relationship between yield and current price. But theoretically, if the price of shell eggs remained constant during a given year, the price of processed eggs would be lower during the peak yield season and higher during the remaining part of the year.

For this reason, breakers seek to break and dry a maximum number of eggs when yields are highest. Other reasons are that peak yield periods correspond with the periods of greatest quantity of shell eggs laid and greatest quantity of high quality eggs produced.

Yield drops during summer and fall as the market starts receiving smaller pullet eggs and a higher percentage of hard-to-separate eggs. Hot weather conditions also take a toll with a higher percentage of eggs found to be inedible.

In order to insure a uniform high-standard quality in egg solids pro-

duced throughout the year, Henningsen's quality control supervision is augmented during the low yield months. An efficient grading operation results in the removal of all poor quality eggs and an alert egg breaking operation results in the discarding of a larger percentage of eggs after breaking. During this period the breaking operation becomes slower to assure proper separation and selectivity and labor costs become higher. This selectivity is another factor limiting the amount of liquid egg available for drying by Henningsen during the low yield months, thus maintaining high quality.

Processed Eggs

Liquid egg and liquid egg products production (ingredients added) during September 1958 totaled 32,840,000 pounds. This was 110 percent more than in September 1957, and the largest production for the month since 1944. The quantities used for immediate consumption, freezing and drying were all larger than in September last year.

Egg solids production at 3,858,000 pounds, compares with 1,169,000 pounds in September 1957 and the 1953-57 September average production of 1,300,000 pounds. The large increase over a year earlier continued to be in the production of whole egg solids produced under Government contract. Total production in September consisted of 2,570,000 pounds of whole egg solids, 500,000 pounds of albumen solids, and 1,300,000 pounds of yolk solids. Production in September 1957 consisted of 242,000 pounds of whole egg solids, 370,000 pounds of albumen solids and 351,000 pounds of yolk solids.

Liquid egg sold or used for immediate consumption during September 1958 totaled 3,006,000 pounds compared with 988,000 pounds in September 1957.

Liquid egg frozen during September totaled 15,500,000 pounds -- up 1 percent from September last year and more than twice the 1953-57 average for the month. Frozen egg stocks decreased 13 million pounds during September, compared with a decrease of 17 million pounds in September 1957 and the 1953-57 average decrease of 21 million pounds.

Cash Egg Market

Current receipts of shell eggs in the Chicago market declined in early August to a range of 22 to 23 cents. From

Continued on page 37.

THE MACARONI JOURNAL

FAMOUS SYMBOLS...



Santa Claus!

A glorious symbol of the joys of childhood... the magic of imagination... the mystery of the unknown - Santa Claus!

This jolly old elf has been the symbol of Christmas gaiety for many decades. The name Santa Claus was derived from Saint Nicholas, the patron saint of children of German origin. Dutch settlers first introduced him in New York. The feast was celebrated originally on December 6, and is still observed in some parts of Germany on that day.

But in the United States, young and old eagerly await the visit from Santa Claus on Christmas. It is an exciting tradition, full of mysticism, suspense and fulfillment of dreams.

NO. 3 IN A SERIES OF FAMOUS SYMBOLS

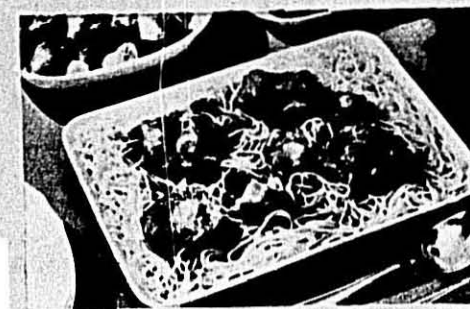
NORTH DAKOTA DURUM WHEAT IS A GREAT TRADITION, TOO!



There's no mystery, there's no suspense, when you depend on North Dakota Durum Wheat for your macaroni products.

North Dakota farmers take pride in raising 85% of the world's durum wheat. The North Dakota Mill & Elevator takes pride in milling the best of this wheat into Semolina and Durum Flour for you.

As we turn the pages into another great year, make it a more prosperous year by selecting the Semolina and Durum Flours that will make your products the finest on the market.



Grown and milled in the heart of the world's greatest durum area

NORTH DAKOTA MILL AND ELEVATOR
Flour Milling Division Grand Forks, North Dakota



THE ULTIMATE TEST is ACTUAL PRODUCTION!

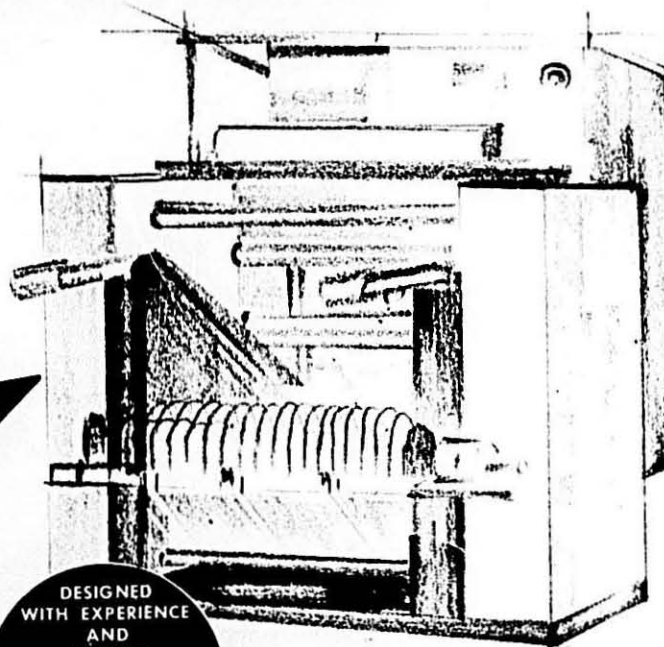
The ultimate test of any automatic spreader takes place in actual production.

