

**THE
MACARONI
JOURNAL**

**Volume 61
No. 2**

June, 1979

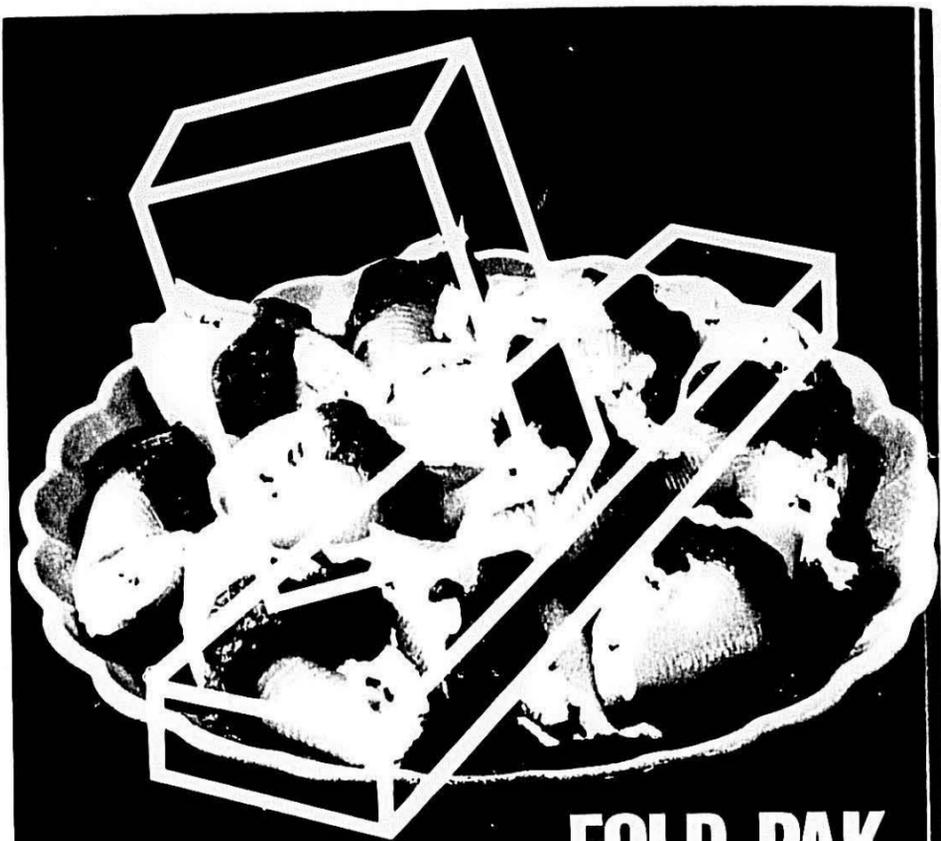
Macaroni Journal

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The Macaroni Journal

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one along the road, but
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carefully and make meals on
the spot.
about a hearty spaghetti
vegetable stew? It's one of those
great meal-in-a-pot dishes. A medley
of colorful vegetables is added to
spaghetti cooked in an onion-flavored

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base. Take along cooked elbow macaroni and salad makings for another nourishing meal. A portion of the stew costs about 5¢ cents and the salad 25 cents. Costs based on New York City prices. You'll find both year-round menu selections don't keep them for outdoor eating only.

Active adults, growing children and teenagers need energy. Elbow macaroni, spaghetti and egg noodles made from durum and/or other high-quality wheat with its carbohydrate content is an excellent energy source. Pasta contains a good distribution of amino acids and offers niacin, thiamine, riboflavin and iron. It is an easily digested, low fat, low sodium food.

Spaghetti Vegetable Stew

- Makes 6 servings
- 3 tablespoons salad oil
 - 2 cloves garlic
 - 1/2 pound green beans, cut in thirds
 - 4 cups water
 - 1 envelope dehydrated onion soup mix
 - 8 ounces spaghetti
 - 1 pound yellow squash, pared and sliced
 - 1/4 teaspoon salt
 - 1/8 teaspoon pepper
 - 1 pound tomatoes, cut into wedges

1 jar 16-ounces onions, drained
Grated Parmesan cheese
In Dutch oven or large pot heat oil, sauté garlic and green beans 5 minutes. Remove garlic, add 4 cups water and soup mix, bring to a boil. Gradually add spaghetti and squash so that water continues to boil. Cover and cook 10 minutes or until spaghetti is tender. Add salt, pepper, tomatoes and onions. Cover and cook over low heat 5 minutes, stirring occasionally. Serve with cheese.

Macaroni Mixed Vegetable Salad

- Makes 4 servings
- 2 cups elbow macaroni, 8 ounces
 - 1 tablespoon salt
 - 2 quarts boiling water
 - 1 cup chopped celery
 - 1 can 16-ounces mixed vegetable, drained
 - 1/2 cup thinly sliced radishes
 - 1/2 cup onion salad dressing
- Gradually add macaroni and salt to rapidly boiling water so that water continues to boil. Cook, uncovered, stirring occasionally, until tender. Drain in colander, rinse with cold water, drain again. In large bowl combine macaroni, celery, vegetables, radishes and dressing, toss lightly and chill.

Conference on Durum Variety & Quality Improvement

Traditionally the macaroni business runs hard during Lent and then abruptly stops for the slowest period of the year. This year the first quarter was the best ever, but instead of slowing up after Lent it continued right on possibly because of cool weather and high prices of meat and due to the fact that Lent is no longer observed as strenuously as a religious and merchandising event.

Cram Course

The staff of the North Dakota State University Agronomy and Cereal Technology and Chemistry Departments put together a cram course for a concentrated background on durum development and testing.

The group was welcomed by Dr. Kenneth A. Gilles, vice president for Agriculture at the University, and Director Dr. Roald H. Lund described the North Dakota State University Experiment Station and its role in agriculture. He pointed out that NDSU was a land grant college established in 1882 by the Morrill Act, and that the College of Agriculture offers 14 disciplines, ten of which can lead to a degree.

With a budget of about \$10 million, 47 percent is spent on the study of crops, 20 percent on natural resources, 18 percent on livestock, and 6.8 percent on basic studies. In 1977 North Dakota farm income was accounted for by crops at 63.5 percent, livestock at 29.1 percent, and government payments at 7.4 percent.

Dr. Jack Carter, Chairman of the Agronomy Department, observed that North Dakota is in the same latitude as England, Germany, and Manchuria. There are 650,000 people in North Dakota, 40,000 of whom are farmers. The state has 18 million hectares with 14 million cultivated. Twelve hundred acres or 460 hectares is the average farm size today. Only nitrogen and phosphorous fertilizers are needed on most of the land which is dry farmed. There is little irrigation. Elevation runs from 800 feet in the east to 3,500 feet in the west, and precipitation runs from 18-20 inches in the east to 15 inches in the west.

The present seed stock system can increase one pound of wheat to

7,200,000 pounds in 15 months with the increase in the winter nursery in Obregon, Mexico, as well as in Mesa and Yuma, Arizona. This system of cooperation between Canada and the United States and Mexico has helped agriculture in all three countries.

