

**THE
MACARONI
JOURNAL**

**Volume 52
No. 4**

August, 1970

Macaroni Journal

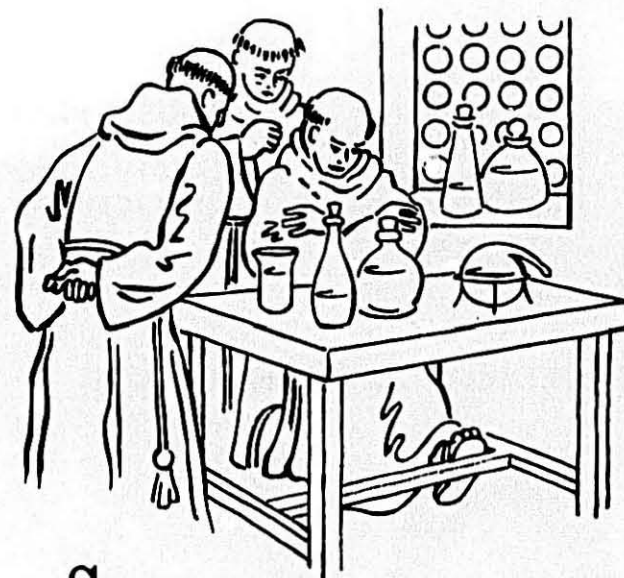
OFFICIAL PUBLICATION
OF THE
NATIONAL
MACARONI MANUFACTURERS
ASSOCIATION



AUGUST, 1970
**MACARONI MAKES
SENSE/CENTS**



PACKAGING PERSONALITIES



ABBÉ LAZARO SPALLANZANI

Eighteenth century Italian priest and biologist whose early experiments with microscopic organisms in 1765 disproved the theory of spontaneous generation of bacteria and led to boiling and sealing as preventive measures in the preserving of food-stuffs. It was a first step in the direction of food packaging.

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The Macaroni Journal

August
1970
Vol. 52
No. 4

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139 North Ashland Avenue, Palatine, Illinois. Address all correspondence
regarding advertising or editorial material to Robert M. Green, Editor,
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August, 1970

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Cover Photo

Pat Council holds the key to related item sales for grocers, to budget control for consumers: spaghetti, macaroni and egg noodles.

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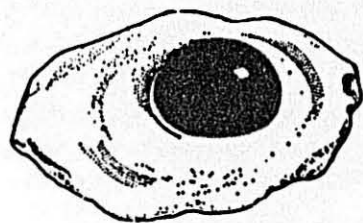


Macaroni Makes Sense / Cents

Macaroni makes sense for the consumer to balance her food budget.
 Macaroni makes cents for the grocer in building related item sales.
 The Institute makes sense for macaroni manufacturers by building a bigger market for macaroni. Send your pennies in each month.

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Year round farm procurement of fresh shell eggs allows us to process egg products every month of the year.

When you need dried egg solids or frozen eggs, call on the folks who can fill your requirements.

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Macaroni Makes Sense

A MAILER in the form of a 30-pound bag going to chain store and voluntary co-op merchandisers around the country from the National Macaroni Institute in May said:

Mr. Merchandiser:

For a BAG FULL of profits feature macaroni products in your displays! "Macaroni Makes Sense" is our industry theme for this year. "Macaroni Makes Sense" and cents for the retailer too, as one macaroni product sale can deliver a BAG FULL of related item sales!

From National Macaroni Institute
 Palatine, Illinois
 (Macaroni is our bag, too!)

Press Release

A press release going to the grocery trade publications read as follows:

"Display macaroni products and sell a bagful of related items is the theme of the National Macaroni Institute's current promotional campaign. Spaghetti, elbow macaroni or egg noodles are the basis of hundreds of delicious meals which are quick and easy to prepare, a real must for hot weather dining. Once a shopper like Linda Hollar puts the macaroni products in her shopping bag, you can bet it will be followed by meat, fowl, sauces, cheese, spices, produce, and all of the other good foods that go into a macaroni entree. 'Macaroni Makes Sense and Cents Too' for the retailer."

TV Kits

More than 70 television stations around the country have used the program kit "Macaroni Makes Sense/Cents in the Seventies" mailed by the National Macaroni Institute this spring. See page 4 of the May, 1970 issue of the Macaroni Journal.

Comments on the kit have been complimentary from the standpoint of interest and timeliness.

Films Bring Relevance To Classroom

Home economics teachers from all over the country gathered in Cleveland during the last week in June looking for ways to make their teaching better, easier, and "more relevant."

The theme of the 61st Annual Meeting of the American Home Economics Association was "The Family Faces Change." General sessions featured speakers on such topics as The Family Faces the Urban Crisis, The Family Faces the Influence of Environment, and



Linda Hollar puts macaroni in her shopping bag.

The Family Faces the Changing Role of Women.

At the Cleveland Convention Center teachers found many aids to help their teaching presentations. One was motion pictures. The food industry does a big job in promoting its goods and services through educational films.

For the past ten years, the National Macaroni Institute in cooperation with the Durum Wheat Institute and North Dakota State Wheat Commission has been distributing "Durum . . . The Standard of Quality" to classrooms and public service television stations, to tell the viewing audience about the development of durum wheat, its production,

and processing into macaroni foods.

The general distribution of the film to schools, service groups, civic organizations, etc., has logged in some 36,160 showings as of May, 1970, with a total viewing audience of approximately 2,000,000. For the first five months of 1970, there were 1,007 bookings with reported audiences of 83,000.

In television distribution since 1963, the film has logged 1,136 telecasts with an estimated audience of 44,000,000. For the first five months of 1970, 126 showings had been made.

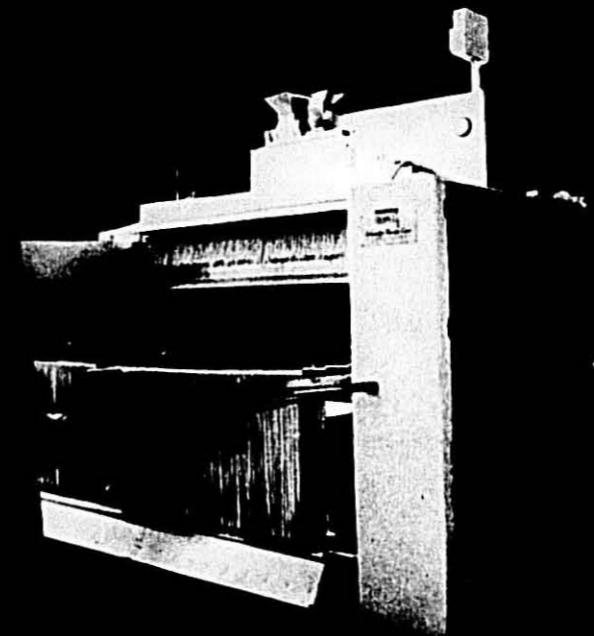
A second film distributed by the three partners is reported upon in the Durum Wheat Institute Report on page 16.



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MORE WITH** **DEMACO**

Eat the Basic Four Foods Every Day

ISABEL DU BOIS, Chicago Daily News Home Economics Editor, writes: "Although nutrition is not usually most folks' cup of tea, we will soon be hearing and reading about it." In the next few months an intra-industry group, the Food Council of America, will be making an all-out push to motivate every American to eat a balanced diet.

"Eat the Basic 4 Foods Every Day" will be the theme of the council's newly planned fall nutritional awareness program.

Why all this hulabaloo, you may ask? Why in this age of affluency is such a big push being put on nutrition?

Shocking Malnutrition

The reason is simple. When some 2,500 knowledgeable people gathered in Washington, D. C., last December for the White House Conference on Food, Nutrition and Health, they revealed the shocking fact that malnutrition in America is not confined to low-income groups, but extends to the affluent as well.

Surveys done by various conference panelists show that today the average American is less well-nourished than he was ten years ago; and the problem is continually increasing.

It was the belief of the Food Distribution and Retailing Panel that the food industry has every reason, both business and moral, to want to change this.

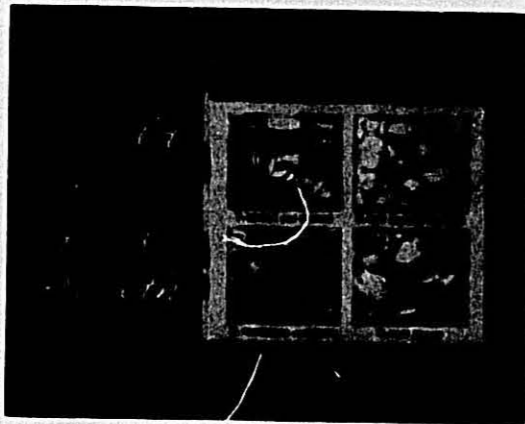
One disturbing fact brought home to this panel was that despite all efforts to provide the widest possible selection of foods, offering all the elements of a well-balanced diet in every conceivable form, today's shoppers are giving so little attention to healthful buying that America has become a nation of very poor eating habits.

Fall Campaign

As a result, they recommended the re-establishment of the Food Council of America, an intra-industry group which has not functioned since 1966, to draft and support a nutritional awareness program.

Many important food trade associations have banded together and pledged their efforts to support the program aimed at helping all consumers become more knowledgeable food shoppers and educating them in the knowledge of and use of nutritionally beneficial foods.

The National Association of Food Chains will encourage grocers to build in-store displays and promote through advertising during September and



October. Food Advertisers Service, 100 Amor Avenue, Carlstadt, New Jersey 07070, will coordinate the campaign and is offering three basic point-of-sale kits. Variations of these kits are available:

(1) Product theme banner reads: "Food is . . . the Wonderful World of Supermarket Choice." Two 40 by 60 inch theme posters read: "Food is . . . the choices you make for your family's health—Eat the basic 4 foods." and "Food is . . . what you choose wisely for nutrition's sake—Eat the basic 4 foods."

(2) Product theme banner reads: "Food is . . . the healthy way to brighten your day." Two 40 by 60 inch theme posters read: "Food is . . . the tool kit to build your family's health." and "Food is . . . the health you find on supermarket shelves."

(3) Product theme banner reads: "Food is . . . what nutrition's all about." Two 40 by 60 inch theme posters read: "Food is . . . your building blocks for family nutrition." and "Food is . . . cooking with nutrition."

Write the Food Advertisers Service for further information or samples.

Shield of Good Health

Recommended servings in the Basic Flour Food Groups:

Group 1—Breads and Cereals—four or more servings daily.

Enriched, whole grain or restored breads and cereals; other baked foods made with enriched or whole grain flour; enriched macaroni, spaghetti and egg noodles.

Group 2—Milk and Milk Products—to drink and in cooking.
Children—2 to 3 cups.

Teen-agers—4 or more cups.

Adults—2 or more cups.

Cheese and ice cream may replace part of the milk.

Group 3—Vegetables and Fruits—four or more servings daily.

Include a citrus fruit or tomato, a dark-green or yellow vegetable, and other vegetables and fruits, including potatoes.

Group 4—Meat Group—two or more servings daily.

Beef, veal, pork, lamb, fish, poultry, eggs . . . with dry beans, dry peas, nuts and peanut butter as alternatives and for variety.

Plus—other foods—to complete meals and to provide additional food energy and other food values.

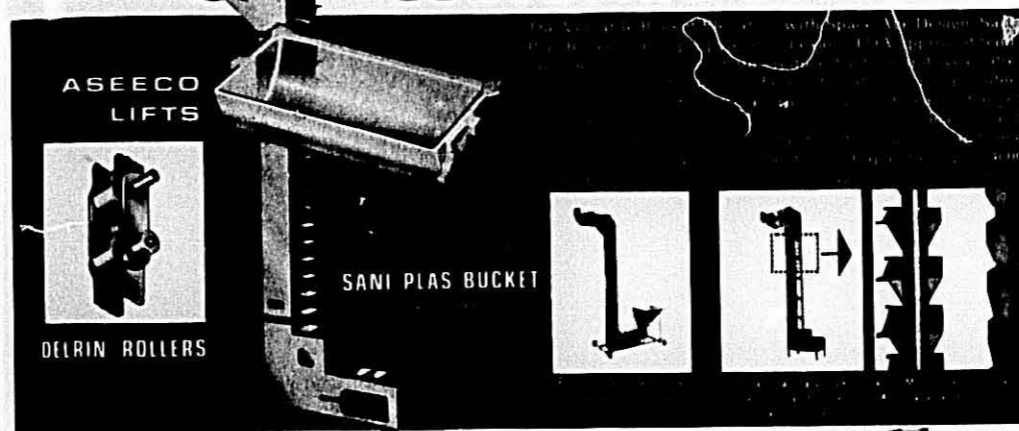
Nutrition Program

Kroger Company, third largest retail grocer in the U. S., has begun a nutrition program designed to help fight malnutrition and provide more nutritious foods, following recommendation by several panels at the White House Conference on Food Nutrition and Health. The program will include the enrichment of all white flour used in the firm's bakeries, enrichment of additional baked food items, inclusion of nutritionally balanced recipes and menus in food advertising, and research into the development of new food products high in nutrition.