Our actual experience with automatic spreaders dates back to 1941. This experience includes the design and building of over 100 spreaders.

Come and see the new DEMACO 1500 lb. — 4 Stick Automatic Spreader in actual operation. Come and get the facts—as only DEMACO gives you these features.



1. EXPERIENCE
2. QUALITY BUILT
3. RUGGED CONSTRUCTION
4. SMOOTH OPERATION
5. SLOW EXTRUSION OVER 4 STICKS
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Macaroni Cutters

Macaroni Products

Continued from page 6

addition to their own contribution to the menu, they are carriers for nutrients provided by other foods. Because they absorb flavors readily, they are excellent foundation food for meats, seafood, cheese, eggs, fowl, vegetables, and even fruit.

Macaroni products fit well into any normal diet from childhood to old age. Because they are digested at a moderate rather than a fast rate, they supply quick energy and, at the same time, give the kind of satisfaction which prevents return of hunger too soon after a meal.

Children need large amounts of such food, for they require energy for growth as well as for vigorous activity. Since they like macaroni, it often can be made the carrier for foods which they are reluctant to eat when served alone.

Ways to Use Macaroni

Macaroni products fit well into any part of the menu from soup to dessert and combine easily with many foods.

Take soups, for example. Most any soup is better with the addition of egg noodles in fine strips or in fancy shapes such as alphabets, stars, or seeds. Consomme, vegetable soup, and bouillon are just a few that are improved by the addition of egg noodles. Besides absorbing and spreading out other flavors present, the egg noodles add texture interest to clear soups and nutritive value to all soups.



A Tempting Noodle Dessert

There's no limit to the number of main dish combinations which can be achieved economically and easily with any of the macaroni products. For baked casseroles or top-of-the-stove dishes, they may be combined with eggs, fish, fowl, vegetables, meat, or cheese. Macaroni products enable leftovers to be brought to the table a second time with an entirely new look. Dressed with butter and perhaps a

few additions like poppyseeds, nuts, or tomato sauce, macaroni products are a welcome change from potatoes. Consider egg noodles with poppyseeds as an accompaniment for veal chops, spaghetti with tomato sauce for pork chops, or macaroni with butter and finely minced parsley with fish.

Macaroni gives heartiness to salads and blends flavors readily. Any of the salad vegetables, meat, fish, fowl, eggs, and fruit may be used with macaroni for salad combinations. These salads have an unwelcome quality which makes them perfect picnic food.

Many pudding and custard recipes call for egg noodles, particularly those of Hungarian origin. Egg noodles are used more often for desserts than other macaroni products, perhaps because they already contain 5.5 per cent egg solids.

These tested recipes of the National Macaroni Institute illustrate some of the popular uses of macaroni, spaghetti or egg noodles.

Spaghetti and Meat Balls

(Makes 4 to 6 servings)

- 1 lb. ground chuck beef
- 1 cup buttered soft bread crumbs
- 1 tablespoon chopped onion
- Salt
- Pepper
- 3 quarts boiling water
- 8 oz. spaghetti
- 2 garlic cloves, minced
- 2 tablespoons butter or margarine
- #2-1/2 can tomatoes, strained
- 1 6-oz. can tomato paste
- 1 beef bouillon cube
- 1 bay leaf
- 1 tablespoon chopped parsley



Spaghetti and Meatballs

Meatballs: 1/2 teaspoon salt, and a dash of pepper together well. Shape meat into 12 to 18 balls. Saute in butter or margarine with garlic until browned. Remove from pan. Add strained tomatoes, tomato paste, bouillon cube, bay leaf, parsley, and 1 teaspoon salt to dripping in pan. Simmer 50 to 60 minutes. Remove bay leaf. Add meat balls and heat thoroughly. Add 1 tablespoon salt to boiling water. Gradually add spaghetti so that water continues to boil. Cook uncovered, stirring occasionally until tender; drain. Dot with butter or margarine, if desired. Place spaghetti on serving plate and top with meat balls and sauce.

Egg Noodle Fruit-Nut Pudding

(Makes 6 to 8 servings)

- 1 tablespoon salt
- 3 quarts boiling water
- 8 ounces egg noodles
- 4 eggs
- 1/2 cup sugar
- 1/8 teaspoon nutmeg
- 1 quart milk
- 1 cup seedless raisins
- 1/2 cup chopped nuts

Add salt to rapidly boiling water. Gradually add egg noodles so that water continues to boil. Cook uncovered, stirring occasionally, until tender. Drain. Beat eggs slightly; add sugar and nutmeg; blend well. Stir in milk, raisins and nuts. Add egg noodles and mix thoroughly. Pour into greased casserole (2 quart). Bake in hot water bath in moderately hot oven (375°) 1 hour and 15 minutes. Let cool to room temperature. Serve.