Plant Breeding

Dr. James Quick, plant breeder, said good varieties plus the weather of North Dakota produce good durum. He described his job as a plant breeder as one of analyzing traits in varieties of wheat and changing them for industrial purposes. The farmer wants yield and disease resistance; the miller is interested in yield from kernel size; the macaroni processor wants steady production of good quality with sufficient protein for consumer satisfaction; the consumer is concerned with firmness, taste, and color.

In the past 50 years there have been four plant breeders whose primary interests ran as follows: Glen S. Smith, 1929-47, launched the science of plant breeding with wheat and got it off the ground; Ruben Heerman, 1948-55, was primarily concerned with stem rust resistance to counter the devastation of 15-B rust; Kenneth Lebbsock, 1956-58, worked on disease resistance and improving kernel size; Jim Quick, 1969-present, has been working on grain yields and gluten properties.

Improvement potentials call for a study of maturity differences that affect the yield and processors' costs, seedling vigor, and quality traits of gluten strength, color, protein and kernel weight.

Tests for Quality

Dr. Brenden Donnelly of the Cereal Technology and Chemistry department, described various tests for durum quality including test weight, vitreousness, 1,000 kernel weight, kernel distribution, protein, and ash as well as tests for milling characteristics and spaghetti processing characteristics including cooking tests.

Dr. Orville Banasik, Chairman of the Department, explained that their purposes are to maintain or improve quality of grains, seek knowledge of physical and biological properties of cereals, develop new quality testing methods, exchange new cereal quality

information with scientists and farmers, seek new uses for cereals.

The plant breeder, cereal chemist and pathologist all work with the grower to produce new varieties and serve as a source of information and technological know-how to domestic and foreign users. Among the public services provided are grain quality surveys, technical assistance for wheat marketing, and the hosting of trade teams.

Dr. Floyd Nierenberger, of the Federal Grain Standards Service, Kansas City stated that grading has been in effect for 63 years and is conducted through regional offices in Kansas City, Chicago, Dallas, and Atlanta. Grading calls for more objective tests and less subjectivity. There must be speed in determination because only a few minutes are available. Cleaning time and down time between samples must be minimized. The simplicity of the operation is important as it is also one of the problems of training. The precision of the tests is vital as the sample is the best you will get. There must be a high degree of accuracy in the testing of grain, and it must be capable of being standardized.

Manufacturers' Comments

In commenting for macaroni manufacturers Association President Paul A. Vermeylen stated: "We are all tremendously impressed with your efforts at North Dakota State University. It is probably true that we are complacent, and we accept the quality that we get—there are those who say that domestic product is inferior to the quality of Italian macaroni. We do know that the amount of imported product is growing and the consumer has been willing to pay more for imports and that the demand for better gluten came from exporters when it should have come from us.

"Mill representatives must be active selling representatives by rolling up their sleeves and demonstrating quality instead of merely selling at price. Quality has to be sold—buying is a rebellion against the so-called durum standard.

(Continued on page 8)



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PROFIT

In many ways, a Chimney Sweep's job is the same as poets, playwrights and historians have portrayed centuries. The same kinds of brushes and elbow grease are needed to clean the same kinds of chimneys — the time-honored superstitions associated with the job observed, such as wearing second-hand top hats and for good luck.

But, for all the legend and romance surrounding the profession, the Chimney Sweep performs a very nice modern-day function — a function which makes him popular in 20th Century Yellow Pages as in 17th century plays.

He's a Breadwinner

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the summer still a time when most of people cozy fireplaces it is the busy time for the Chimney Sweep. What the job does is so does he — to clean chimneys which would be in use until the winter.

Chimney Sweeps services are in demand just about everywhere.

Area fire departments also support the business, most homeowners are that built up because of the chimney.

The business is a lot of work, but it is a good one. It is a job that is not only profitable, but it is a job that is a lot of fun.

Chimney Sweeps still observe the old superstitions associated with the job.

Second-hand top hats — which are worn for good luck. But the superstitions that

exist are not just superstitions, they are facts. The Chimney Sweep is a professional who is responsible for the safety of the home. He is a man who is a lot of things, but he is not just a man who is a lot of things, he is a man who is a lot of things.

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Conference on Durum

(Continued from page 4)

"Color is cosmetic. It is performance that should be the final criteria. Specifications are being more strictly enforced along the line from pasta customers to pasta producers. We are in a period of change and must be more professional. We are also in a period of ascendance, and the future looks bright."

Good Manufacturing Practices

Thomas J. Imholte, Corporate Quality Control for General Mills, Minneapolis, had an interesting audio-visual presentation on Umbrella Good Manufacturing Practices demonstrating general provisions, applications to building and facilities, equipment, and processes and controls.

NMMA Director of Research James J. Winston noted that good manufacturing practices should take cognizance of: (1) raw materials; (2) manufacturing and processing conditions; (3) finished products; (4) coding and inventory; (5) additional practices to supplement the sanitation program; (6) the necessity for gathering and collating data on micro-biological examinations.

After the comments there were round table discussions and questions and answer sessions about good operating procedures.

Judi Adams Leaves

Judi Adams, nutritionist with the Wheat Commission since 1973, has accepted a position with the North Dakota Sunflower Council. She will continue with the Commission on a part-time basis through the summer months.

Judi has been instrumental in developing nutritional awareness for wheat and wheat products in North Dakota and the nation. She was named the state's Outstanding Young Home Economist in 1978 and has served as an officer and director for the Bismarck-Mandan Nutrition Council and the State Home Economists Association.

Judi holds both the bachelor of science in home economics and the master of science in home economics with emphasis in foods and nutrition from the University of Wyoming.



Industry Echoes: Thoughts on Durum Research

by Charles M. Hoskins

As the plane carrying the macaroni men converging on Fargo for the Durum Seminar dropped down through swirling clouds a vast lake met the eye where the Fargo area durum fields should have been. A delegate from Grand Forks came directly from carrying sand bags onto the levee to protect his neighbors and his own home from a river which was still rising.

People who braved this weather were rewarded by a look into the science fiction battle being waged over the decades by the plant breeders, pathologists and chemists of North Dakota state and USDA to bring us superior durum in spite of insects, rust, short growing seasons and competition from sunflowers. The detailed description of the talks and tours will appear in the Macaroni Journal.

I would like to discuss the implications of the work and suggest how the macaroni industry can add its knowledge to that of the durum and milling people to speed solutions of practical problems.

The new varieties Edmore and Vic produce bright yellow color and have very strong gluten. Other varieties have short straw to prevent lodging and increase yield per acre.

Edmore should be available in some quantity beginning in the 1981 or 1982 crop year and will provide a tool for improving processing character-

istics, dry product strength and resistance to over cooking.

Research scientists require detailed knowledge which can be put in mathematical terms to carry forward their work. They also need to know the practical results from their labor so that they can direct their efforts toward solving the most urgent problems faced by the people who use their products. If you have a problem let them know.