Plentiful Foods

August is Sandwich Month. All wheat foods are in plentiful supply as are rice, chickens, and summer vegetables. Chicken and noodles are great!

ASEECO CONVEYING SYSTEMS



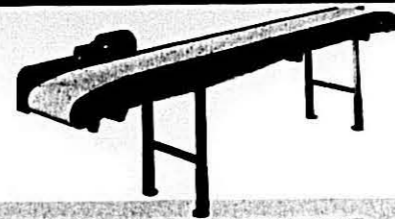
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SANI PLAS BUCKET

BELT CONVEYORS

A complete line of sanitary, modern streamlined standardized belt conveyors applicable to most conveying applications. Custom special designs available. Write for Bulletin CC-20



QUICK RELEASE CLAMP FOR EASY CLEANING AND CHANGING SCREENS

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BULK STORAGE AND MODULAR DISTRIBUTION SYSTEMS



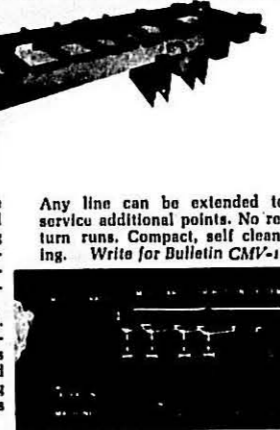
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The only Automatic Belt Storage System with first-in and first-out for the storage of non-free-flowing materials such as snack foods, cookies, frozen foods and/or other items prone to bridge.

Capacities up to 70,000 lbs. Bulletin CAC-20

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Any line can be extended to service additional points. No return runs. Compact, self-cleaning. Write for Bulletin CMV-10

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Write for your nearest representative.

Eating Habits Changing

The Decade of the Seventies will see dramatic changes in the eating habits of Americans, with more direct influence on the food industry by the consumer.

Such was the forecast of Vincent DeDomenico, chief executive officer of internationally-known Golden Grain Macaroni Company, in a recent talk before the Institute of Food Technologists.

Age of Consumerism

DeDomenico said the 70s are already shaping up as the Age of Consumerism, with the "spotlight of publicity" focussed on all manufacturers—big and little—to make certain that they contribute to the quality of life.

"Were it not for the housewife demanding quality, convenience and economy in the food she purchases, flour and salt would still be sold from barrels and fruit would be available only in season."

DeDomenico said American eating habits are due for a big change. "The traditional three meals a day will become four to six smaller ones . . . people no longer seem to have time for the leisurely meals of prior years."

This, he added, will mean more emphasis on "ready to eat foods and quick food service."

"For example, TV dinners of the future will be large enough to feed a hun-



Vincent DeDomenico

gry teen-ager and will be complete meals."

International Foods

International foods such as Italian, Spanish, Scandinavian and Japanese, will be in greater demand as the result of increased world travel by Americans. By the same token, he continued, travelers from foreign lands will want more American foods in their daily menus.

He predicted that frozen food will be used increasingly in restaurants, which will pave the way for expanded menus with consistent taste quality and more reasonable prices.

"Of the new food products to be developed in the Seventies," DeDomenico maintained, "it is estimated that 38 per cent will be for away-from-the-home eating, with emphasis on convenience."

Nutrition

Nutrition will also come in for its share of attention in the Age of Consumerism. "We manufacturers can make highly nutritious food products, but until they are purchased and consumed they have no value. Unfortunately we are finding built-in resistance on the part of the consumer to purchase health-oriented foods, except where the more nutritious food tastes as good or better than the item it replaces."

"The American housewife must awake to the importance of nutritional factors and apply her knowledge to family meal planning," DeDomenico stated.

Plenty of Rice

Rice is a plentiful food. Production this year is estimated at 85,000,000 hundredweights. The carryover from the 1969 crop is expected to be between 14 and 15,000,000 cwt. Thus, the total supply as of August 1 may be close to 100,000,000 cwt. or the third largest on record.

ASCS Buys Wheat-Soy Macaroni

The Agricultural Stabilization and Conservation Service, U. S. Department of Agriculture, Minneapolis office continues to buy wheat and soy macaroni and milk macaroni for distribution to the needy. Product is packed either in paperboard cartons or polyethylene bags in one-pound size packed 24 to the case.

Purchases in April totaled 4,280,640 pounds for distribution all over the country. In May, 1,647,192 pounds were bought. In June two purchases were made of 2,463,000 and 211,200 pounds. Three month total is 8,602,032 pounds.

Invitations went out for bids on 2,263,200 pounds for August shipment.

Veterans Administration Purchase

Veterans Administration at Hines, Illinois invited bids in June for long spaghetti, packed 20 pounds in a poly bag inserted in a corrugated container, for Somerville, N. J., E.J.I, California, and Hines, Illinois. Total of 28,300 pounds.

Sills Staff

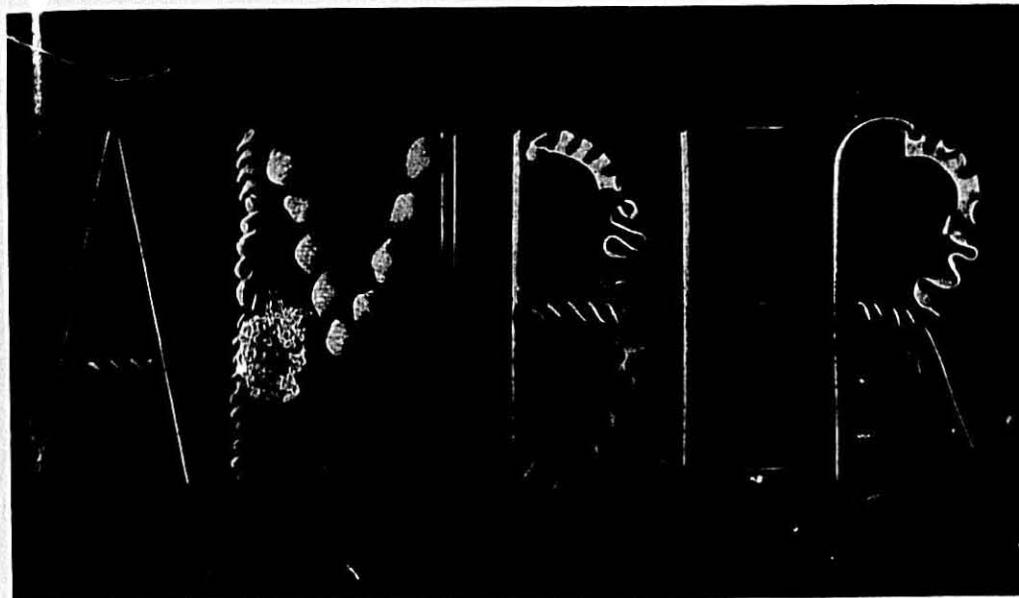
Theodore R. Sills of Theodore R. Sills, Inc., public relations, announces the promotion of Elinor Ehrman to executive vice president, New York office. Marian Laylin, macaroni account executive and member of the Women's Services Department, has been made a vice president.

Sills, Inc. merged with Burson-Marsteller recently.



Mr. Pat Ippolito, vice-president of Ideal Macaroni Co., in charge of Sales and Promotions, proudly shows a new product, Ideal Egg Noodles in a colorfully designed package.

This product along with Ideal Kluski Egg Noodles has been added to the large assortment of Ippolito's Ideal Macaroni products.



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In any size—any shape—it's always easier to control the quality and color of *your* products with Amber's first quality Venezia No. 1 Semolina, and, Imperia Durum Granular.

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We are prepared to meet *your* orders—prepared to ship every order when promised. And because of our rigid laboratory controls, highly skilled milling personnel and modern milling methods, you can be *sure* of consistent Amber quality. Be sure—specify AMBER.



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Prince Commercial Wins TV Award

The Prince Spaghetti television commercial was singled out for the best 1970 TV commercial in packaged foods products at the recently held festival by the American Television & Radio Academy. Shown in the photo (L to R.) are Joseph Pellegino, Jr., President of Prince Macaroni Manufacturing Company, and Zal Venet, President of Venet Advertising, Inc., agency which created the commercial, holding the "Clio" statuette which was received in recognition of the national TV award.

"Wednesday"

The commercial, based on the company's longtime theme, "Wednesday is Prince Spaghetti Day" stars a cast of Italians from Boston's North End who are real people, not actors. Happened like this: Dreaming of a possible commercial, Zal Venet and Joseph Pellegino took a leisurely walk through Boston's "Little Italy" one fine day, and said, "Why not?" They'd already gone the route with the usual cartoons, humor, personality spots. Here they were, right where the action is.

Next came Venet's creative and production people with a crew from PGL Productions, walking the same streets looking for people who would fit the roles in their new script. They spotted a youngster of nine darting out of a doorway, name of Anthony Martignetti, who had come from Italy two years ago. A real find. So was his mother, they discovered, when they went home with Tony for permission for him to take the leading role.

Plot

Plot has Tony running home for dinner. As he runs we cut to Mom in the kitchen cooking the spaghetti. Back to him. Back to mom. He finally makes it, exhausted, and the smile he gives out with at the sight of dinner is worth the price of the commercial. A real people-

smile. Not an actor-smile. And the spaghetti looks like real people-spaghetti. This was the first "Clio" award presented to a spaghetti company for a nationally recognized TV commercial. It won from a field of 1,803 entries in a competition judged by creative and production executives in Detroit, Chicago and New York. The board of judges was headed by Victor Bloede, President of Benton & Bowles. Jack Gifford, who stars in the Cracker Jack commercials, emceed the proceedings.

Other Winners

Over-all campaign winners were Alka-Seltzer for "The Special Sauce," "Unfinished Lunch" and "Politician" commercials created by Jack Tinker & Partners, New York and Talon Zippers for "Wedding," "Star," and "Escape" commercials created by DKG, New York.

American Home Counsel

John R. Stafford has been named General Counsel of American Home Products Corporation according to William F. Laporte, Chairman and President.

Mr. Stafford most recently has been group attorney for Hoffmann-LaRoche Inc., Nutley, New Jersey. His prior experience has been with the law firms Steptoe & Johnson and Covington & Burling, both in Washington, D.C.

A graduate of Dickinson College, he attended The George Washington University Law School where he was editor-in-chief of the Law Review.

Mr. Stafford resides with his wife and four daughters in North Caldwell, New Jersey.

Hygrade Appointments

Richard Berg, President of Hygrade Foods Products Corporation, Detroit, announced the appointment of Bernard Woodke as Vice President-Finance for Hygrade. Mr. Woodke comes to Hygrade from General Foods where he was Controller of the Maxwell House Division.

Harold B. Stroom, who has been Vice President-Finance and Executive Vice President, will continue with the company as Executive Vice President.

Mr. Berg also announced the election of three men as Vice Presidents. Mr. Vern Buol, Western Regional Marketing Manager, headquartered in Chicago; Mr. Ed Flomen, Manager of Independent Products Canada Limited, a division of Hygrade, headquartered in Montreal, and Mr. Ruben Van Leeuwen, President of Brechteen, an operating division of Hygrade, headquartered in Mt. Clemens, Michigan.



Buitoni Toasterino

Buitoni Foods Corporation has introduced the first frozen sandwich to use the convenience of the toaster for its preparation—Toasterino.

Toasterino follows the success of Buitoni's instant pizza, a product which Buitoni successfully launched three years ago as the first pizza to use a toaster instead of an oven.

The Toasterino is designed to appeal mainly to young adults and teenagers (as evidenced by extensive consumer research) or to anyone who feels young. Toasterino is round shaped; a juicy filling is sealed in a thin double crust. Each Toasterino weighs approximately two ounces. The first three flavors to be offered are Pizzaburger, Sloppy Joe and Grilled Cheese. The taste range will be widened eventually to include the preferences of everyone from grammar schooler to gourmet.

The first two markets into which Buitoni is introducing the product are New York and Chicago. It will be supported by heavy television and newspaper coverage.

In line with the company's policy of preserving traditional recipes with their natural ingredients, the Toasterino packages list nothing but real food contents. Toasterino comes four in a package of 8 3/4 ounces; twelve packages per case. The suggested retail selling price is 69¢.

New Impact

The Grist, after forty years of publishing news and features about employees and their families as well company activities of International Milling Company, has retired.