Stuffy Macaroni and Cheese

(Makes 4 servings)

- 3-1/2 teaspoons salt
 - 3 quarts boiling water
 - 8 oz. elbow macaroni
 - 1 teaspoon dry mustard
 - 1/8 teaspoon pepper
 - 1 cup milk
 - 8 oz. processed American cheese sliced
- Add 3 teaspoons salt to rapidly boiling water. Gradually add macaroni so that water continues to boil. Cook uncovered, stirring occasionally, until macaroni is tender. Drain. Place mustard, pepper and remaining 1/2 teaspoon salt in top of double boiler. Gradually blend in milk. Add cheese and cook over hot water until cheese is melted. Add cooked macaroni and mix together well. Heat thoroughly and serve.

Success Story

One of the biggest success stories in the still comparatively recent history of new crop research is the broccoli



Macaroni and Cheese with bacon garnish

tale. While the date of introduction of this now highly popular vegetable into the United States is not known, until the 1920's it was grown only in backyards, largely by Italian immigrants. However, sometime during the roaring twenties it made its appearance at fresh fruit and vegetable markets. It was not, however, until the frozen food business was well under way that the acreage and heavy merchandising of broccoli got well started. Today it is third highest of the frozen vegetables, excluding potato products... a striking example of the success possible with some attention to the development of new (in a specific area) crop uses.

The advent of large scale frozen foods has had an impressive and long-range effect upon the agricultural economy of all national groups the strange and exotic foods of other cultures and lands. The nation-wide popularity of Chinese foods, Italian specialties, Mexican dishes, etc., has led to greatly increased acreage in new vegetable crops... adding both to the growth of the food industry and the reduction of land given to the growing of now surplus crops.

Merry Macaroni

Good food, attractively served, is one of the memorable parts of the Holiday season. Extra busy homemakers depend on skilled food producers outside the home for many of their festive fruit cakes, pies, smoked turkey

and other glamorous delicacies. Others like to express their own culinary accomplishments and turn out elaborate foods themselves.

A most dependable helper during this time of the year will be the macaroni family of foods. For there are many meals to plan and prepare during this busy time. Quick, easy-to-mix casserole dishes and platter suppers are often counted on for family or for company pre-Christmas suppers. Such foods as strips of scarlet pimiento, tufts of crisp parsley and sliced stuffed olives add a gay festive touch to these dishes.

And this macaroni trio goes to work for post-Holiday meals, too. The holiday bird appears happily in a steaming spaghetti casserole, a platter of turkey à la king on crisp noodles or a hearty macaroni salad served with soup and sandwiches.

Place For Pastina

Teen age diets fall short of recommended standards, a food industry report shows. Half of the teen age girls checked in California received inadequate amounts of protein and iron, about 20 percent of boys surveyed in New Hampshire lacked calcium and thiamine. Inadequate breakfasts are a key cause.

Sage Saying

Where law ends, tyranny begins. — William Pitt.



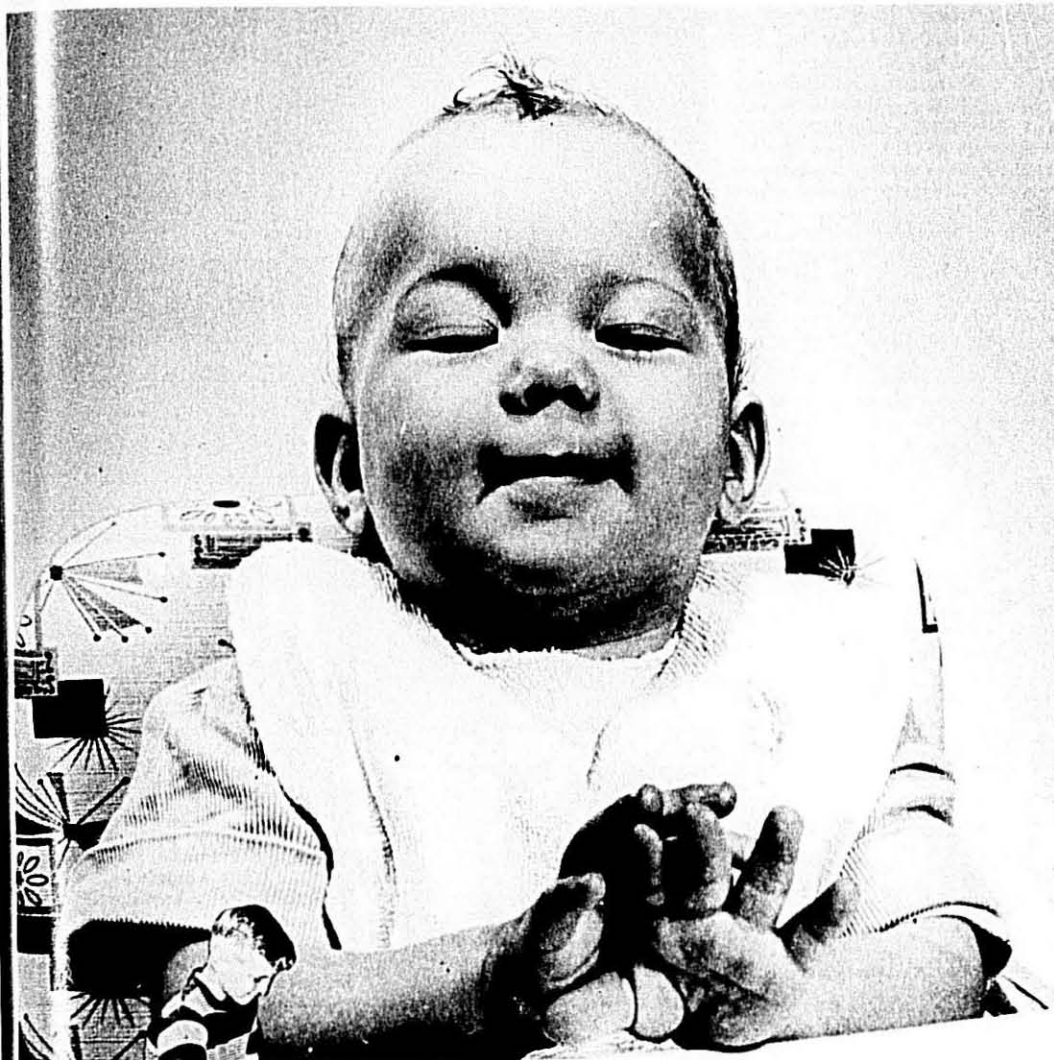
Take a tip from Ronco Foods of Memphis, Tenn. They've found that even the most eager flesh-and-blood salesman can't always be on hand to promote their macaroni and noodle products...but a Milprint package can! Those illustrated here are only two of the Ronco "family" of packages designed to stop and sell busy shoppers. Brilliantly precision-printed by Milprint's experienced craftsmen, they extend an irresistible invitation to buy — as long as there's a customer in sight!