Our industry should be grateful for the fine work which has been done in North Dakota to provide durum varieties which are rust resistant and which make a macaroni product which has good cooking quality and color. The new strong gluten products will return more closely to the cooking qualities of the early Russian wheats which were brought to the country by Carleton and served as the basis for the durum industry. Resistance to over cooking will be the principal benefit of this.

As time becomes available there are a few other areas which should be explored by durum breeders and other scientists in the durum-milling-macaroni manufacturing industry.

- What is the effect of durum variety on the extrusion patterns of short cut and long goods products. This requires knowledge of viscosity of dough at various temperatures and rates of shear.

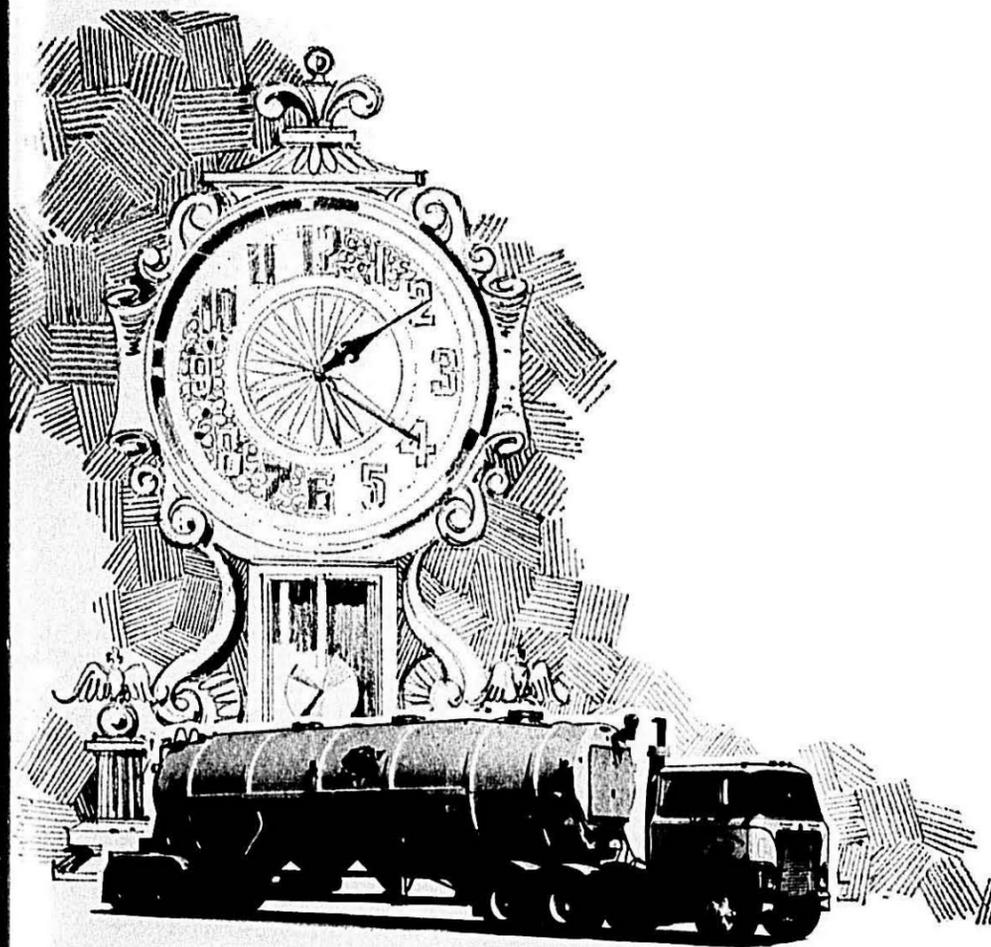
- As drying temperatures creep upward there may be a tendency to a somewhat brown product because of the Maillard browning reaction. This is caused by an interaction of heat, sugar and protein. Research has been done in Europe. We will need more knowledge of this.

- Taste of pasta can vary from totally bland to a mildly nutlike flavor. This is a subtle background for the sauce flavor that has an important effect on the enjoyment of the cooked food. European manufacturers blend durum from several countries in order to get the best combination of taste, texture and color. The taste component of quality should be fed into the research effort.

- Both gluten and starch contribute to the unique characteristics of durum wheat. They both need to be studied with the purpose of finding what effect they have on processing and

(Continued on page 10)

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Thoughts on Durum Research

(Continued from page 8)

cooking. The characteristics of dough mixed at room temperature or slightly above have been thoroughly studied by the use of Erabender farinographs, stretching devices, mixographs and the like. The quality of cooked product has been studied in cooking tests. The area which is still somewhat of a mystery is exactly what happens as the temperature is raised through the gelatinization temperature of starch and the coagulation temperature of starch and the coagulation temperature of protein. With high drying temperatures this transformation of starch and gluten can occur during the drying process as well as in the cooking process.

I wouldn't go so far as to say that all macaroni people should prostrate themselves toward Fargo five times a day as the Moslems do toward Mecca, but I think that they should all have an occasional kind thought toward Brendan Donnelly, Jim Quick, Len Sibbitt, Ken Gilles and the other scientists whose long slow work has brought the durum crop through setbacks which could have been major and continuing disasters.

New Varieties Released

The NDSU Experiment Station has released a new spring wheat variety and one durum.

The hard red spring wheat variety has been named "Len" after Len Sibbitt, NDSU Cereal Chemist, who has dedicated over 40 years of service in developing and promoting North Dakota wheat, not only here in the United States but overseas as well.

Durum Variety "Vic"

Another durum variety named "Vic" after Vic Sturlaugson, long time superintendent of the Langdon Experiment Station, was also released. "Vic" durum is a selection between a cross of Edmore and Ward durum. "Vic" has been yield tested in North Dakota field strips since 1974, regional trials since 1976, and in North Dakota drill strips since 1976.

"Vic" is a normal height durum with white awns and glooms and appears to have the following characteristics when compared to other durums. "Vic's" yield is superior to Edmore and equal or superior to all normal

height durums it was checked against in tests conducted at North Dakota experiment stations. "Vic's" average yield during that past three years was 48 bushels per acre. Only Cando out yielded "Vic" by leading with 48.6 bushels per acre. Other varieties in equal or superior to Rugby, Edmore and Rugby. In kernel weight, "Vic" is equal or superior to Rugby, Edmore and Calvin. In test weight, days to head, height and lodging resistance "Vic" is equal to Rugby and Edmore. In disease resistance "Vic" is equal to Rugby. "Vic's" root rot resistance is intermediate between Rugby and Edmore. "Vic" is superior to Rugby and comparable to Edmore in quality.

These varieties have been allotted to county crop improvement associations for seed increase this year and should be available for commercial production next year.

Cooperative Effort

"Vic" durum is the result of expanded durum plant breeding at NDSU which the NDSWC financially supports. In fact, the National Macaroni Manufacturers Association and the durum millers throughout the United States also contribute to this very worthwhile project.