It is replaced by IMpact of the new International Multifoods. While the name and format are new the basic aims remain the same: an employee magazine for and about IM people, products, and activities. Bob Belden is the editor.

ADM Milling Co.

Crop Progresses

After a cold wet Spring the durum crop was planted by mid-June, the latest season in about twenty years. Late snow, rains heavy enough for flooding, and hail all combined to make the farmer's lot miserable.

The Peavey Crop letter at the end of June said: "Generally excellent growing conditions—all crops are making good progress due to warm temperatures and adequate moisture conditions. Weeds are heavy and spraying con-general."

The North Dakota Weekly Weather & Crop Report noted in the last week in June that durum was only 21% jointed or beyond compared to 84% of the crop on the average. Durum is especially vulnerable to quality and color deterioration in late harvest so conditions will be closely watched during the growing season.

Mill Grind Gains

Straight semolina and durum flour production in April increased 25% over a year ago, according to the Bureau of the Census. Output in the month totaled 1,186,000 cwts, compared with 949,000 in April, 1969, an increase of 237,000. On the other hand, it was down 227,000 cwts, or 16% from 1,413,000 turned out in March. In fact, it was the smallest monthly output since December when production was 1,139,000 cwts.

Durum wheat grind in April amounted to 2,405,000 bus, compared with 2,112,000 in the same month of the preceding year, an increase of 293,000, or 14%. It was down 480,000, or 17%, from 2,885,000 ground in March.

Crop Year to Date

Production of straight semolina and durum flour in the first 10 months of the 1969-70 crop year, or July-April, amounted to 12,330,000 cwts, compared with 11,089,000 in the same period of the preceding crop year, an increase of 1,241,000, or 11%. Durum grind in the first 10 months of the 1969-70 crop year was 26,719,000 bus, against 24,775,000 in the same period of the preceding year, a gain of 1,944,000, or 8%.

In the first four months of 1970, January-April, straight semolina and durum flour production totaled 5,259,000 cwts against 4,519,000 in the same period of the preceding year, an increase of 740,000, or 16%. Durum grind in the four months was 11,223,000 bus, against 10,086,000 in the same four months of the preceding year, an increase of 1,137,000, or 11%.



The last new six-section, free-swinging sifter was being installed when this photograph was taken at Amber Mill, Rush City, Minnesota. According to Amber's manager, Gene Kuhn, "this completes our long-range modernization program, during which every major piece of equipment in the plant was replaced with the newest, most efficient units available." Mr. Kuhn said that completion of the modernization program makes Amber Mill as efficient as a new mill constructed from the ground up.

Germans Like U.S. Durum

Consistent supplies of high-quality, strong-gluten hard red spring wheat and durum with good semolina extraction and high color have impressed German millers, say two members of a German wheat importers' team who visited North Dakota State University in Fargo.

The quality of North Dakota hard red spring wheat has improved considerably in the past two or three years, according to Paul Hess with the United States Embassy in Bonn, Germany. German millers must have high protein strong gluten wheat to "blend up" domestic soft wheats which don't produce a good loaf of bread without blending he said.

In the past, Germany has bought wheat from Argentina, Canada and Russia. But recently German buyers have begun to insist on hard red spring wheat of North Dakota quality. The European Common Market countries produce a surplus of soft wheat which they try to export or feed, Hess said. Presently, Germany imports about 25 percent of its total use, or 900,000 tons.

Dependability

The price, quality and dependability of the North Dakota durum supply appeals to pasta, spaghetti and macaroni manufacturers, according to Hans Werle, Mannheim, Germany. North Dakota durum has gained a good share of the German market because it yields a semolina which produces a high, bright yellow product, Werle said.

The trend in imported durum has turned down somewhat with the creation of the Common Market, but there still is a market for high quality durum that Germany can depend on, said Werle. Other countries such as Syria and Sicily produce good durum, but the supply is not always dependable since crops in both countries are affected severely by weather, Werle said.

Most of the durum produced in Tunisia and Algeria is exported to France. Some years Russia uses its entire crop, other years it doesn't. So the German market needs a durum supply that is consistent and of high quality, he said.

International Multifoods Posts Sales Gains

International Multifoods, Minneapolis-based diversified food company, reported that preliminary figures for the first quarter which ended May 31 show increased sales and a decline in earnings.

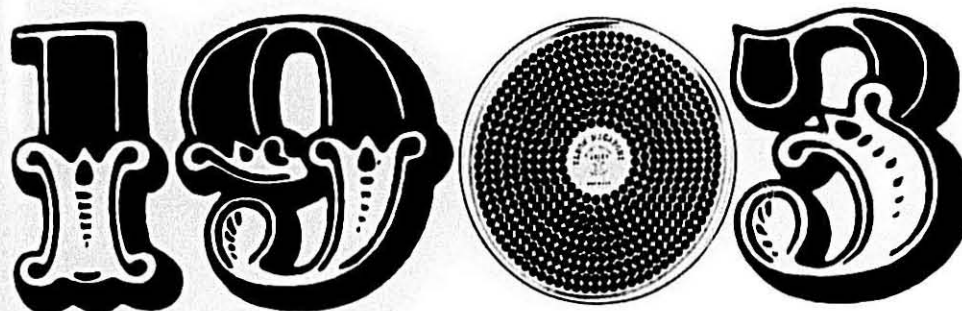
William G. Phillips, IM president, said sales for the three-month period were up 7.9 percent, from \$89,329,000 last year to \$96,343,000. Consolidated net earnings were down 14.4 percent in the first quarter, from \$1,220,000 last year to \$1,049,000 this year. Earnings per share were 34 cents compared to the previous year's first quarter earnings of 41 cents, an 18 percent decline.

Before restating to reflect the King Foods acquisition last December, last year's first quarter sales were \$81,193,000 and earnings were \$1,108,000. Restating had no effect on the earnings per share figure.

Phillips said the decline in earnings was a result of several factors, among them a drop in family flour volume in Canada—which last year was normally high in the first quarter and which this year encountered unexpected intense price competition. Other factors included lower U.S. bakery flour volume, and mark-downs on ingredient inventories necessitated by lower market prices for eggs and shortenin.

Phillips stated he expects IM to show profit and sales improvement for the full fiscal year. He pointed out that last year IM enjoyed an unusually good first quarter, that this year's results were actually the second best in the last five years, and that earnings per share for the three-month period were 13 percent higher than two years ago.

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Durum Wheat Institute Report

THE Durum Wheat Institute conducts a program in behalf of products made from semolina and durum granulars, working in close cooperation with the U. S. Durum Growers Association, the North Dakota State Wheat Commission, and the National Macaroni Institute.

Projects

The program established by the committee is on a project basis, although it includes the regular release of the home economics bulletin, "Durum Wheat Notes." As a result of such projects, a number of printed materials, as well as films and filmstrips, have been produced over the years. All carry the signature of the durum growers, the Durum Wheat Institute and the National Macaroni Institute.

In the course of the year, more than 38,000 copies of DWI printed materials were distributed, the bulk being represented by the recipe book, "Specialties of the House."

Sampling

Another project, initiated in the 1969-70 fiscal year, included the mailing of two one-pound sample packages of spaghetti to food editors for purposes of comparison. One sample was made from number one hard red winter wheat. The second sample was made from number one semolina. The differences between the two samples were pointed out—in color, in cooking characteristics, in taste, and in holding quality in casseroles and on steam tables. The mailing was accompanied by two recipes and photographs as well as food copy. The food editors were asked to cook the two pound samples and to make their own comparison of color, cooking characteristics, cooked texture, taste and holding qualities.

The mailing, made shortly after the beginning of the calendar year, brought the following results:

No clipping service was retained to check the results of the mailing of the durum, non-durum samples of spaghetti to food editors. But 21 tear-sheets were received within a few weeks of the release date, and a number of the evaluation forms showing that comparative cooking had been undertaken. In all cases, the durum-based spaghetti was preferred. One newspaper ran a special article on the data furnished on the Durum Wheat Information Sheet.



H. Howard Lampmen

Educational Materials

In a subsequent meeting, the Durum Wheat Institute Committee decided to make available all its present stock of materials to teachers and students at no cost—in an effort to clear them out so that additional materials could be produced to the satisfaction of the macaroni manufacturers and the North Dakota State Wheat Commissioners, as well as themselves.

As a continuing project, the Durum Wheat Institute also shares one-third of the cost of distributing the color motion picture, "Durum—Standard of Quality," with the National Macaroni Institute and the North Dakota State Wheat Commission.

In similar fashion, the Durum Wheat Institute represents a one-third partnership in the durum-macaroni Hotel-Restaurant-Institutional program, outlined below.

Durum-Macaroni HRI Program

Since its inception in 1965, the durum-macaroni HRI program has produced a movie, "Macaroni Menu Magic," and an accompanying filmstrip, "How to Cook Macaroni Foods," both designed to teach students in quantity food preparation the correct procedure in buying, cooking, serving and merchandising pastas. The films are in great demand. A statement from the distributor as of

February 28, 1970, reports that the movie has been listed in 25 promotions, with almost a quarter of a million students numbered in its audience. A special notice advised that the film is in heavy demand and more than 250 requests during the prior 12 months could not be honored due to a shortage in the number of prints available. At the same time, the sale of the filmstrip version of the movie, "How to Cook Macaroni Foods," numbered more than 150 copies sold during the year.

Adjuncts

As an adjunct to the movie and filmstrip, the Durum HRI program also produced a set of quantity recipe cards, designed according to the specifications of school lunch authorities, which have become standard in the foodservice industry. Each card illustrates the featured dish in full color on one side, provides the formulas for its preparation in test lots and in large quantity, and space for "costing," on the reverse. In a recent conference, it was decided to make these sets of recipe cards, 32 in number, available at no charge. On February 16, a release to the restaurant press offering the cards was made.

School Lunch

The Durum HRI program also prepared for publication in the "School Lunch Journal," circulation 44,789, a feature story on the correct methods of preparing and serving pasta products, under the title, "Al Dente—Al Who?" Requests for 2,700 reprints of the article were received.

The Durum HRI program was also instrumental in providing for school lunch buyers a standard specification for the purchase of durum-based pastas, following the line established by the Armed Forces Foodservice Institute.

At the same time, a special bulletin for the HRI trade, "Pasta Profit Pointers," was produced but failed to gain any great degree of acceptance in the macaroni trade—possibly because it was offered to all whereas the individual manufacturer sought something which would tell his own brand story.

Presentations

Two presentations were made by a spokesman for the Durum Wheat Institute before the meetings of the National Macaroni Manufacturers Association—in mid-winter at Boca Raton, Florida, and earlier in mid-summer at Del Coro.

(Continued on page 19)

THE MACARONI JOURNAL

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nado Hotel, Coronado, California. At both these meetings, in addition to reporting on the activities of the Durum Wheat Institute and the distribution of materials, the macaroni manufacturers were advised that their interests in changes in the enrichment formula, particularly as they dealt with levels of iron fortification, were being represented with the authorities concerned at the Food and Nutrition Board and the U. S. Department of Health, Education and Welfare.

Following the Coronado meeting, complete kits of sample materials available from the Durum Wheat Institute were mailed to all members of the National Macaroni Manufacturers Association, offering copies at cost-of-printing prices. While a number of orders were received in consequence, the lack of response led to the decision to clear out all stock of materials relating to the Durum program and the durum-macaroni HRI effort.

O'Hare Meeting

At a meeting held at the O'Hare Inn, near Chicago, May 15, with spokesmen for the Durum Wheat Institute, the National Macaroni Institute, and both the North Dakota State Wheat Commission and the Durum Growers Association attending, it was decided that the HRI Program undertake on a trial basis a contest among professional cooks and chefs to seek out and publicize the best quantity formulas for (1) sauces; (2) casserole-type dishes; and (3) side dishes or macaroni-based salads.

Detail of the program were to be announced at the convention of the National Macaroni Manufacturers Association. As discussed, the contest will be undertaken in the spring months of 1971. The competition itself and the circulation of prize-winning recipes would generate widespread publicity in the institutional trade press. It is also planned to enlist, if possible, the support of the National Restaurant Association, as well as a leading school of hotel or restaurant management to conduct the judging in an objective manner.

Wheat Foods Foundation

The American Bakers Association, through its Board of Governors, has agreed to support legislation which would finance the Wheat and Wheat Foods Foundation at a rate not to exceed two and one-half cents per hundredweight of flour.

Day of Bread

Before recorded time, the family of man paused each autumn, for rites of joy and gratitude for the bounty of Nature. Spontaneous ceremonies marked the completion of his harvest from field, farm, forest . . . from lakes, streams and seas.