Want over half a century of packaging experience plus the widest variety of packaging materials and printing processes available anywhere? Call your Milprint man — first!

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THE MACARONI JOURNAL



Fulfillment...

Um-m-m good! Sure improves the disposition when the inner man is well filled with those yummy macaroni products made from Commander Larabee's Comet No. 1 Semolina.

From tots to teens... the durum taste is tops!



COMMANDER LARABEE

Durum Department

A DIVISION OF ARCHER-DANIELS-MIDLAND-MINNEAPOLIS

DECEMBER 1959

Testing Tools

Continued from page 19

appearance of finished goods are connected with the behavior of proteins (gluten) the cooking properties are based on the characteristics of the starch component in semolina. The behavior of starch during gelatinization during the process of cooking cannot be determined at room temperature. It is necessary to run the products to be tested, whether they are semolina or ground up macaroni, at the same temperatures which are used in cooking. The instrument created for this purpose, is the amylograph. The amylograph is a recording viscosimeter with one very peculiar feature: It can be operated at a constant temperature, which is possible with any viscosimeter, but it can also be operated at a steady increasing temperature of, say, 1-1/2° C. per minute. Thus, the cooking cycle is under strict control and faster or slower heating during cooking cannot occur.

The starch quality in the raw material is by far the dominating factor which determines cooking properties, but it is not the only factor. With the introduction of vacuum presses, it was found that cooking time sometimes was increased three to four minutes. This is probably because in vacuum pressing the density arrived at is very high and therefore it takes longer for the cooking water to penetrate and gelatinize the starch properly. The time can be prolonged in such a way that enzymatic activity may produce a slight sliminess. Therefore, macaroni manufacturers have been forced to change the wall thickness of their products after the introduction of the vacuum press.

Some macaroni processors also use the extensigraph for testing the mechanical strength of finished long goods either before or after cooking.

Moisture Testing

The determination of moisture in raw material, be it semolina or egg powder, is important not only from an economical point of view, but also as a factor going into the calculation of water to be added in production. Even the simplest formula for determining water content has to take into consideration the moisture content of the raw material. Furthermore important is the determination of the moisture content after the product leaves the die for a check-back on the ratio of the dry and liquid components of the dough. Finally, but most important is the supervision of the loss of moisture during drying which enables the macaroni maker to set up and then keep constant a rigid schedule of moisture extraction, so important for proper quality.

Merchandise during drying which has already formed a hard surface has to be ground up. We found that a mill built on the so-called Wiley principle does an excellent job on any type of macaroni in any state. It will grind it up to a fineness of fine semolina and it can also be used to grind up finished



Committee Meetings. The National Macaroni Institute Committee met recently to consider plans for 1960. The map at the background indicates the theme: "Macaroni Salutes the Fifty-States." Standing, left to right, are Lloyd E. Skinner, Peter J. Viviano, C. W. Wolfe, Vincent F. LaRosa, Emanuele Ronzoni, Jr., Theodore R. Sills. Seated, Chairman Fred Mueller and Horace P. Giola.