Several of the varieties released by NDSU in recent years are the result of the cooperative arrangement. Our overseas customers have stressed the U.S. needs to improve the gluten strength of its durum varieties in order to maintain our share of world markets. The domestic manufacturers, as well, have agreed this quality characteristic may improve the gluten qualities of pasta products. As a result, Jim Quick, NDSU durum plant breeder, has been directing the program toward the gluten strength improvement and has met with considerable success. The varieties Calvin, Cando (both semi-dwarfs), Edmore and now "Vic" have improved gluten characteristics over previous varieties.

Cold, Wet Spring

(Written in late April)

Severe spring flooding in the U.S. southern and northern Great Plains and in Manitoba Province in Canada are not dissimilar to the reported spring flooding in Poland and the Soviet Union. In addition, overall un-

seasonably cool and above normal precipitation in various North Hemisphere countries have delayed the necessary field work for planting spring sown grains and the efforts to rescue acreage planted to frost damage or winterkill of winter sown grains in both Western and Eastern European countries. According to various reports, unseasonably cold weather in certain grain producing areas in the Soviet Union is also creating uncertainties and some concerns about the outlook for grain cropping patterns in that country. Press reports from the Soviet Union indicate that spring sown grain in that country is "off to the slowest start in the past seven years." According to the leading agricultural newspaper in Russia, *Selskaya Zhizn*, only about 15 million acres had been sown to grain by the middle of April, just about half of the area normally seeded by this time in past years.

Price Relationships

These similar weather related conditions in the United States, compounded by a recent thirty (30) day weather outlook of a higher than normal precipitation, are creating delays in seeding the corn crop and spring sown wheat. Coupled with the current price relationship between either oil-bearing crops or coarse grains and wheat, further weather related seeding delays of these grain crops as the month of May approaches only suggest an increased incentive for U.S. farmers in the Corn Belt and the Northern Great Plains wheat area to consider seeding increased acreage in these areas to soybeans and specialty oil-bearing crops. While the current delays in seeding progress is not of a crucial nature at this point, particularly because of advanced agronomical practices and sophisticated mechanisms in operations, some degree of concern is being expressed now about any future delays with respect to proper plant germination and development and any unseasonably early fall weather patterns.

A D M Dividend

Archer Daniels Midland Co. declared a dividend of 5 cents per share on the common stock, payable June 1 to shareholders of record on May 10. The payment is ADM's 190th consecutive quarterly payment.

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WHEAT AND WHEAT FOODS NUTRITION EDUCATION ACT OF 1977

by Kenneth A. Gilles, Vice President for Agriculture,
North Dakota State University, Fargo, at the Durum Seminar

Honored guests: it is a pleasure for me to address this meeting of the National Macaroni Manufacturers' Association. When Dr. Donnelly invited me to present the topic which he had selected entitled, "Current Trends in Nutrition and Relevance to Pasta Products: Wheat and Wheat Foods Nutrition Education Act", I was overwhelmed by the length of the title. However, I appreciate the opportunity to speak on this subject in which I have had a keen interest for more than a decade. Perhaps, if a facetious subtitle were chosen, it might be called "Wheat Nutrition Can't Be Marketed — Or Can It?"



Dr. Kenneth A. Gilles

Background

For many years, it was thought that wheat and rice were the two most important cereals in the world. That is true today! However, wheat production has been increasing at the rate of about 2.8 percent per year, slightly faster than rice production. Consequently, in the last several years, we have been producing and consuming more wheat worldwide. To those interested in wheat marketing and production, one would say, that's great! But associated with this is the allied observation that worldwide there is no concerted effort to provide an on-going technical and informational program concerning the nutritional qualities of wheat products.

Within the United States in recent years, interest in natural foods has risen substantially. Associated with this have been many people who convey myths and misconceptions about wheat food products. They are starchy; they are fattening; they are refined; they lack vitamins, etc., the types of statements designed to discourage consumption of wheat foods. In addition, the opportunity for selection of many alternative foods has risen as one of the many facets of the sophisticated food marketing system that has been developing in the United States. Thus, the competition is not only among alternative sources of foods but among alternative

sources of information relating to foods, some of which may be considered reliable.

Because of the diversity of the wheat foods industry within the United States, there has never been a concerted effort, an agreement by all segments of the industry to adequately and consistently support a wheat products research program. Where such programs exist, the work reflects the provincial attitudes of those supplying the financial support. Consequently, a nationwide program reflecting in an even-handed manner the interest of the many segments of the wheat industry has considerable appeal.

Nutrition education promotion programs have been used advantageously in other countries of the world. England, Sweden, Germany and Japan are examples where successful programs have been conducted. In England during the 1930's, the Millers Mutual Association initiated an "Eat More Bread" campaign with extensive press, poster and magazine advertising funded entirely by the Millers Mutual Association. At that time, we were just learning a bit about the role of vitamins in nutrition and the medical profession criticized white bread as a refined product with lower vitamin content. They were using an analogy to problems found in polished rice. Work immediately following World War II and published as the Widdowson and McCance report

showed that enriched white bread and whole wheat bread were nutritionally very similar. This work was challenged and in the 1950's, the Cohen panel recommended continued production of white flour enriched with Vitamin B₁, niacin, iron and calcium. The British millers hoped, but were later doomed to disappointment that this type of scientific evidence would resolve the medical controversy about white bread and help restore the image of bread. However, in England, the promotional campaign suffered from a decline in funding and lack of continuity.

Recently, Jack Copeland, European Editor of Milling & Baking News made two observations concerning the effort in the United Kingdom. One is that continuity of effort coupled with assurance of funding is essential to establishing a worthwhile program and two, is that an official pronouncement from government or official medical sources of the desirability of increasing or maintaining bread consumption is in the interest of national health.

During the 1960's, there was considerable dialogue developed relative to the establishment of a U.S. wheat and wheat foods foundation. Howard Lampman of the Wheat Flour Institute was an enthusiastic supporter of this concept. Moreover, on several occasions, I had the opportunity to stress the academic viewpoint relative to the need for increased comprehensive nutrition research. During several of the annual meetings of the National Macaroni Manufacturers' Association, Bob Green provided an audience for those topics.

It should be noted that other groups have successfully employed research and education approaches for market development. Currently, the cotton industry invests approximately \$1 million annually; the poultry and egg industry \$6 million and the potato industry \$2.6. Statistics show that the efforts of these groups have resulted in changed consumer attitudes. Mr. Robert Mercer of the Potato Board

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note) that within the last two years, people who believed potatoes were nutritious increased from 56 to 81 percent of those surveyed. Those who thought potatoes were fattening had decreased by over 20 percent; and since 1975, per capita consumption of potatoes has increased from 118 to 124 pounds. Mr. Mercer feels that the program indeed helps to improve the image and sell the product.

Research studies on consumer attitudes, presented by Mr. Girardi of Hoffmann-LaRoche, indicate that the issue of starch and carbohydrates is a classic one of misconception. Today's enriched bread is recognized by 70 percent of the shoppers as a source of carbohydrates, but only 59 percent recognize it as a source of B vitamins, only 50 percent as containing any protein and only 39 percent as a source of iron. Misconceptions come from the fact that only 14 percent of the consumers surveyed in one study consider carbohydrates and starches to be any part of a nutritional diet and only 11 percent thought cereals, grains, pasta and rice should be considered in the context of a nutritious diet.