This compelling impulse became part of tribal or religious custom beyond the reach of human memory. You still find Harvest Festivals—whether for grapes that make wine, grains for bread, or fish or meat for the larder—celebrated by most people of the world.

Following the Egyptians and those before them, the Greeks incarnated the concept in a goddess Demeter, and paid her homage. The Romans called her Ceres, for whom cereals were named. Bread came to symbolize all food and the dependence of man upon the soil, the rain, the sun, the seasons and the labor of agriculture.

Symbol of Food

Bread thus signifies the reaping of all crops, of meat, milk and food itself, a meaning expressed in prayer, "Give Us This Day. . . ." The thought gains greater import every day as governments around the world become increasingly concerned with problems of feeding the hungry and malnourished, at home and abroad.

In token of such values, the tradition was revived in West Germany almost twenty years ago . . . in a "Day of Bread." The observance spread to other

countries of the Continent, to the Americas and the Far East. Last year, President Nixon, the Governors of more than 35 states, and the Mayors of scores of cities proclaimed a "Day of Bread," as part of a "Harvest Festival" Week. Deeply rooted in the legacy of all mankind, the occasion is viewed as a contribution to human understanding, person-to-person, and to international communications— to a degree that transcends all boundries of country, creed, or politics.

The Harvest Week Festival will be celebrated October 4-10, 1970 with the International Day of Bread on October 6. National Macaroni Week will be observed October 15-24.

Oldach Moves

William H. Oldach, Inc., packers and distributors of frozen and dried eggs, plus poultry products, has moved to Flourtown, Pennsylvania 19031. Post Office Box number is 337; telephone is 215-836-7800.

Sales Gain For Ogilvie

Ogilvie Flour Mills, Montreal, a subsidiary of John Labatt, Ltd., reports profit for the year ending April 30 was \$2,752,000 (85¢ per share). Sales increased to \$129,144,000 from \$119,272,000. Profit excludes a gain of \$1,731,000 from the sale of securities in fiscal 1970.

Bradley Celebrates 25th Anniversary

Dr. William B. Bradley, president of the American Institute of Baking, celebrated his 25th anniversary of service to the institute June 1. He was elected president on January 1, 1964, after serving on the administrative staff for 19 years as director of laboratories and scientific and research director. Dr. Bradley is a past president of both the American Association of Cereal Chemists and Research & Development Associates, Food and Container Institute of the Armed Forces. He is a member of the Committee on Iron Nutritional Deficiency of the National Research Council—Food and Nutrition Board, and served as a consultant to the recent White House conference on Food and Nutrition. In addition, he has been active on the Grain Crops Research Advisory Committee of the U.S. Department of Agriculture.



Dr. William B. Bradley

MEASUREMENT OF SPAGHETTI COLOR¹

by David E. Walsh²



Fig. 1. Operator shown adjusting the Zeiss Elrepho Reflectance Photometer (Instrument I) to measure the color of spaghetti samples.



Fig. 2. A special black plastic holder used to position 16 spaghetti strands over the viewing area of the Agron Reflectance Spectrophotometer (Instrument II).

THROUGH the ages, writers, poets, and scientists have attempted to describe the color of the objects they viewed. Numerous accounts of the color of a lake, a sunset, or a young girl's eyes have been recited in the most elegant of terms. But, however elegant, these descriptions depend on the reader's imaginative recall—a mental picture of the scene which was described. For the most part, this mental picture depends on the reader's memory of what he has seen earlier. Consequently, each reader, not having exactly the same experiences, visualized a different picture for the same description.

We have a similar situation in attempting to describe the color of spaghetti, or for that matter, any durum product. Experts tell us that the consumer associates the overall quality of spaghetti with the color. By good color we mean the product has a smooth, clear, translucent surface, and is "bright yellow." Here is where we meet the poets head on. How bright is "bright" and how yellow is "yellow"? As a descriptive term, "bright yellow" can be interpreted to mean any number of hues and intensities of yellow.

It seems obvious that descriptive terms simply do not give precise specifications for color which are accurate enough for quality control or for research purposes.

To move away from describing the color, many attempts have been made to establish color standards for a number of foods—butter, eggs, honey, to

mention a few. In most cases, the color "standards" were prepared by fixing the products in a sealed transparent container and assigning a numerical value (color score) according to the color. A color score for an unknown was determined by a visual comparison with the color standard. In other cases, the color standards were not the actual products, but colored paper charts, dye solutions or some other material which had a color similar to the product in question. While these systems were a vast improvement over the descriptive terms, two main sources of error in assigning a color score were still apparent.

First, the color score depended on the judgment of the observer who compared the sample with the color standard. John Ruskin wrote, "The purest, most thoughtful minds are those which love color the most." The problem here was that no matter how pure and thoughtful a visual observer might be, assignment of the color score depended largely on the viewer's concept of "good color" as he compared the samples. In most cases, little agreement in concept of color existed among different judges. Consequently, it was most difficult to compare color results among different laboratories.

A second major source of error in visual comparison was the fact that most objects change in color with age. This principle is well known to the wife who, after five years, finally talks her husband into moving the couch, and behold: she discovers that the area

under the couch is a different color from the rest of the carpet. Because of fading, dirt, wear or simply age, even samples kept under carefully controlled conditions usually change in color from year to year. What was needed was a color measurement system which did not depend upon visual judgment or unstable color standards.

Fortunately, in this age of electronics, there are a number of reliable electronic instruments called reflectance colorimeters which seem ideally suited for measuring the color of foods such as spaghetti. First, these instruments require no visual judgment of the color by the operator. Secondly, the instruments can be calibrated against a pure white magnesium oxide standard which is extremely stable in color.

This report describes and evaluates a method which uses a reflectance colorimeter to measure spaghetti color. Fifty spaghetti samples were measured for color with three different types of reflectance colorimeters. The samples were read in quadruplicate with each instrument and the relative accuracy of the three sets of resulting data was computed.

Preparation of Samples

To obtain a suitable spaghetti product, semolina was processed by extruding the pasta through a 0.073 in. brass spaghetti die, using a modification of the method described by Martin et al.¹ In the method described by Martin, pasta was extruded with a hand pump-

ed hydraulic press; a new type of mechanical press (Research Products TC 800 Press) was obtained for this work. The new press was fitted with special driving gears to extrude spaghetti at a uniform driving speed of 0.70 in./min. with a 1 in. diameter piston. The resultant spaghetti was dried in an automatic laboratory macaroni dryer, cut into 6 in. lengths, and stored in the dark prior to color measurement.² To obtain the best results, it was found that the spaghetti must be uniform in diameter and straight.

In the work presented here, the 50 different spaghetti samples tested were processed comparably with the same extrusion die. When products with different diameters and shapes were tested, variance in the color score was noted. Apparently, the surface area of the product influenced the measurement of reflected light. Consequently, it was concluded that a separate color map was necessary for each product type and shape.

Visual Evaluation of Color

Visual color was determined by comparing each sample visually under a constant light source (Seeburo North Light) and assigning a numerical visual color score from 1 to 12 with 12 as the best score.

Instrumental Measurement of Color

To measure spaghetti color, the light reflectance of Walsh, Gilles and Shuey was used.³ Measurements of spaghetti were made with the Carl Zeiss Elrepho Photoelectric Reflectance Photometer (Instrument I), the Magnuson Engineers Agron Reflectance Photometer Model M-500 equipped with a M-300 wide-area viewer (Instrument II), and the Hunter Color Difference Meter equipped with a D-25 optical unit (Instrument III). The three instruments each were equipped with optical filters to measure the reflected light intensities of the three primary colors, red, green, and blue.

The selection of instruments for study was based on availability to our laboratory and the knowledge that data from each of the instruments could be expressed on a similar basis for comparison. Consequently, the choice of the three instruments should not be interpreted as an endorsement.

Instrument I

Before measuring spaghetti color, Instrument I was calibrated so that spaghetti reflectance could be compared against a white magnesium oxide 100% reflectance standard. To measure the color, the entire 35 mm viewing area of

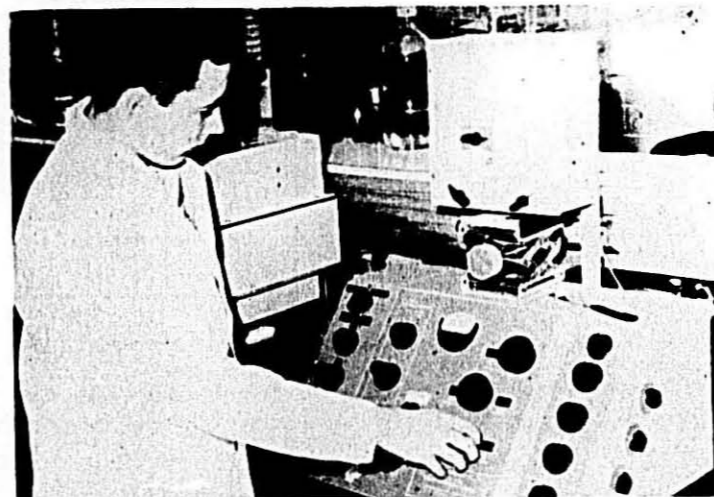


Fig. 3. Operator shown adjusting the Hunter Color Difference Meter (Instrument III). The sample holding stage containing the spaghetti is shown just above the technician's right hand.

Instrument I was covered with a single layer of spaghetti strands which were held in place using a black 0% reflectance spring loaded stage (Figure 1). Care was taken to insure that the strands did not overlap.

Since, to the human eye, all shades of color are made up of a mixture of three basic components, red, green and blue, the light reflected from the spaghetti was measured through optical filters for red, green and blue. The intensity of these values was expressed as a red value (X), a green value (Y), and a blue value (Z). Since it was desirable to express spaghetti color in terms of a yellowness value (b%), and a brightness value (L%), it was necessary to make the following simple mathematical conversion of the original Y and Z values:

$$\text{Spaghetti yellowness, } b\% = \frac{7(Y-Z)}{Y}$$

$$\text{Spaghetti brightness, } L\% = 10\sqrt{Y}$$

Instrument II

To measure spaghetti color with Instrument II, 16 spaghetti strands were placed in a special holder 1 3/4 x 6 in., covered with a 30 sq. in., 0% reflectance, black plastic disc, and placed over the wide-area viewer (Figure 2). As with Instrument I, the optical viewer was calibrated to compare spaghetti reflectance against a white magnesium oxide, 100% reflectance standard. Reflectance was measured through red, green or blue optical filters and the data were converted to yellowness values (b%),

and brightness values (L%), using the formula as before.

Instrument III

Instrument III was supplied with a number of colored ceramic tiles which can be used to calibrate the instrument. Since we wished to test spaghetti, the instrument was calibrated using the yellow standard tile. To measure spaghetti color, the entire viewing area of Instrument III was covered with a single layer of spaghetti strands. Moreover, the strands were held in place using a holding stage which was covered with 6% reflectance black paper (Figure 3). Since Instrument III gave direct readings in terms of yellowness (b%), and brightness (L%), no mathematical conversion of the data was necessary.

The Color Map

To express photoelectric color readings in terms of single values (color scores), a color map was used. The map was simply a graph of the yellowness (b%), plotted against the brightness values (L%), for spaghetti. Areas on the map were assigned numbers which corresponded to the visual color scores of standard spaghetti samples of known color. After reading 50 spaghetti samples in quadruplicate, it became obvious that a separate color map was necessary for each instrument. Figures 4, 5 and 6 show the color maps devised for each of the 3 instruments. After the maps had been constructed, it was a simple matter to determine the color of un-

(Continued on page 22)

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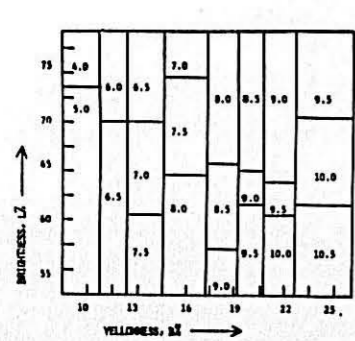


Fig. 4
Zeiss Elrepho Reflectance Photometer

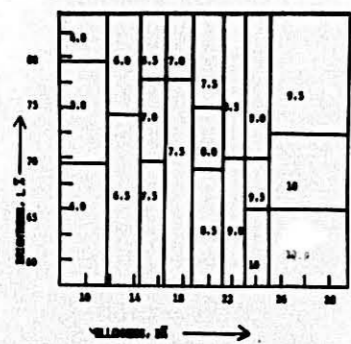


Fig. 5
Agtron Reflectance Spectrophotometer

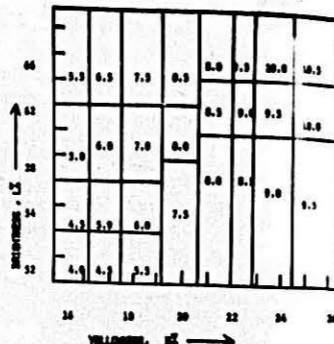


Fig. 6
Hunter Color Differences Meter

Color maps used to convert L% and b% values into spaghetti color scores. The highest color score indicates the best spaghetti color.