In a modern macaroni plant moisture testing is going on day and night continuously. It has been found cumbersome and too time consuming to rely on a laboratory and usually the equipment has to be used right in the plant. Equipment must be rugged, simple, and be able to carry out dozens of moisture tests in a short time. Well-proven for this purpose is a ten dish type Moisture Tester introduced for the last 30 years all over the world. Between 1 and 10 samples can be inserted at the same time. The standard drying time is 1 hour at 130° C. for all products from raw material to the finished macaroni. A rapid method of 20 minutes can be used for semolina alone, but not for other products. The accuracy is very high, better than ±2%. Many processors, however, use an increased temperature of 140° C. and thereby reduce the time to 35 minutes with not more than 1/10 of 1% loss of accuracy.

Most products up to 19% moisture content can be tested without grinding. They are cut in 3/8" pieces and then inserted into the test dish. Merchandise during drying which has already formed a hard surface has to be ground up. We found that a mill built on the so-called Wiley principle does an excellent job on any type of macaroni in any state. It will grind it up to a fineness of fine semolina and it can also be used to grind up finished

products either for moisture testing or for testing in the amylograph.

The macaroni makers have always complained that the time for testing moisture during drying is too long to make proper use of the results obtained. Some time ago I designed a moisture tester which permits to determine moisture in any type of plastic material, beginning with a dough even if only half mixed or products coming from the dies or any stage of the drying process in 6 to 7 minutes.

It works as follows: A sample of 5 grams of the product to be tested is laid between two round sheets of filter paper and then pressed under a little Carver press with a pressure of about 5 tons. This will impregnate the two filter papers with dough so that the two papers are thinner after the dough is in than they were before the dough was inserted. The sheet thus obtained and consisting of the two filter papers with the dough impregnated in between is suspended on an optical scale the dial of which is calibrated in moisture directly. From both sides of the sheet infrared heat is shot against the filter paper. In the beginning, the two infrared bulbs of 1500 watts are only two inches from the filter papers and a little motor will then retract the two bulbs in order to avoid scorching of the paper and the dough which will occur if only a little residue of water is left in the dough.



The Standards Committee meeting this fall authorized investigations to improve research facilities on durum at the North Dakota Agricultural College. Director of Research James J. Winston is collating background material on macaroni research. Present at the meeting were the following: Seated, from left to right, Paul Vermeylen, Chairman Roger DiPasca, James Winston. Standing, Peter J. Viviano, Vincent F. LaRosa, Horace P. Giola, Lloyd E. Skinner.

Unfortunately, this machine could not go into manufacturing because when it was ready, the strong infrared bulbs we needed were no longer being made. Since then we have not been able to find uniform infrared sources which will do the trick. Recently, however, a new infrared device has come into production and we are trying to make it do the job. If we succeed, we will certainly have the best and fastest equipment for moisture testing on wet products in the macaroni industry.

Cast Egg Market

Continued from page 28

there they made a gradual ascent to increase almost 4 cents to range 26 to 27 cents at the end of October.

Frozen whole eggs ranged 21.5 to 22.5 cents in August. They hit their low in the second week of October at 20 cents and then rose to the original beginning August level by the end of October.

Frozen egg whites, still a drug on the market, hovered slightly above or below an 8 to 9 cent range.

Frozen egg yolks of 45 percent solids in No. 4 color were very steady over a three month period ranging 52 to 53 cents and strengthening at October's close to 53 to 56 cents. No. 5 color was quoted at 1 to 2 cents premium.

Dried yolk solids were the only item

in the schedule to drop in price. In the first week of August they ranged \$1.10 to \$1.21 a pound and then declined steadily to month's end where they held at \$1.04 to \$1.14 for the next two months.

Soup Eating Habits

The National Menu Census reports condensed soups are used frequently as a cooking ingredient. About one of every six cans purchased is used for that purpose. In the case of cream of mushroom soup, every other can is used in cooking. It's true of one in every three cans of cream of celery soup, and roughly 25 percent of tomato and cream of chicken soup.

When mushroom soup is used as an ingredient, these are the dishes that are made, in order of frequency: noodle dishes, macaroni dishes, creamed dishes, seafood casseroles, meat casseroles, gravy, baked scalloped dishes, beef dishes, rice dishes, spaghetti dishes, poultry dishes, vegetable dishes, and foreign.

Dishes using tomato soup as an ingredient rank in the following order: spaghetti dishes, beef dishes, Mexican dishes, macaroni dishes, salad dressing, stuffed dishes (such as baked chicken), noodle dishes, rice dishes, meat dishes, sauces, stews, sandwiches, and salads.

Tomato Paste in Large Cans

Tomato paste in 12-ounce cans is being pecked by Hunt Foods, 24 to a case, for national distribution. Recipe booklet is offered in Hunt's national tomato paste ads. The product reportedly is the only tomato paste backed by national magazine promotion.

Winter Plantings in Mexico

Seeding of experimental bread wheat, durum and oat breeding lines from Upper Midwest and Canadian experiment stations was completed in mid-October at Ciudad Obregon, Mexico, Donald G. Fletcher, executive secretary, Rust Prevention Assn., Minneapolis, reports.

These plantings are part of a continuing winter increase program sponsored by the association to speed development of improved varieties. Winter plantings in Mexico make two crops possible each year as seed will be returned next spring to U. S. and Canadian plant scientists. During the last five winters more than 50,000 wheat, oat and barley breeding lines have been grown in this Mexican increase program.

Winter increases have provided the plant scientists with an important assist in their efforts to develop improved varieties. Currently the extensive acreage of Selkirk wheat grown in the Upper Midwest and Canada is vulnerable to stem rust attack.