In general, one could conclude that there is a creditable information lack both in the home and in the schools concerning wheat and wheat based foods.

During the 1960's, legislation was introduced to create a wheat and wheat foods foundation. Although support was generated, the legislation failed. In 1976, legislation was again introduced and in 1977, the Wheat and Wheat Foods Research and Nutrition Act became part of the 1977 farm bill. This activity successfully included more than a decade of planning and discussion.

The proposed Wheat Research and Nutrition Education Program is summarized in a statement prepared by the Agricultural Marketing Service of the USDA. A copy of the "Background" is included in your information packet. It provides the background information about how the act will be implemented, approved, financed, and a program ultimately initiated.

Current

To assist in providing background information, an ad hoc committee, consisting of 16 people, was appointed

by the president of the Wheat and Wheat Foods Foundation, Mr. Glenn Moore. Dr. Bert D'Appolonia of our institution is one member of this committee whose purpose is to develop an action program for research and education to be submitted to the Wheat Industry Council when it is ultimately formed. The two main objectives of the program are: 1) to educate the public on the present nutritional and economic value of wheat foods; and 2) to maximize the nutritional and economic value of wheat based foods in human nutrition through acquisition and application of knowledge.

Public hearings were held during the month of March 1979. A preponderance of testimony provided at the three hearings indicated an industry-wide support for the concept. Wheat producers, millers, bakers, allied supporters, academicians, and administrative type people all offered their comments. It was generally agreed that research and nutrition education are needed to correct myths, misconceptions and blatant inaccuracies concerning wheat foods. The misfortune is that consumers are being led to avoid a range of economical and healthful wheat foods by persons with perceived authority but questionable expertise and there is no national organizational resource to provide a constant supply of reliable information about these foods. Mr. William Metz, the chairman of the American Bakers Association, stated at the St. Paul hearing, where I testified, that "we herald the opportunities inherent in a wheat industry council for self help and for opening new avenues of understanding to consumers through research and education". There was no opposition at the St. Paul or Denver meetings and only negligible opposition evidenced at the Atlanta meeting.

The report of this activity is very timely because the hearing brief was filed on April 24.

Future

It is important that each person concerned with the wheat industry becomes acquainted with the concept of the Wheat Industry Council, its potential operation, mission and goals. Hopefully, my presentation today will convey some of the necessary back-

ground information to you so that you may share this with your colleagues.

Assuming the hearing brief will be favorable, within 60 days, the Secretary of Agriculture will issue an order spelling out details on the creation of the proposed Wheat Industry Council. Approximately 30 days later, the end product manufacturers will register for a referendum. Presumably, the referendum will be conducted in October or November of 1979 by the Agricultural Marketing Service of the USDA. If at least 50 percent of those manufacturers pre-registered vote, the results of the referendum will be considered valid. The order would be approved if favored by two-thirds of those voting, or by a majority of those voting if they account for at least two-thirds of the total processed wheat contained in all end products manufactured.

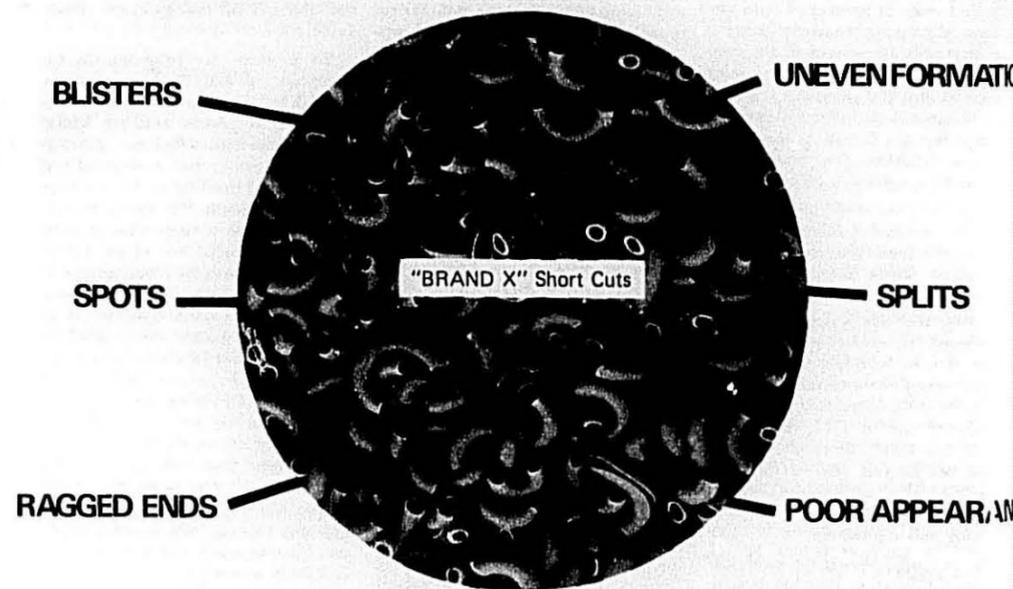
To promote the program, an expenditure of \$20,000 has been approved by the American Bakers Association to permit mailing, visitations, rallies and telephone information services to be established. At their annual meeting in Puerto Rico earlier this month, the ABA members were told that a research education program on behalf of bread in the United States has its advantages over similar undertakings in Europe. Jack Copeland cited the following: (1) an official policy mainly represented by the report of the Senate committee on nutrition and human needs; (2) an assured basis of funding and the promise of continuity provided only that you satisfy the authorities and the participants that you are working effectively; (3) the solidarity of the Wheat Industry Council made up of growers, millers, bakers and consumers; (4) a very low cost equivalent to 7/1000 of a cent per one pound loaf, equivalent to 0.01¢ per pound of spaghetti; (5) the prospect that coordinated research and the coordinated assembly of research information will be helpful; and (6) the opportunity is present to utilize the lessons derived from successful promotions in Europe and to continue exchange of meaningful information with European sources. The results optimistically stated can be organized, and integrated into a positive program promoting nutritional benefits of wheat

(Continued on page 16)