Measurement of Spaghetti Color—

(Continued from page 21)

known spaghetti samples from the reflectance values (L% and b%). With the appropriate map, the location of the point described by these two values was determined. The number corresponding to the area on the color map in which the point was located was assigned as the color score for the sample.

Accuracy of the Method

To test the accuracy of the instrumental method, correlation coefficients were calculated between visual color score and the color scores obtained from each of the three instruments. The photoelectric color score in most cases agreed quite well with the visual scores. For Instruments I and III, the correlation coefficient was 0.91 between visual and photoelectric scores. This value indicated that about 82% of the readings obtained with Instruments I and III agreed with the visual observations of spaghetti color. With Instrument II, a correlation coefficient of 0.96 was obtained. Correspondingly, the correlation showed that approximately 91% of the color scores from Instrument II agreed with the visual color scores. After analyzing the data for the three instruments, it became apparent that there were some inherent advantages in using instrumental color measurements over the visual method. Since the instruments were calibrated using color-stable ceramic tiles or magnesium oxide, errors due to changes in color among standard spaghetti samples with age were eliminated. Because the method was objective and based on a chromaticity map, errors due to differences in concept of color among visual judges

and lack of precision in describing the color were minimized. Of equal importance, the instrumental method resulted in precise numerical color values which could be statistically evaluated and compared among different laboratories.

As for rating the performance of the method on the three instruments, no firm conclusions were reached. With the method, the three instruments were nearly equal in accuracy and all show correlations greater than 0.90. A slight advantage was noted for Instrument III since the instrument was direct reading and there was no need for calculations to convert the results to L% and b% values. However, these calculations were quite simple and were performed easily with the data obtained from Instruments I and II.

Summary

Subjective visual judgments of product colors are usually not accurate or precise enough for quality control or research purposes. Errors due to differences in concept of color among visual judges and lack of precision in describing color are apparent. To eliminate many of the sources of error in testing spaghetti color, a new objective method using photoelectric instruments was developed. In the method, a reflectance colorimeter is used to measure spaghetti color in terms of red, green, and blue reflectance values. With a simple mathematical formula and a color map, the reflectance values were used to determine spaghetti color scores.

In the present study, 50 spaghetti samples which varied in color from dull gray to bright yellow were tested with three different types of reflectance colorimeters. For the most part, each of

the three instruments showed correlation coefficients greater than 0.90 when evaluated against the visual scoring system.

Moreover, when compared with visual judgment of the color, the instrumental technique had several important advantages. Because the procedure required no subjective judgment of the color on the part of the operator, errors due to differences in concept of color among judges were minimized. Since the instruments were calibrated using color-stable magnesium oxide or ceramic tiles, errors caused by changes in standards with age were eliminated. Of equal importance, the instrumental techniques resulted in precise numerical color values which could be compared among different laboratories.

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The Product We Make - Determining the Quality of Macaroni

by Florian Majorack, FDA Division of Industry Services, Bureau of Foods, at the N.M.M.A. Seminar on Good Manufacturing Practices

WHAT is quality macaroni? One of our problems in a technical view is the problem of self-certification, of making industry totally responsible for their operations. Self-certification uses as its basis total quality assurance and what goes with it. This is what we would like to talk about.

Quality control is the process of checking materials, systems and process to determine if they comply to specifications assigned to them. Someone must assign the specifications to them, and this must be done by the industry. Total quality assurance is the philosophy of doing things right. This means that this is an integrated effort throughout the organization to achieve quality from product inspection through product use by the customer. You must start with the chairman of the board, and go through the yard man, the product development man, the salesman, and you must consider the customer, too.

Right Product Use

What control do you have over the customer? Your control is some communicating medium, most likely the package. Does that have a concept of quality too? Does that have the necessary instructions, so that the customer is going to use your product right? In other words, total quality assurance is everybody's business, from the chairman to the customer.

The second of these problems is that of the meaning of quality. As I said before, you have to define that. You put a good deal of your faith in what the customer thinks. The customer isn't the only one who makes decisions. She has an agent to help make a decision of quality control, and that agent is the FDA.

Meaning of Quality

What does the customer think the meaning of quality is? The product must be free of insects, have good color, proper texture, be nutritious, no broken pieces, good packaging — all of these things. This is how the customer rates a product. However, her agent is over here, and he has some ideas too, physical and economic aspects. Then there are microbiological, chemical, environmental and processing aspects. These things, too, must be integrated into the meaning of quality.

How do we go about self-certifying these plants? We ask them to give their specifications from the time raw materials come in until the finished product goes out. It is surprising, but most companies have far tougher specifications than the FDA.

But, what happens in making macaroni? You start with raw materials. This is a major area that you are going to consider in specifications. Then, you have equipment. With the equipment you need people, and people contribute a good part of what is desired in the whole specifications set-up. Then of course you have an environment in which you work, and environment is important in all food processing industries. When you combine these three—equipment, people, and environment—you have processing.

Your Philosophy

The philosophy of a good quality assurance operation is not to wait until you have come to a finished product. The philosophy is to check your raw materials to make certain that they have come in according to specifications that you have required. The philosophy is to see that the equipment is designed properly so that it is not going to contribute to your problems. The philosophy is that your people do not contribute to your problems. This is a matter of supervision. Then we have environment. If you have all these things right and your environment is not proper you will not have a finished quality product. So, if you do your checking before trouble begins, then you will have a product that meets the quality standards that you have set.

There are different kinds of considerations, and you are concerned with all of them. The FDA is only concerned with parts of them, as an agent of the country.

Let's take the first: elegance. This is a general term which concerns the finished product: its color, texture, size and flavor. This is what you are mostly concerned with, because this is what your consumer is mostly concerned about. This is one aspect in which the FDA is least concerned.

Then there is the economic aspect of quality. FDA has some concern in this because the consumer is concerned. Is

the weight proper? Is the standard of identity proper? Was it made according to the standards established by the FDA? Is the mandatory labeling proper? These are economic considerations. Then, is the general information on the label on your box proper? This might not be of particular concern to FDA, but it could be a real concern to your customers; therefore, it must be taken into consideration for the quality specifications.

Physical Considerations

Then you have physical considerations. The variety of wheat is very important to the macaroni and noodle makers. This must be a specification of raw materials—the drying of the wheat—the color of the eggs—the moisture of the flour—the moisture of the finished product. All these physical considerations are important. Again I must stress that you don't take these things for granted. You don't accept them because industry accepts them. You must have specifications for them, and those specifications mean you must check. This is the prime aspect of total quality assurance.

You have chemical aspects: The testing of the wheat which you will use gives a good deal of information on the type of spaghetti you will make. There is ash, pesticides, additives. Are the proper amounts available so you have the true meaning of quality?

Microbiological Considerations

You have heard a lot about the microbiological aspect and the problems. You know that mold may be present. Is this a problem? Insects—does your raw material fall within the standards for insects as established by the FDA? This whole matter of microbiological consideration is very important. Do you have written specifications for each of these items? Do you know exactly what you are supposed to have? Do you know exactly what you get?

You must always consider sanitary practices. How are people behaving? How should they behave? Is this in the specifications? If it isn't, it should be written down, and not taken for granted. Again, environment, the condition of your plant in general, and, in a broad

(Continued on page 24)

The Product We Make—

(Continued from page 23)

sense, process—how you put people and equipment together to make for a quality operation—these are some of the specific aspects of quality.

Raw Materials

Let's now consider raw materials. First, let us consider water. What kind of specifications do you have for water? Generally, you use the water of a local authority. Are there any other specifications that any of you feel should be added to water besides the qualities that you get locally? Water should have a minimum of calcium and magnesium; otherwise, it will interfere with the manufacture of the product. You want the pH to be under 7. Anything above 7 brings out undesirable color. In order to get the proper pH, a water conditioner should be used. Does everyone know what the pH of his water is? Is this checked frequently in macaroni plants? Are you thinking in all the terms that you should to make quality macaroni?

Now consider flour. Here I am sure that most of you are experts. Flour has certain specifications. But the point is, do you have those specifications? Do you check your supplier to make certain that he is giving you the specifications that you are paying for? Are you using modern statistical quality control for sampling procedures? Or are you random sampling your supplies? These are some of the considerations.

Eggs, of course, are a big consideration. You are all familiar with salmonella problems and the fact that this is your prime source of contamination today. Part of the self-certification program is to try to get the egg processor to self-certify, so that that product will come out always without contamination. Obviously this is a big job. The concept is, again, in the egg industry, to have them set down every item of their specifications, and in checking it out they will come up with the right product.

Additives

Additives—this is an item where you have intentional additives and where you have non-intentional additives. Your intentional additives could be such things as nutritional minerals and vitamins. Non-intentional additives would be such things as pesticides. Are you satisfied that you are getting proper enrichment?

Do you have specifications for your trimmings? Do you know the maximum time trimmings can stand and still can be reused? Do you have the proper storage facilities? Do you make certain

that they are separated from non-usable trimmings? Do you have all these things spelled out so that you will get the proper product?

Now, consider equipment. I think your first worry is the carriers. This is how your raw materials come in. Do you have procedures to check your carriers for cleanliness? for proper temperature? control charts that the eggs were kept at a proper temperature during their ride from the producing plant to your plant? Do you have these things written down as specifications? These are some of the considerations with carriers.

Storage Facilities

Then, storage conditions—I'm sure that all of you are constantly concerned with this. Do all of your employees understand what must be done? Do they understand the matter of rotating stock or how it should be stored in the warehouse? Do they have the proper temperature for storage? and not all the same temperature for all of your products? Are all of these things spelled out?

Consider your processing equipment, such as storage tanks and storage bins. Do you have specifications for the condition of these bins? How they should be constructed? The frequency of cleaning them? The frequency of fumigation? Are all these things written down? Check all of your equipment: your transportation system for your flour, your drying rooms, your packaging room operations. Are all of these covered in your specifications?

How about the general help? Do you require health certificates of your food handlers? Do you have a routine follow-up? Women are required to wear hair nets. Are your men required to wear hair nets? This, strangely enough, is getting to be quite a concern in union negotiations. But, nevertheless, if it's good for the women, then it should be good for the men. Men with beards should not be allowed to work in the plant but should be put in the warehouse. Or, make a firm stand, and insist that they shave them off.

We have been emphasizing a concept. For quality assurance, write down specifications and check them out.

Swat That Fly!

Would you believe that the average fly is a mathematician?

No, not actually, but he certainly can multiply! In fact, some experts claim one pair of flies, left undisturbed for one summer, might produce 191,000,000,000,000,000,000 descendants! Imagine the problem you would have in your

plant if that were to happen. On second thought, it's better not to imagine it.

Armory Available

A broad-range attack on all types of pests common to the macaroni and noodle industry, from caterpillars and borers to beetles and weevils, is gaining increasing success throughout the industry with the use of a "total armory" of specialized insecticides. These have been created by the Fumol Corporation, and are designed to meet a variety of special needs with better-than-average results.

Four Major Types

Four major types are available: Fumol 56, now the best-selling insecticide in the industry, is formulated for mechanical fogging equipment like Atomist, Challenger and Microsol. Fumol 56 Special C is for thermal fog generators like Dynafog, Swinford and similar. Both have high flashpoints for added fire protection, and are available in 55 gallon drums.

The Fumol P-D Concentrate is an all-purpose, long-lasting residual insecticide for use in non-production areas. Available in one gallon cans, from 10 to 20 gallons of finished residual can result. This product contains no DDT, chlor-dane or other chlorinated hydrocarbons. The Fumol Aero-Spray is a 6 oz. instant total release aerosol, widely used "at a buck a truck" for vehicles and grain elevators. Treated premises can be occupied within one hour after spraying, a significant advance over most industry-used products.

All Fumol products are registered with the USDA, and are compounded to performance standards well in excess of FDA requirements. Products are shipped freight prepaid in continental U.S.

Since 1932 the Fumol Corporation has been compounding specialized chemical and insecticidal products for a broad range of industrial users. Directing Fumol's efforts in the food field is Jack W. Shocket, who has personally serviced hundreds of major plants to achieve insect control at the lowest possible cost. Toward this end, Mr. Shocket has designed both the equipment and the compounds to meet many special and custom needs. Fumol Corporation is located at 49-65 Van Dam Street, Long Island City, N.Y. 11101.

Wide World of Wheat

Wheat is the most widely cultivated of all cereal grains. It is grown in all countries of the world's temperate zones.