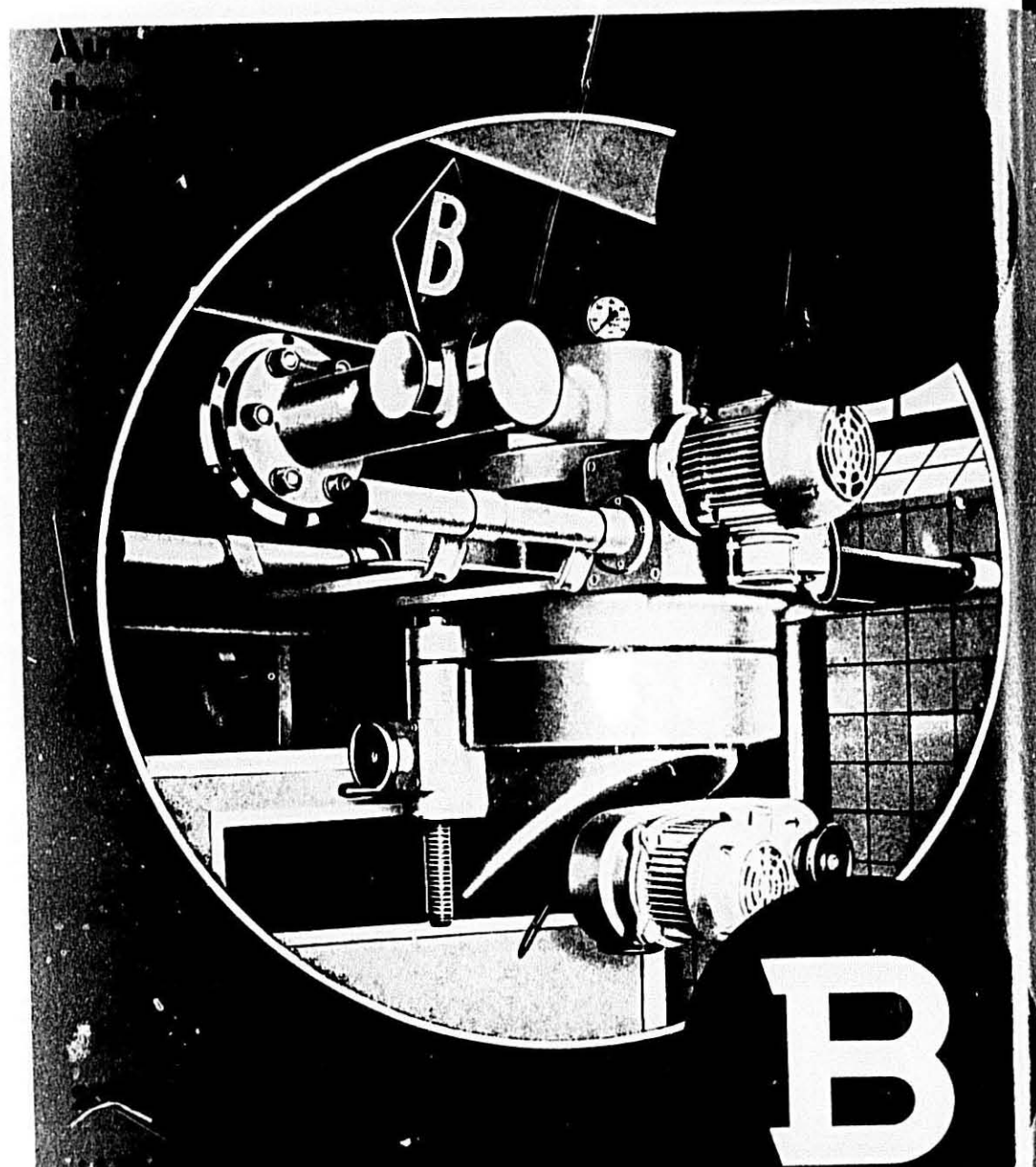
Winter increases in Mexico coupled with tests of breeding lines against dangerous North American rust races in Puerto Rico are important steps in strengthening rust control and crop improvement programs.

Ready-Shredded Cheese

Pizza cheese, ready-shredded and conveniently packaged for sprinkling on Italian foods, is now being marketed nationally, by Armour and Company under its Miss Wisconsin brand.

The cheese is Italian style Mozzarella and is packed in four-ounce transparent pouches containing an exact cupful for easy recipe management. A suggested retail price of 29 cents returns the retailer a 24 to 27 per cent margin.

The airtight pouch of laminated polyethylene and cellophane preserves freshness under refrigeration. The easy-opening package permits the cheese to be sprinkled freely on the pizza or other foods. The home grating or shredding chore is completely eliminated. On the reverse side of the package are serving suggestions and a recipe for quick pizza.



Season's Greetings

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Warren Keller Mgr., Flour Svc. Div. Kansas City	Jack Salvers Kansas City	Paul J. McGrath Kansas City	W. Quincy Isaacs Kansas City	L. L. McAninch Kansas City	Jim Doty (Cons.) Kansas City	D. R. Lewis Kansas City
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Mrs. B. Thompson Dallas	Dr. T. McMillan St. Louis	Dr. W. Williams Allenton	W. J. Davis Buffalo	Paul G. Callison Portland, Ore.		