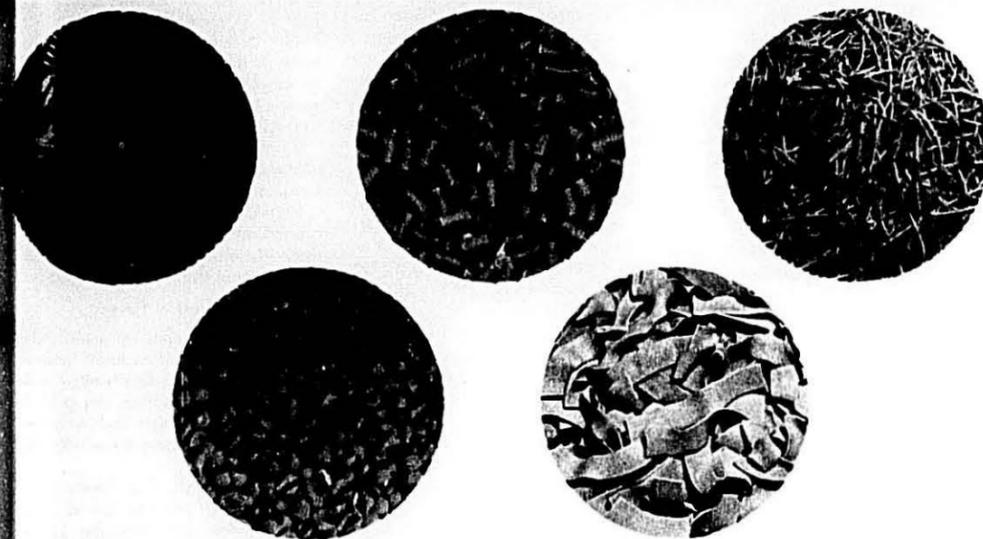
You can't take short cuts if you want Quality.

"Brand X" Short Cuts reflect all the imperfections caused by their hurried system of production via one large extrusion screw that forces the mix through the extrusion die without allowing it to blend into the proper consistency.

Here are the results:



The Demaco Short Cut production system is designed
with Quality -of-the-end-product in mind!



Demaco's 2-headed Short Cut Press (each head with its own extrusion screw) extrudes the mix at a properly regulated, unhurried rate, allowing for a smooth, evenly blended consistency. In addition, Demaco's all stainless steel Pre-Mixer and exclusive Mixer-Extruder (U.S.D.A. approved) prepares the product in advance for:

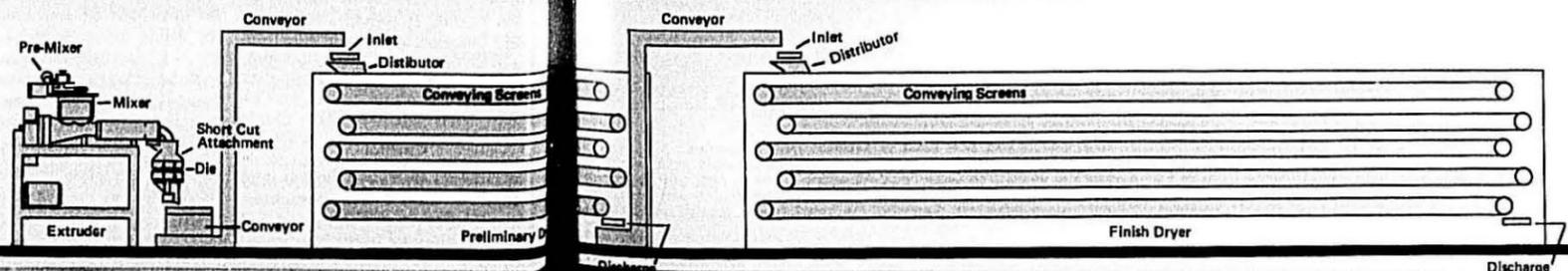
- ✓ Lightness and Fluffiness (curl)
 - ✓ Color and Uniformity
 - ✓ Wholesomeness and Eye-appeal
- in every production run!

For the full story, contact **DE FRANCISCI MACHINE CORP.**

80 Wallabout St., Brooklyn, N. Y. 11208, U.S.A. / Phone: 212-963-6000 / TWX: 710-584-2449 / Cable: DEMACOMAC NEW YORK
Western Representative: Hoskins Co., Box F, Libertyville, Illinois 60048 U.S.A. / Phone: 312-362-1031

This diagram illustrates the simplicity of design of the Demaco Short Cut Line:

- Stainless Steel Pre-Mixer pre-blends for smooth consistency.
- Exclusive U.S.D.A. approved Mixer-Extruder. Most sanitary available.
- Electroless nickel-plated Short Cut Attachment produces most standard small macaroni products as well as Lasagna. Mosticcioni is also easily made by adding a special cutting device for the bias cut.
- Simple, uncomplicated dryer (all U.S. made parts) will provide maximum dependable service; minimum maintenance required.



Wheat Foods Act

(Continued on page 12)

foods based on a sound, long-term research program.

How much will the program cost? Beginning assessments of 1-cent per hundredweight of processed wheat will generate an estimated \$2 million per year. The maximum assessment allowed by law is 5 cents per hundredweight.

USDA estimates based upon 200 million hundredweights of processed wheat used annually in domestic food production would be assessable. Depending on the assessment rate, from \$2 to \$10 million dollars could be generated annually. Certainly enough to develop a significant research and educational program.

I commend you to become informed and encourage eligible organizations to register and to vote.

Wheat Commissioners Elected

The North Dakota Wheat Commission announces that George Kubik, Manning and J. Ole Sampson, Lawton have been re-elected to six year terms from Commission District No. 1 (Southwest) and District No. 4 (North Central) respectively. According to Mel Maier, Administrator, Kubik operates a Dunn County grain and cattle farm. Maier said he was re-elected to represent Dunn County at the district election at which election representatives from 12 other Southwestern counties met to select one from among themselves to serve the Commission term. Kubik has served as NDSWC Vice-Chairman and on the Board of Directors of Great Plains Wheat, Inc. He is currently serving as aboard member of Western Wheat Associates.

J. Ole Sampson, Ramsey county farmer, was re-elected in District No. 4 which comprises seven counties in the North Central part of the state. Maier reported Sampson will be serving his third term on the Commission and is currently serving as its Chairman. In addition, he is serving as Vice-Chairman of the Great Plains Wheat Board of Directors and will likely succeed to the chairmanship of that organization this year.

Maier stated that the next elections will be conducted in District No. 5 (Southeast) and District No. 2 (Northwest) in early 1981.

Durum Forum Set

The 3rd annual International Durum Forum will be held again at the Ramada Inn in Minot, North Dakota, on November 13-14, 1979. The usual mid-October date has conflicted with the sunflower harvest. Therefore, it is hoped that the November date will be acceptable to producers, grain buyers, millers, and processors of durum. The Forum is sponsored by the U.S. Durum Growers Association, the Ward County Agricultural Improvement Association, and the Minot Chamber of Commerce.

Campbell Soup to Purchase

Campbell Soup Company has announced that it is negotiating to acquire German Village Products, Inc., a Wauscon, Ohio, pasta products manufacturer.

Campbell has proposed a statutory merger which would give shareholders of German Village Products, Inc., \$3.30 per share in cash for their shares in the Ohio firm.

Shareholder Approval Needed

If agreement is reached, consummation of the merger would be subject to the negotiation of a satisfactory contract between the two companies and approval of the German Village shareholders.

German Village's products are sold mainly to industrial and institutional customers. Annual sales last year were more than \$3 million.