Selling the Boss and the Board

by David James, Director, Self-Certification and Quality Assurance, General Foods Corporation, White Plains, N.Y.

I BELIEVE that in dealing with bosses and boards this group represents a complete range. I don't think it makes a lot of difference, however, when you start talking about product quality and how you are going to solve the problems.

Cooperation

One of the many factors behind our achievements in food production and distribution has been a multiple degree of teamwork between government and industry, interested in a common goal—to assure the American consumer of wholesome, nutritious food products at fair prices. The Food and Drug Administration through the industry session we are having today is evidence of the teamwork necessary to make true progress.

In the 1930's, the Grocery Manufacturers of America played a helpful role in suggesting provisions and also providing support to Federal legislation which resulted in the 1938 Federal Food, Drug and Cosmetic Act. This role of cooperation is continuing. Last year, for example, the Good Manufacturing Practices came out. There was an industry point of view represented in working with the Government to get a real industry approach. The food industry recognizes that product safety has long been a watchword among our leaders. I am glad to share with you today some of the experiences of General Foods in food safety.

Consumerism

The key word for 1970 seems to be consumerism. This word seems to have its roots in the rising tide of the consumer protest movement. Without a doubt a positive response to the protest is quality assurance. It is important that we tune in on the same wave lengths to properly distinguish between quality control and quality assurance. While quality control asks "Are we doing things right?"—quality assurance asks "Are we doing the right thing?" There is a vast difference. Traditional quality control in a manufacturing plant measures and reports these quality levels. The marketing area generally determines the kind of product the customer wants and what it will buy. Research, our particular part of the industry, does work on these product specifications. Engineering is involved in the selection

and installation of equipment. Manufacturing has the responsibility of operating its equipment to produce the product. Quality assurance comes into the act in that it has a coordinating function between all these various elements of manufacturing, from raw materials to the product on the grocery shelf.

Can It Happen Here?

As most of you know, four years ago a major dairy milk product was faced with a salmonella problem. They received adverse publicity and a national recall of products from warehouses and grocery shelves. At that time, our management asked, "Could it happen here?" When we told them, "Yes, it could," we had to take action. That action consisted of taking an experienced technical manufacturing man and saying, basically, to him, "Find the problem." He started out by finding out what others were doing. There were some other companies in the areas from where we could gain some knowledge. The first part of the study was fact-finding, and the second part was the action step.

Policy Statement

The first fact was that we did not have a clear policy statement on product quality standards. This came about by each segment of our business growing up and setting up its own quality control functions. After twenty-five years, we had these things written down on paper, but nobody had bothered to pull them together. This is where, I think, the boss and the board really became important. They had the attitude that they wanted to fix this problem and get on top of it. Without that, the whole effort would have fallen.

The first act was that our top executives became accessible regarding the subject of quality. It required that top management knew what these problems were and what action it had to take in order to solve them. The executive management viewpoint on quality can best be communicated if you put the policy down on a piece of paper, and since you do have to communicate it through the organization, it is important that that policy statement be simple, concise, and understood by everybody that can play a part in it.

I'll tell you a bit about our policy statement, because it might give you some thoughts that you can apply to

your own. Our policy is that General Foods quality standards will be designed to assure that all products actively reflect the concept, basic characteristics, and attributes, as approved by management. The second fact in this policy statement: We will comply with federal, state, and municipal regulations, and we are going to make sure that we design pure, wholesome products.

Standards

Now, we get these standards by five steps. First, we are going to use raw, approved packaging materials that meet standards themselves. Second, we are going to use effective and sanitary equipment. Third, we are going to use well-defined operating procedures and controls. We are going to follow the Good Manufacturing Practices, and then, further, we are going to go into the distribution system itself, to make sure that we will maintain that control as long as we can.

I ask you to review your own quality objectives and make sure that you have a policy with a high standard of quality. Get this policy through your top management, and distribute it throughout your organization to those who need to know.

Let us clearly recognize that one of the items bearing strongly on quality is the changing background of technical information. I brought with me a bulletin that was prepared by the Grocery Manufacturers of America which has been distributed at other industry workshops. Its title is "How Food Manufacturers Can Control Salmonella." I suggest that you add this to your folder, and when you return to your plant take the time to glance at the points that are in there.

Reduce Risk

The business of management is to really reduce risk and allocate its resources so that we can solve problems. I urge you to look at your resources for checking on bacteria. We found that we had some low profit margin items, and they were faced with product specifications calling for bacteria checks, and they had stated tolerances, but quite frankly we weren't doing these things three and four years ago. This is a little bit of a shocker to us, so what did we have to do? We provided the laboratory, we provided the people, and in some

cases we had to do some work on the bacteriological methods so that we could live up to our own specifications. This expenditure for laboratory facilities actually required a minimum of selling to our board, once we had the clear policy statement. I think that without that first step you will always be facing up to the question: "Why should we do it?"

Industry-Wide Problems

A competitive fact I am sure is that we have industry-wide problems similar to our own. Now we don't always know (just as I am sure you don't always know) what is going on in your competitor's factory. But in this one case, we definitely faced the problem, paid the price, spent the money for the laboratory facilities and the people who manned it. We also know that bacteria beyond salmonella require control. Our experience for the past two years emphasizes the value of stopping contaminated raw materials from entering the plant before being processed into the product. Probably the single most important thing that General Foods has done in the last three years as far as improving its procedures has been to stop the problem before it gets to the plant door before it gets processed into the product.

Many of our products are similar to yours, in that we do not have a policy of detailed assessment of product. We do have an instruction manual for all products that require bacteriological intensity raw materials to be carefully examined before use. If they do not measure up, we have to reject them. We have had to work hard with our raw material suppliers in a cooperative manner because of this new attitude of rejection. For selected raw materials, we visit the supplier plant, and if the products measure up in this plant, we advise our purchasing department of approval. Yes, we had some screams from Purchasing when we changed our procedure. They said it was going to cost more money. But I think that, after two or three years down the road, I can say to you that I don't think it was a justifiable charge. I think they are much happier today because we got realistic specifications. We know our suppliers better; they know us better; and we can talk the same language.

Raw Material Control

Tight raw material control to reject contaminated raw materials (be it for insect fragments, foreign objects, or too many of specific types of bacteria) is the key change we made; and it is of real value, I can testify to that. You

can't afford to make the finished product and have it picked up for adverse publicity. It is very hard to put a dollar value on what these things might cost you. It is far cheaper to absorb quality control costs, which are relatively small costs as compared to the large cost of a product recall and the loss of good will.

Understanding with FDA

I think we also should be candid in a meeting such as this that we do have some problems between us. A common problem of the FDA and industry is a realistic definition of what constitutes a health hazard. In the case of highly toxic material, such as botulism, zero tolerance is clearly the target we all have to aim for. In other situations, zero tolerance is not required and it could be impossible to achieve even at any price. I don't feel that these areas of disagreement need a further expose' today. I think they are going to take a lot of time to really conclude what is best policy.

To the consumer, insect fragments are truly filth. You can't argue if a customer complains. Yet we do have the apparent problem that with certain kinds of agricultural products, grains, for example, we do have this insect problem. I propose to you that we have got to find realistic ways to approach this problem in a competitive situation such as we are in. I don't think that accepting the status quo is going to continue to be a satisfactory answer. I don't have the problem answered for you, but I don't think that sitting still is the answer.

Good Manufacturing Practices

We have been operating under Good Manufacturing Practices for about one year. Your own Macaroni Journal published in July of last year a summary of the key points of the GMP. I wonder how many of you have gone to your boss with a list of your problems, a plan of what you are going to do to solve these problems, and to face up to what it is going to cost to solve them. This is not the easiest thing to do. If you read in detail in the Good Manufacturing Practices, you will find the words "shall" and "should." Now perhaps this means "do we" or "don't we." We had the experience within the past year of going through all our plants and listing in great detail what needs to be done. We put a price tag beside them. We put a priority on them. We cover as complete a range as your industry does. It suggests that we have to find ways to come up with the dollars for these equipment changes.

For the first time, the written guidelines provide a checklist for FDA sani-

tation compliance. At your September meeting in Washington last year, General Delmore of the FDA referred to GMP's as your key to quality. You have a useful tool to sell your boss on the need for operating and capital funding to replace some of the old units with more modern units. It is also important that the man who is responsible for equipment purchase refers to the same guidelines when he installs it and maintains it in the plant. We have an internal problem with our own engineering group, quite frankly, of making sure that they carry out the full intent of the GMP's. We also found that our operating procedures required careful review. In nearly every review we have found that close attention is required as to how we solve the job of specifications of materials. This we designate in our own company as research. How this material is recycled is important from an economic and sanitation viewpoint.

Cleaning Programs

Cleaning programs have required much greater attention to see that they really accomplish the intended purpose. Wiping out equipment with rags often makes the problem worse. In many cases you will have to take a step-by-step microbiological investigation to check out where these problems really are and how often the cleaning needs to be performed. Don't be surprised to find that you can go for relatively long periods of time where you have dry materials and a dry finished product and clean environment. On the other hand, where you have moist location—ideal temperatures for bacterial growth—more frequent cleaning that you realize is probably going to be needed in some cases. I would urge you to make this kind of internal check, to make sure that you really take care of the cleaning. Even on raw materials, for example, we have found that it pays to clean these things off before you dump them.

Perhaps the greatest continuing problem that we all have is employee motivation. Getting good housekeeping, proper sanitation, really requires a lot of emphasis from the boss. He can say what he wants, and he can stress the ultimate goals of how clean that plant must be. His attitude is vital. Remember, quality products are made by people out in the plant. You do not inject quality into that product back in the quality control laboratory after the product is made.

Record Results

A system of recording results on your quality specs is also very essential. We

found that some of our managers did not really know all the facts that they should be acquainted with. Therefore we have instituted monthly exceptions reports that really get at the problems. This also has great value in preparing your boss for the shocker later on when you have to spend some money to take care of the problem. If he doesn't know about it, he is naturally going to be reluctant to spend money.

It also pays to go into the stores. Go a step beyond and find out what is going on, and in some cases you might find that the things that leave the plant are not quite as good as you would have hoped that they were. Particularly in the area of packaging, you might find that some packages have a tendency to pop their seals; or there may be insect problems. In a few of our problems, we have had to go into the store to help clean and sanitize the shelf area, and this required our working with our customers in the supermarket.

Two Years' Experience

Last year we completed a two-year test experience on self-certification. This was in our Dover, Delaware plant on two key products. One was on Jello gelatin, and the other was on Jello egg custard. We selected these products, because in one case we knew, we had a relatively safe product, and in the other new product (which was the egg custard) we thought there might be some problems, and then again there might not. In this voluntary effort their was sharing of FDA inspection reports of our facilities and also a sharing of periodic information to the FDA on our customer complaints. Our people felt that the real value of this effort was the information, the communications value if you will, between government and industry out of the two-year period.

Putting dollar signs on sanitation or quality is definitely the role of industry. Close reading of the Food, Drug and Cosmetic Act or the GMP's will not reveal any mention of economic matters. I would urge you to set up your accounting system so you know the cost of the various expenses involved in reaching a quality product. In our particular case, we have classified quality costs between those things related to safety and those things related to consumer satisfaction, and I think that it has paid off and we do know a little bit more about where we are going, where we are spending the money, where we can shift some of it. Remember, your trade-offs are quite significant. Cost versus safety, cost versus performance

of the product, or cost versus dependability. These are costly dollar signs, but I think that you have to take the best information you can get and apply it to your particular situation. Most of these FDA regulations deal with product safety, where your concern is safety plus consumer satisfaction. Our cost system has helped us a lot in getting at this. We have had to add, in some cases, people with particular skills, such as bacteriologists.

At the same time, we are faced in this kind of business the same as you are with a competitive situation. We found that we had a lot of specifications that were not very important, and we simply cut back. So we were able in some cases to transfer internally the emphasis from one type of activity to another. I think that is very important. You have to know your problems first of all, before you can shift this kind of emphasis.

A Way of Life

As responsible business men, I am sure that you are going to give quality assurance proper attention, including the funds that are required for its total performance. Quality can't be a program; it has to be a way of life. The most significant change in the decade ahead facing our food industry will be the new customers. With real income significantly increasing, and a higher level of education, we are going to be faced with a population that can buy what it wants and is smart enough to know how it should perform. These people are not going to be awed with a statistical approach. They are going to expect these products to work as you advertise them. The quality program has to be oriented for the prevention of error. Improving methods of detection of errors alone is not going to be enough. Prevention and product quality must be the policy of the company, and the quality people have to do the selling and implementation. Top management has the ultimate responsibility for product quality as citizens vote at the ballot box and customers vote at the cash register. The company that ignores the will of the majority is going to be in trouble.