To all our friends, our sincere wishes for a very Merry Christmas and a Happy and Prosperous New Year.

R. Whiteside
Pres.

Sterwin Chemicals - Subsidiary of Sterling Inc. 1430 Broadway, New York 18, N. Y.

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JACOBS-WINSTON LABORATORIES, Inc.

EST. 1920

Consulting and Analytical Chemists, specializing
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duction and labeling of Macaroni, Noodle and
Egg Products.

- 1—Vitamins and Minerals Enrichment Assays.
- 2—Egg Solids and Color Score in Eggs, Yolks and Egg Noodles.
- 3—Semolina and Flour Analysis.
- 4—Rodent and Insect Infestation Investigations. Microscopic Analyses.
- 5—SANITARY PLANT INSPECTIONS AND WRITTEN REPORTS.

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DURUM SEMOLINA GRANULAR FLOURS



Call Ray Wentzel
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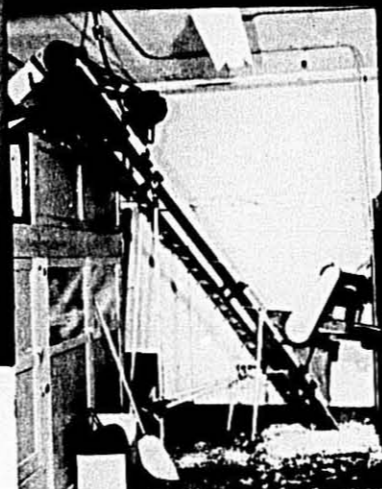
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THE MACARONI JOURNAL

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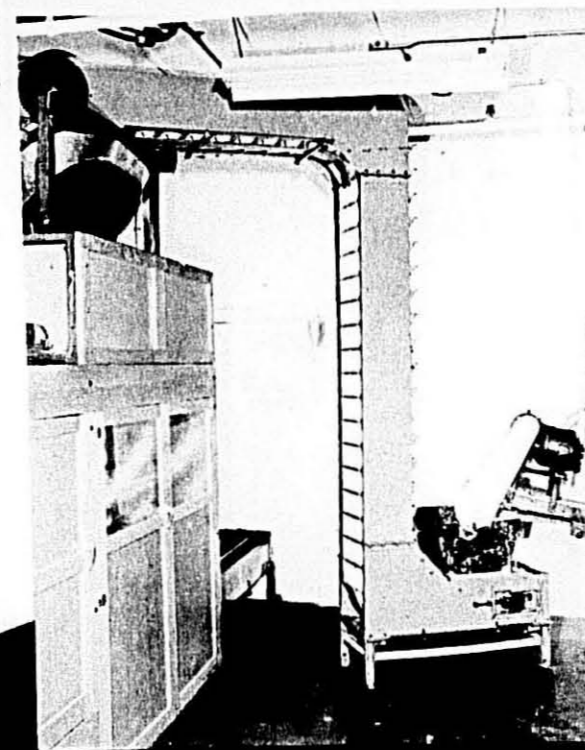
ASEECO—Staffed with years of experi-
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SPECIALISTS in Automated Systems from
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ENGINEERED TO SUIT
YOUR REQUIREMENTS!



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ASEECO INC.
TO MEET YOUR NEEDS

RETROSPECTIONS

by
M. J.



40 Years Ago

- "The manufacturers of macaroni, noodles and kindred products have learned to regard the New Macaroni Journal as absolutely indispensable to their business. There are many reasons for this, chief of which is that it has since its first appearance held a position in the macaroni world absolutely unapproached by any other trade paper covering this growing industry". Cover message.
- The Minnesota legislature plans an experimental flour mill in Minneapolis. Capacity: about 100 barrels daily.
- Durum prices soaring with quality below average. Millers were using durum for gluten to strengthen short spring wheat supply.
- Tomato paste, with Italian origin and American development, is promoted for use as a macaroni sauce.
- Coal strike shuts down many New York factories. Shut down hurts business and will raise prices.
- Fire destroyed the offices, shipping and store rooms of the Atlantic Macaroni Company in Long Island City, New York.
- The Busalacchi Brothers Macaroni Company of Milwaukee reports an increase of \$30,000 in its capitalization.

30 Years Ago

- The Millis Advertising Company of Indianapolis was commissioned by the National Macaroni Manufacturers Association to assemble facts about the consumption, sale, distribution and production of macaroni products to see if there is some way in which consumption can be increased in this country.
- Thirty-eight radio stations broadcast the Betty Crocker Macaroni Story to millions in the United States and Canada.
- Joseph Freschi, president of Mound City Macaroni Company in St. Louis, repeated his oft-presented plan for financing a national macaroni publicity campaign - a 5 or 10 cents tax on all raw materials sold to manufacturers.
- Mario Tanzi & Brothers of Boston announce their perfection of a die for fusilli.
- The International Macaroni Manufacturing Company, Inc. of Houston, Texas, announced plans for a contemplated new plant.