Veg-All and Creamettes Launch Summer Tie-in

Veg-All Mixed Vegetables and Creamettes Macaroni will join forces for the first time in a major promotion spearheaded by a full-page, four-color ad featuring a recipe for a "Quick 'n' Cool Summer Salad." The ad will appear in June 26 Family Circle and July 17 Woman's Day.

The recipe illustration and directions in the ad will also be featured on Creamettes Macaroni 7-oz. packages, along with 10¢-off coupons for Veg-All, during May and June.

Point-of-sale materials will be available through both Veg-All and Creamettes sales representatives.

Veg-All is the leading brand of canned mixed vegetables, and Creamettes Macaroni is the widest distributed pasta in the U.S. and Canada.

Effective Tie-in

The two companies have been using tie-in promotions lately because of the increased effectiveness with which two sales groups can provide retailers with display and merchandising ideas — to help them sell more related items.

Besides Veg-All, The Larsen Company offers a complete line of vegetables under the Freshlike brand. Creamettes sells a complete line of Spaghetti, Egg Noodles and other pasta items.

The ad agency for Larsen is Campbell-Mithun in Chicago. Martin/Williams, Minneapolis, is the Creamettes agency.

PROBLEMS - EXPERIENCE

With more than half a century of experience in helping macaroni manufacturers, we believe we might be able to help you if you have any problems in our areas of experience.

PACKAGING

— we believe we have undoubtedly modernized more packages than any other sources. We constantly continue our updating processes.

PROMOTION

— we have not only conceived many promotional plans, but we have studied many that others have launched throughout the country. We believe we can help promote your products that you have by study, and recommend additional products that might be promoted in your trading areas.

MARKETING

— rather than depending entirely on advertising dollars, we can show you modern marketing methods which will help capture more of your market. We have done it for others.

MERCHANDISING

— We can point the way towards new profitable products and lay out merchandising methods.

AND . . .

confidentially advise on the buying and selling of macaroni plants in the United States. We have experience in these areas.

Charles C. Rossotti, President

Jack E. Rossotti, Vice President

George Leroy, Vice President and Marketing Director

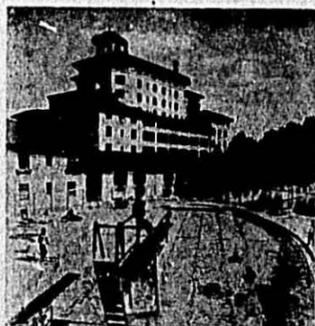
ROSSOTTI CONSULTANTS ASSOCIATES, INC.

158 Linwood Plaza
Fort Lee, New Jersey 07024
Telephone (201) 944-7972

Established in 1898



Golden Grain and Best Foods in Summer Tie-in Promotion
An outdoor promotion in Northern California featuring a summer salad made with Best Foods Real Mayonnaise and Golden Grain Salad Macaroni is now in high gear. Billboards in many locations around the San Francisco Bay Area, Sacramento, Fresno and other Northern California communities are displaying the colorful dual product posting. The outdoor campaign runs from May through July.



John Westerberg, President of Creamettes

L. John Westerberg, Vice President of Sales and Advertising of The Creamette Company was named President of the Creamette Company on April 12, it was announced by H. P. (Jack) Byrd, Senior Vice President of Borden Foods.

The Creamette Company, Minneapolis, has been a major producer of macaroni and pasta products since 1906. It was acquired by Borden Foods, a division of Borden, Inc., in late fall 1978.

Mr. Westerberg succeeds the late Lawrence D. Williams, who passed away earlier in April.

Mr. Westerberg began his career with The Creamette Company in 1945. In 1951 he was named General Sales Manager, and in 1960 advanced to Vice President of Sales and Advertising, the position he held at the time of his appointment to the Presidency of the company.

Mr. Westerberg is a member of the Interlachen Country Club and the Minneapolis Athletic Club and makes his home at 241 Shady Oak Road in Hopkins, Minnesota, with his wife, Thelma, and sons Gary, Steve, John and Paul.

FDA Head Leaves

Dr. Donald Kennedy, commissioner of the Food and Drug Administration since early 1977, is resigning to take a top administrative position at Stanford University, Palo Alto, California.

Dr. Kennedy said he is leaving F.D.A. to become provost and vice-president for academic affairs at Stanford, effective August 1.

PROGRAM 75TH ANNUAL MEETING

**National Macaroni Manufacturers Association
The Broadmoor, Colorado Springs, Colorado**

Sunday, July 8

- 2:00 a.m. Board of Directors Meeting
- 7:00 p.m. Welcoming Reception
- 8:00 p.m. Dinner—Remarks by President Paul A. Vermylen

Monday, July 9

- 8:00 a.m. Breakfast Meeting for Everyone—Ladies invited!
- 8:45 a.m. Ted Sills reminisces
- 9:00 a.m. Elinor Ehrman reports on product promotion
- 9:20 a.m. Gary Kushner reviews the Washington scene
- 9:40 a.m. Vance Goodfellow gives the crop outlook
- 10:00 a.m. Closed session for Macaroni Manufacturers to transact Association business
- Noon Association business
- 1:00 p.m. Tennis Mixer
- 6:00 p.m. Cookout at Rotten Log Hollow—bus transportation

Tuesday, July 10

- 9:00 a.m. Dialogue with Grocers—questions and answers Give and take with an outstanding panel of grocers
- 12:00 Noon National Macaroni Institute Committee Meeting
- 7:00 p.m. Suppliers' Social—Evening Open

Wednesday, July 11

- 9:00 a.m. **Management Seminars**—choose one:
to "Will Your Business Support Your Retirement Years—or
Noon Ruin Them?"

Every Business bears within it the seeds of its own destruction, because the owner is so busy running it today he does not have time to think about his long-term future. Yet, there are only a limited number of options.

Frank Butrick of the Independent Business Institute, Akron, Ohio, will lead the session.

"The Achieving Manager"—how to develop an achievement oriented team; receive feedback on your management style from a national representation of your peers.

Dr. Lee R. Ginsburg, a partner in Miller/Ginsburg and Brant, Philadelphia, will lead the discussion

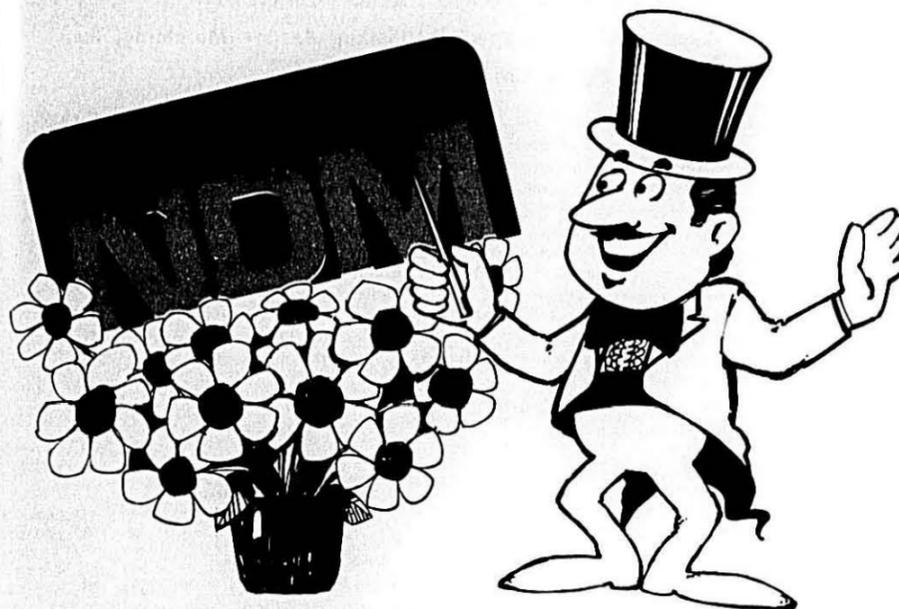
- 7:00 p.m. Suppliers' Social—Dinner-Dance