IM Acquisition

The Board of Directors of International Multifoods approved the acquisition of Derivados de Maiz, C.A. (Damca), a major producer of pre-cooked corn flour in Venezuela.

Cost of the acquisition will be approximately \$2.5 million, IM President William G. Phillips states.

Packaging Institute

The preliminary program for the Annual National Packaging Forum of The Packaging Institute, U.S.A. has been announced by Forum Chairman Paul H. Schulz, Manager of Creative Packaging for Ciba Pharmaceutical Corporation. The theme of the forum, scheduled for October 5, 6, and 7 at the Chicago Marriott, will be "Packaging Profitability from Design Through Disposal." A total of fifteen seminars and workshops have been organized to explore this timely theme.

Dr. Robert F. Testin, Director of Environmental Planning for Reynolds Metals Company, will conduct a one-hour opening day spectacular entitled, "Packaging Waste—A Challenge and an Opportunity." The spectacular will cover the historical, present and future aspects of waste in society.

Diamond Packaging Products Appointment

The appointment of Richard A. Lyons as Assistant Sales Manager for Diamond Packaging Products Division was announced by Roland T. Greene, New York Sales Manager. Mr. Lyons will be located at the New York City headquarters at 733 Third Avenue.

Prior to his new position, Mr. Lyons was an Executive Sales Representative in New York. He joined the company in 1950. In his new position, he will be involved with the New York-New Jersey sales and marketing areas.

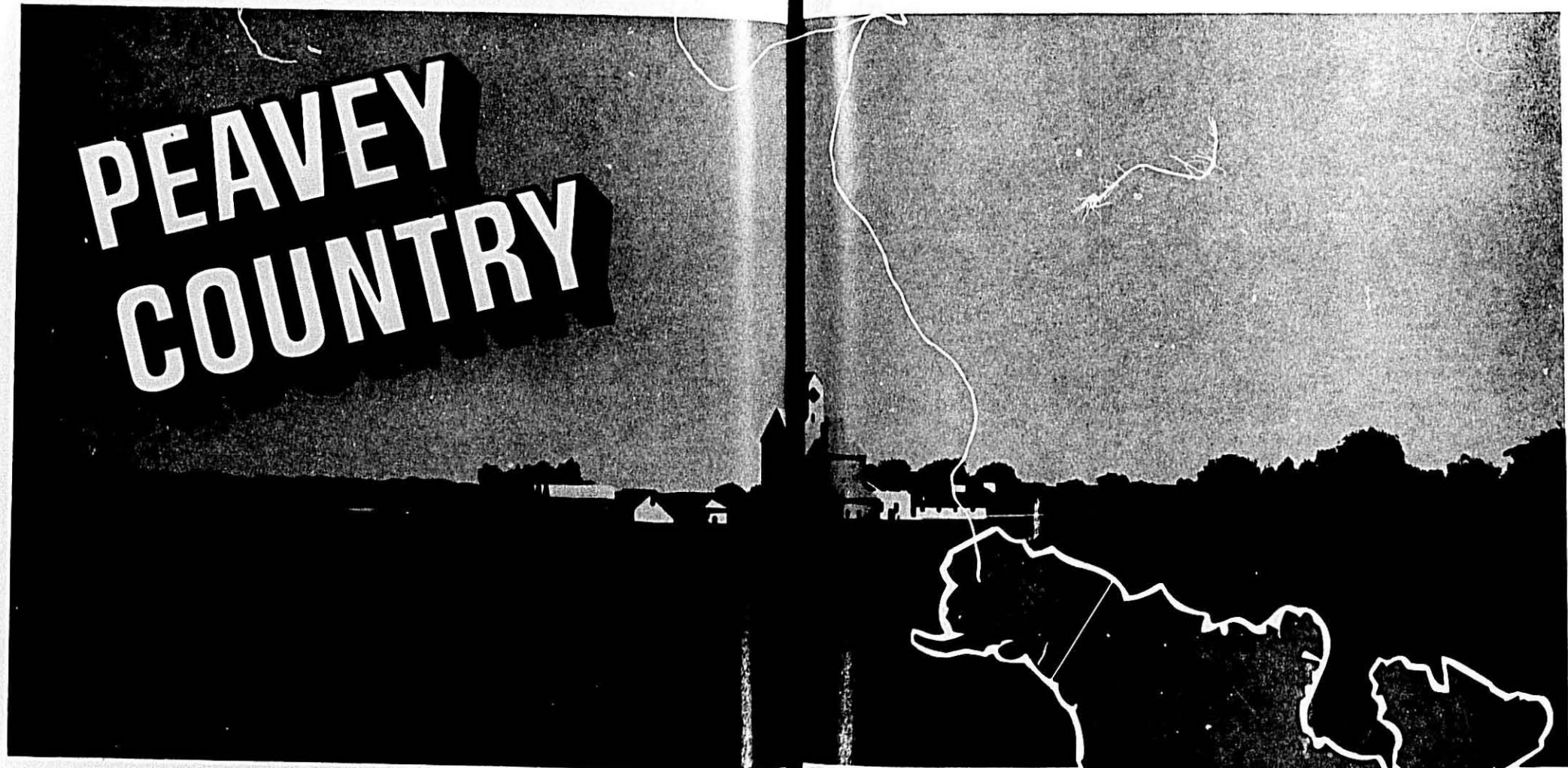
Diamond Packaging Products is a division of Diamond National Corporation and a leader in the design and manufacture of labels, cartons, point-of-sales and related products for packaging and merchandising.

Grocery Sales Gain

According to the Bureau of Census, the nation's grocery stores in 1969 rang up a record sales of approximately \$70.9 billion, an increase of 4.5% over 1968. The Bureau points out that if it were not for the approximate 4.9% increase in the prices of food consumed at home, 1969 retail grocery store sales would have only equaled, or perhaps even declined fractionally, from the 1968 levels.

The chains (operators of 11 or more stores) had total sales of about \$37.2 billion in 1969, an increase of 8.4% over the previous year. These operators also increased their share of the total market from 50.5% in 1968 to about 52.4% last year.

PEAVEY COUNTRY



Famous for its durum wheat

You might well expect Peavey to be a major factor in the milling and distribution of durum products. The reason? North Dakota's durum wheat fields where virtually all the nation's durum crop is grown—are in the heart of Peavey Country (see map). This is a broad, wheat-rich land that supplies the Peavey mills that specialize in the milling of Semolina and Durum flour.

Durum is an important product of Peavey, along with a multitude of other enterprises related to the growing, stor-

age, transportation, merchandising, and processing of cereal grains. Peavey is a highly efficient operator in this complex business because its operations are streamlined and coordinated to the nth degree.

Durum mills operated by Peavey are located at Superior, Wisconsin, Grand Forks, North Dakota and Buffalo, New York. Peavey Flour Mills process wheat received from 700 grain elevators located in the areas producing the finest wheat in the world. Peavey has total milling

capacity of 60,000 hundred-weights a day, much of it, of course, in durum. No wonder macaroni and spaghetti manufacturers have come to rely most heavily on Peavey for their quality durum products. And it all starts 'way out in Peavey Country'.

■ Merchandising and commodity futures offices; ● Terminals; ✪ Flour mills and mix plants; ✪ Flour sales offices and warehouses; ✪ Country elevator, feed and service facilities; ○ Home offices of Peavey Company and National Grain Co. Ltd.



PEAVEY COMPANY
Flour Mills

King Midas DURUM PRODUCTS

At the U.S. Chamber of Commerce Convention

Quality of Life Suffers During Inflation, Shumway Says

Society has become more interdependent than ever before. And it is the responsibility of business not only to make a reasonable profit, but to make a direct contribution to our complex society.

"For we do not live in a vacuum; business is not an island unto itself," said F. Ritter Shumway, following his introduction as 43rd President of the National Chamber at the Annual Dinner.

Mr. Shumway, chairman of the board and chief executive of Sybron Corporation, Rochester, N. Y., observed that the world itself has become more interdependent and that the effects of domestic problems are reflected in our international relations, foreign trade, our position in world affairs and national security.

However, he added, the problem of inflation is so paramount and fundamental that unless a solution is found, "it will frustrate us completely on both the business and social fronts in our efforts to improve the quality of man's life."

Ten Year Trend

Mr. Shumway said that our current inflation problem originated in the late 1960's when we had "a gun-and-butter policy that flew in the face of history."

Such a policy, he continued, always in the past brought on a demand-pull type of inflation.

Mr. Shumway said the situation has become aggravated by a cost-push type of inflation brought on by high-wage demands by labor.

"Labor costs are now rising at a rate that is nearly double the increase in productivity," he said, adding:

"Such a situation must be reflected in rising prices as total costs go up because such increases cannot be squeezed out of profits."

He cautioned that we cannot look to government for relief from labor cost pushes, because the political situation makes this unrealistic.

Mr. Shumway said that business will have to stand together, especially in the construction field where the problem is more severe, to resist unreasonable and inflationary wage demands.

The recent 6 percent increase in pay for federal employees adds up to about \$2.5 billion a year.



Generation Gap—Adults Said To Be Not All Bad

"Our children's generation is not work-oriented."

"You can't starve to death in any civilized part of America any more."

"Our children are the first generation which can get off this planet. They are the first space generation."

These are some of the quotes from Dan Moore's speech at the U. S. Chamber Convention. Mr. Moore, manager of Educational Programs for the Times Mirror Corporation, Los Angeles, believes "we're living right on the edge of the greatest historical era in the 5,000-year written history of man."

Discussing the generation gap, and explaining some of the turmoil currently plaguing the nation, Mr. Moore believes we are seeing changes which will soon dwarf those of the Renaissance. "They will not come over a period of 400 years but in one generation—the generation of our children."

We adults, he said, "are the last earth-bound generation of happy, absolute people who lived in a world where all the answers were known and all you had to do was to go to school and memorize them for the final examination."

In contrast, he said "our children are the first generation of relative people who live in a universe where none of the answers are known and the only limit on human thought is something we can't begin to define and call eternity."

Explaining what is needed of our children, Mr. Moore said that it is "not so much to conform as to be responsible."

He urged that our children come to understand that adults have a right to be different from them, for the adults are as much a product of their world as children are of theirs.

Shultz on Inflation: Get Tough With Union to Help Fight It

The Nixon Administration wants businessmen to understand that:

- A strike can have good effect.
- Employers should not seek labor peace at public expense.
- Unless some take a strong position at the bargaining table, we will never be able to solve such problems as excessive wage demands.

So, says Secretary of Labor George P. Shultz:

"We cannot allow labor peace to become the over-riding objective in our collective bargaining."

Speaking frankly to businessmen at the Third General Session of the U. S. Chamber Convention, he urged: "You must be willing to face up to the true problems."

In a period of "hard transition," when we are trying to turn the economy around and get rid of inflation, he cautioned, we cannot expect the union leader to tell his members they shouldn't ask for high wage increases.

"That's got to come from management," he declared. "And if there aren't some who take that position, we'll never be able to solve these problems."

Secretary Shultz pointed out that management and unions have been in a collision course as a result of squeezed profits for business and rising living costs for workers.

With few exceptions, such as in construction, "people have been spinning their wheels," with rising prices and rising wage increases, he said.

Recognizing that you can't expect people to "sacrifice their own interests" in the present situation, the former University of Chicago economist warned against the two and three-year wage agreement that "carries a high-cost projection built on the assumption" that the "wildly inflationary economy" of 1969 will continue.

"I don't think it's going to be that way," he predicted, asserting that "we are looking at the beginning of our opportunity to get control."

Addressing himself to the theme of the Session, "The Road to Labor Peace,"

Secretary Schultz said it starts with placing primary responsibility for collective bargaining on the company and union involved, not the government.

Another step, he said, is giving careful analysis and thought to bargaining and "not simply reacting today to the pressures of today."

A third: The responsibility of government to provide a climate conducive to a productive kind of labor peace.

National Emergencies

Emergency disputes particularly plague transportation industries, which come under the outmoded Railway Labor Act, the labor secretary observed. The Administration has proposed to Congress that these disputes be subject to the Taft-Hartley Act's national emergency provision, with a variety of options available for dealing with them.

Public Employee Strikes

"There is no right to strike against the government," Mr. Shultz emphasized, adding that the government must do a better job of insuring fair procedures in employee relations. He cited President Nixon's revised Executive Order No. 11491 as a "strong start."

"A person who chooses to work for the government accepts a special responsibility to the national interest," he said.

"Jawboning" Argued Pro and Con as Inflation Deterrent

There must be patience and reliance on a moderate monetary policy to help the country emerge from current economic difficulties.