20 Years Ago

- With war raging in Europe, a Macaroni Journal editorial said, "Let's Hold Our Heads and Keep Our Balance."
- A special committee to study the problem of slack-fill and deceptive packages was appointed by Association president Harry Diamond. Its chairman, Joseph J. Cuneo of Connellsville Macaroni Company; Edward Z. Vermyle, A. Zerega's Sons; J. C. Luehring, Tharinger Macaroni Company; Guy La Marca, Prince Macaroni Company; C. W. Wolfe, Megs Macaroni Company; and B. R. Jacobs.
- The 1939 durum wheat crop was slightly in excess of 33,144,000 bushels, reports the Agricultural Marketing Service. The average yield was 10.7 bushels per acre.
- A new durum mill was erected at Middleport, New York - the Middleport Durum Mills, J. A. Linehardt, president.
- The plant of the Krumm Macaroni Company of Philadelphia was to be dismantled according to George B. Johnson, general manager of the Keystone Macaroni Company in Lebanon, purchasers of the Philadelphia plant.

10 Years Ago

- The 1949 Durum Show was a record breaker. Roy Rutledge of Langdon, North Dakota, was crowned Durum Wheat King and was awarded the N. M.M.A. plaque as sweepstake winner.
- The 1949 durum crop is estimated at 38,996,000 bushels by the Crop Reporting Board, U. S. Department of Agriculture.
- Eggs are 15 cents a dozen. 600,000,000 eggs are being stored in a limestone cave in the Hickory Creek area, near Atchinson, Kansas.
- The Roma Macaroni Manufacturing Company plant in Chicago was completely destroyed by fire according to Charles Fresto, manager.
- Nicholas J. Cavagnaro, secretary of the Conco, Inc. Machine Company of Brooklyn, retired August 31 according to an announcement by President Conrad Ambrette and Treasurer Joseph DeFrancisci.
- "Spaghetti, beloved in every modest Italian home, is the darling of the gourmet today", says Marie Peters of the American Home Kitchen.

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Want Ads.....75 Cents per Line

FOR SALE - Clermont Noodle Cutter with five sets standard cutting width rollers. Dough Breaker, Preliminary Noodle Dryer. In excellent condition, in operation now. Reasonably priced. Write Box 154, Macaroni Journal, Palatine, Illinois.

WANTED - Complete Stainless Steel Tanks with agitator, pump, and valves for mixing of Eggs for Egg Noodle Production. Box 164, Macaroni Journal, Palatine, Illinois.

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Credit

The dies and macaroni illustrations in the Aseco advertisement on Page 31 of the November issue of the Macaroni Journal were made through the courtesy of the Gabriele Macaroni Company of Los Angeles, California.



Season's Greetings
from the Staff of
The Macaroni Journal

THE MACARONI JOURNAL

Season's Greetings - by the Tons

- Our sincerest thanks for the privilege of serving you
- Our best wishes for a very successful and prosperous New Year

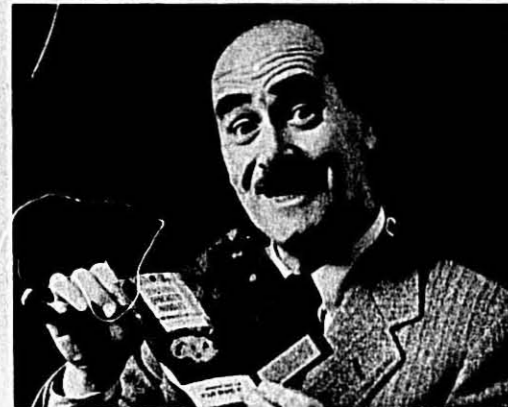
FROM THE
VITAMIN DIVISION
HOFFMANN-LA ROCHE INC.
in the United States and Canada
and our distributors



Recipes in 5 cookbooks



Recipes in newspapers



Recipes in special booklets



Personalized recipe service

How Betty Crocker is helping you make more sales

Betty Crocker encourages homemakers to serve spaghetti, macaroni and noodle main dishes often with scores of intriguing recipes in all five of her popular cookbooks. Popular cookbooks? Yes sir! Nine million homemakers now use them regularly.

General Mills sends spaghetti, macaroni and noodle recipes and photographs to newspaper food editors across the country for use in their columns.

Betty Crocker creates special recipe booklets for promotion-minded manufacturers to distribute to their customers. Ask for the new, full color macaroni, spaghetti and noodle recipe booklet from your General Mills salesman. (Available in U.S.A. only—at less than printer's cost.)

A consultant to America's homemakers she provides advice and recipes for macaroni products. Last year, through her Phone and Personalized Letter Service alone, she helped 10,000 women prepare tastier meals.

Helping pave the way for each call your salesman make is America's first lady of food, the highly-respected Betty Crocker of General Mills.

She shows your customers how to use your macaroni in glamorous main dishes for company-style entertaining. And she demonstrates how they can economize with noodle hot dishes. She tells them how easy it is to fix new spaghetti meals, how delicious and nutritious macaroni products are. And the women believe and buy because Betty Crocker helps them in creating a variety of macaroni dishes . . . dishes that already have proven to be popular with American families.

DURUM SALES

Minneapolis 26, Minnesota



Our Promise For 1960

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Amber's Venezia No. 1 Semolina and Imperia Durum Granular will be milled from these reserves, assuring you of uniform color, quality, and granulation throughout the 1960 crop year.



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Farmers Union Grain Terminal Association

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