Dr. Beryl W. Sprinkel offered that advice in contrast to a recommendation by Dr. Walter W. Heller that the White House return to "jawboning" techniques—or direct pressure on business and labor to restrain prices and wages.

"Jawboning" failed to work under both the Kennedy and Johnson Administrations, Dr. Sprinkel countered.

The two nationally known economists were panelists at a general luncheon of the U. S. Chamber Meeting titled "Is Inflation Forever?"

Dr. Sprinkel, senior vice president, Harris Trust and Savings Bank, Chicago, and a National Chamber director, acknowledged that "we are at the moment in that painful situation of recession and inflation."

He foresaw that the slump would continue for another quarter or so and that then there would be improvements on the price front.

Dr. Heller, former chairman of the Council of Economic Advisers and now professor of economics at the University

of Minnesota, said Mr. Nixon's policies had slowed the economy, but not inflation.

Most citizens still expect further price hikes, Dr. Heller said, arguing that this was one reason inflation could not be controlled by relying on fiscal-monetary measures alone.

He also foresaw an abatement in inflationary pressures by the end of the year, but predicted that the rate of inflation would still be running about four percent.

Dr. Sprinkel said he thought the inflationary rate would be reduced to perhaps three percent by 1971.

He called attention to the wholesale price index as one of the best indicators of a slowdown in the rise of inflation.

Because of the persistence of inflation, interest rates will show only modest declines and will remain on a "high plateau," Dr. Heller said.

Declines in interest rates will be slight in the foreseeable future, Dr. Sprinkel conceded.

James J. Kilpatrick, nationally syndicated newspaper columnist, was the moderator.

Where Taxes Are Rising Fastest

Most rapidly growing sector in the economy is state and local finance with an average rate of increase in revenues approaching 12 percent a year.

Alfred Parker, executive director, Tax Foundation, Inc., New York, put general revenue collections by state and local governments in this fiscal year at \$130 billion.

If the rate of increase continues, their revenues will double in less than seven years, he said.

The American political landscape is strewn with governors, legislators, mayors, councilmen and county commissioners who have "committed suicide at the polls" by raising taxes to enable states and communities to discharge responsibilities, William G. Colman, consultant, of Washington, D. C., commented, adding:

"It is in the interests of business to give support to public executives and legislators, regardless of party, who show willingness to undertake the difficult unpopular job of girding up our state and local tax systems to meet the demands of the Seventies and the decades beyond."

Growing Expenditures

New taxes are not the way to meet the problem of growing expenditure demands, Dr. Mabel Walker, of New Jersey, declared.

Some states, she said, will turn to taxes they have not yet utilized, and some will use existing taxes more intensively.

"Also," she continued, "we may find some juggling of the present system of state taxes on business, but I suspect that any changes in tax systems on business will be more in the nature of substitutions than of additional levies."

Better Methods

Leonard E. Kust, director and member of the Taxation Committee, National Chamber, and vice president and general tax counsel for Westinghouse Electric Corporation, Pittsburgh, set the scene for the discussion, reciting a number of questions for the panelists to explore, leading off with: "How are state and local governments going to obtain revenues in the years ahead?"

He pointed out that the continued exodus of middle-class Americans to the suburbs is worsening the problems of the core cities by reducing their tax base for revenues, leaving heavier tax burdens for those who remain.

Robert R. Statham, taxation and finance manager, National Chamber, listed these possibilities for obtaining new revenues and making better use of revenue sources:

- Better budgeting of government expenditures, with realistic priorities.
- More efficiency in government.
- Improved tax laws and regulations—"some state and local tax laws are so poorly drawn that compliance by taxpayers is on the honor system."
- Better collection of delinquent taxes.
- More efficient audits to make sure all taxpayers, small and large, are paying their fair share of the cost of government.
- Congressional approval of federal revenue sharing.

Wage Pressures Keep Building

"Trouble," a Detroit auto company executive said after hearing terms of a rubber industry strike settlement.

So far for the first half of the year—labor settlements—excluding the high-priced construction agreements, have been averaging about 8% a year for wages alone or around 8.6% for wages and fringes over the two-year or three-year duration of new contracts.

Trucking: \$1.10 an hour (8.8% a year) over 39 months, plus fringes.

New York newspapers: 41.7% an hour more pay and fringes over three years. Rubber workers: \$1.30 an hour in wages and fringes over three years, or about 8% a year.

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A Tribute to the Late Mario Braibanti

Ralph W. Hauenstein, Chairman of the Board, Werner Lehara, Inc., writes on the passing away of Dr. Ing. Mario Braibanti of Milan, on May 16, 1970:

It was more than two score years ago in Europe I heard him identified as the "King of Pasta."

Such identity was befitting of Dr. Mario Braibanti. No single individual in the history of pasta manufacturing has contributed so much to the progress of this industry.

Inventive Genius

He literally grew up in the macaroni business and in the era of his youth when automation and technology were only dreams he brought to fruition the mass production of pasta. His inventive genius changed not only the course of this industry but made possible the feeding of millions in virtually all lands of the world.

The incredibly large extrusion machines, continuous dryers, storage tunnels and numerous other innovations will always be the mark of Mario Braibanti. And the many other industries who utilized his innovations shall forever be indebted to his genius.

But those of us who were his associates will miss him most for the kind and gentle man he was.

Egg Production

The Nation's laying flock produced 6,051 million eggs in May, down one-half percent from May 1969. Layers on hand during May averaged 314.3 million, 1 percent more than a year earlier.

Layers on farms June 1 totaled 312.4 million, up 1 percent from June 1, 1969. Rate of lay on June 1 averaged 61.8 eggs per 100 layers, down 2 percent from a year earlier, and 1 percent from May 1.

V. James Benincasa notes that eggs in incubators May 1 egg-type were up 9% over a year ago. For the period of January-April 1970 egg-type chicks produced were up 18% over the same period of a year ago.

To keep egg production at manageable levels for consumer grades it is necessary for breakers and dryers to remove eggs from the market during May through July, as these months usually mark the peak of egg production. For the month of April only 2,448,000 pounds went into warehouse storage of frozen eggs.

The large hatches of November, December and January come into production this summer. Offsetting this is the old fowl slaughter and the birds that die from diseases, estimated at 25 to 30% of the pullets.

With the full circle of the production cycle coming round it seems doubtful that a sustained increase in consumer grades of eggs will materialize before production shows a positive decrease.

Market Outlook

Ballas Egg Products Corp. of Zanesville, Ohio writes at the end of June: We are getting requests from many people as to our ideas on the egg market for the balance of the year. We believe that the following information may be helpful in your buying program.

United Egg Product

There is one force that has a lot of muscle and has used it well in the past to strongly influence the market, and that is the Southern egg producers group known as the United Egg Producers. Only they know their action, and some times we wonder if they do.

Our storage warehouse stocks were very low at the beginning of the present breaking season and users were almost on a hand to mouth basis. Buying is good now but no one is taking an inventory position and with tight money, high interest rates and general economic conditions unsettled, we doubt that many will take an inventory position over a long period of time.

At the end of May, 1970 Storage Warehouse holdings were as follows:

Shell Eggs Cases	104,000	5-31-70	5-31-69	237,000
Frozen Egg Whites—				
Lbs.	5,839,000			6,493,000
Frozen Egg Yolks—				
Lbs.	12,766,000			15,568,000
Frozen Whole Eggs—				
Lbs.	26,360,000			29,351,000
Frozen Blends	1,857,000			1,670,000
Total Frozen Eggs	46,822,000			53,282,000

Hatch Up

Egg type chicks hatched in the first five months of 1970 totaled 290,404,000 compared with last year's 251,775,000 or an increase of 15%. Eggs in incubators on June 1 were 7% above 1969. 45,675,000 of these chicks will be coming into production in July, 47,048,000 in August and 63,969,000 in September. Hens and pullets of laying age June 1, 1970 totaled 312,426,000 compared to last year's 309,050,000. Slaughter is not up to expectations, indicating that many hens are being molted and will come back into production. Slaughter in 1970—63,877,000; in 1969—62,696,000.

Government Purchases

The Department of Agriculture has been buying scrambled egg mix. Purchases to date total 14,832,000 pounds and they are still buying. This is the equivalent to 750,000 or more cases of shell eggs. No one knows what the total purchases will be. Due to this purchase program shell egg prices have remained firm to slightly advancing during the past couple of months.

Egg albumen prices have been very steady and firm. Recently, one producer lowered prices, got some sizeable orders, and saw liquid prices go back up to previous levels. He got a lot of experience and no pay. Another large processor has practically been out of the market for plant improvements and is now back bidding liquid whites at higher levels. Demand for all kinds of albumen is excellent and supplies short to barely ample.

Egg yolk and whole egg solids have been steady and the market seems full steady. Demand is good; supplies are ample but not burdensome.

No Big Change

We do not see any big change in the market for some time. United Egg Producers do not want any mortalities and will do all they can to keep the market from collapse, even at its worst. At present levels, all egg products are attractively priced and represent excellent values.

Eggs are on the Plentiful Foods List.

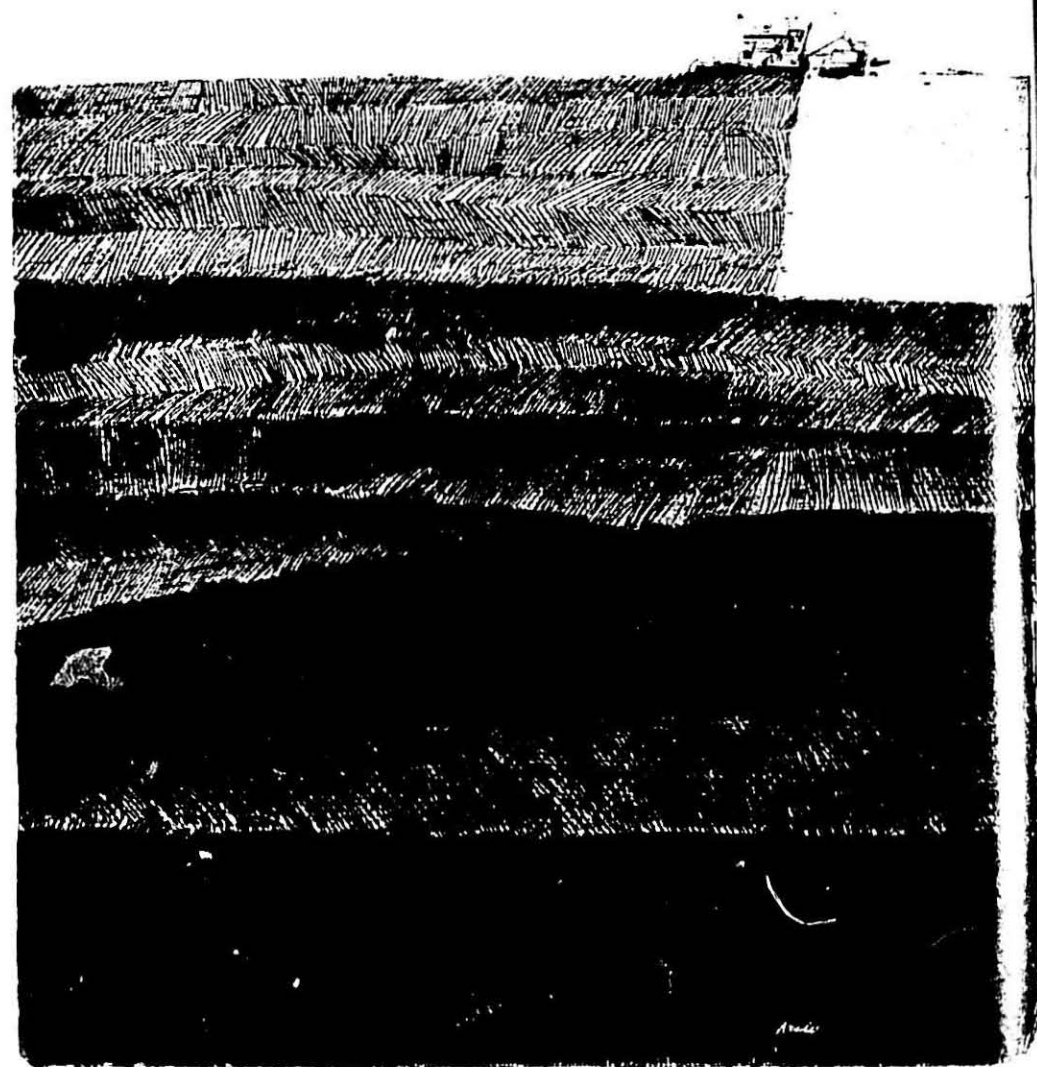
THE MACARONI JOURNAL

Launching a new look?

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