Thursday, July 12

- 9:00 p.m. Board of Directors Meeting

Adjournment by noon

Golf Tournament can be played on Sunday, Monday, Tuesday on the west course. Check in with the pro and have your card stamped "NMMA Tourney". \$10.00 fee for prize pool, \$15.00 green fees plus \$12.00 cart for two. You must be in a twosome, threesome, or foursome for attesting scores. No husband-wife combos. Ladies invited. Register with Association Office.



**The
magic
touch**

The sign of success.

It's as easy as pulling a rabbit out of a hat when you start with quality durum products from the North Dakota Mill. We're located in the heart of the famous durum country. Our modern milling facilities produce Durakota No. 1 Semolina, Perfecto Durum Granular and Excello Fancy Durum Patent Flour. Our specialists will help you select the durum product you need for the finest pasta products. It's the magic touch you need for success.

the durum people



NORTH DAKOTA MILL
Grand Forks, North Dakota 58201
Phone (701) 772-4841

COMPETITION AMONG CARBOHYDRATES

by Julius A. Perozzi, Marketing Specialist, Selling Areas—Marketing, Inc.
at the N.M.M.A. Winter Meeting

In 1966, Selling Areas Marketing, Inc. began reporting warehouse withdrawals to food stores. In 1973 they added SAMI's Retail Distribution Index. 1977—Institutional Foodservice Trends. 1978—On-Line operations. 1979—SAMI's Scanner Store Data Service.

SAMI is in the business of reporting warehouse withdrawals to food stores in defined marketing areas. It does not report drop shipments, store door deliveries, fresh meat products, produce products.

What is SAMI? It is a communications tool for use by the sales organization, the trade (buyers), marketing management, top management. SAMI provides comprehensive and timely knowledge about products in the market place.

How do clients use SAMI? As a sales department tool to accomplish distribution, shelf management, obtain promotion and feature support. As a management tool to plan, forecast, budget; acquisition study; new product analysis. In product management and complete marketing plan. In Marketing research: to measure results of marketing-sales efforts.

SAMI covers 39 markets, 77% of U.S. food store sales—over 400 categories, 22,000 brands, 130,000 items. It has 300 dry grocery participants averaging 75% coverage. It issues 13 reports a year on 28-day periods. Total U.S. and regional data is projected to all grocery outlets.

Participants include all major factors except Safeway and Schwegman. List is published twice a year with changes reported to clients every reporting period. Average coverage in any given market is 75%. Participants receive cash and data.

SAMI product groups include 235 categories of dry grocery food; 75 categories of dry grocery non-food; 79 categories of frozen and refrigerated foods; 49 categories of health and beauty aids. Data reported includes movement to stores in cases, dollars and equivalents; retail prices; number of operators shipping; cents-

off and other deals; "new" or "deleted" date information; all brands and items for category purchased.

In graphic form, Mr. Perozzi described the state of the nation: U.S. Gross National Product in billions of dollars rose from \$1,650 in the first quarter of 1976 to \$2,141 in the third quarter of 1978. In 1972 dollars the rise was from \$1,256 to \$1,394. Percent of change compared to the previous year was as follows by quarters:

1976			1977			1978		
13	13	10	10	11	12	10	12	12
7	7	5	4	5	5	6	4	4
U.S. Disposable Personal Income								
12	7	8	9	8	10	11	12	11
6	1	3	3	3	4	5	4	4
U.S. Food Store Sales								
7	5	3	5	5	8	8	10	11
Index of U.S. Consumer Prices, 1967=100								
5	4	2	1	4	7	7	8	10
6	6	6	5	6	7	7	6	7

Dollar and Tonnage Trends	52 Week Data				12 Week Data			
	Billion \$	% Change	% Change	% Change	Billion \$	% Change	% Change	% Change
U.S. Total	\$58.5	\$64.4	10.0	1.2	10.9	2.9		
Dry Grocery Food	35.8	39.1	9.0	1.0	10.0	2.6		
Dry Grocery Non-Food	10.9	11.9	9.2	1.4	11.1	2.5		
Frozen Foods	6.3	7.2	15.1	1.5	14.4	3.0		
Refrigerated Foods	2.5	2.8	12.2	3.6	13.0	7.3		
Health & Beauty Aids	3.0	3.4	12.7	2.5	12.3	5.5		

TOTAL U.S. PASTA VERSUS ALLIED CATEGORIES	Pound Basis—Annual Percent Change Versus a Year Ago				
	52 Weeks Ending:	11-22-74	11-21-75	11-19-76	11-18-77
Pasta	+ 3.1	+ 3.9	+ .8	— .5	+ 1.8
Canned Pasta Dishes	+ .6	— 6.5	+ 3.9	— 4.0	— 2.2
Italian Food Sauces	+13.1	+14.6	+10.3	+ 3.3	+ 7.4
Dried Rice	+ 3.0	— .5	+ 1.1	— 1.2	+ 1.4
Prepared Rice	— .4	— 5.0	+12.0	+ 5.9	+ 4.6
Dry Packaged Dinners	—12.4	— 2.6	+ 2.0	+ 5.5	+12.1
Instant Potatoes	+ 4.2	—15.7	+ 5.6	— .1	+ 1.5
Frozen Potatoes	— .9	— 5.3	+ 2.5	+ 7.1	+ 1.0
Total Dry Grocery	0	— 1	+ 2	0	+ 1

Sixteen different brands have the largest 52 week dollar share within 39 SAMI markets. The shares for the top brands vary from a high of 70.4% to a low of 24.2%.

Of the 235 SAMI categories in dry grocery-food, the top three brands

PASTA VERSUS ALLIED CATEGORIES

Category	Pound Index	Dollar Index
Pasta	100	100
Canned Pasta Dishes	63	59
Italian Food Sauces	51	65
Dried Rice	67	60
Prepared Rice	7	16
Dry Packaged Dinners	41	69
Instant Potatoes	12	26
Frozen Potatoes	91	77

1976			1977			1978		
13	13	10	10	11	12	10	12	12
7	7	5	4	5	5	6	4	4
U.S. Disposable Personal Income								
12	7	8	9	8	10	11	12	11
6	1	3	3	3	4	5	4	4
U.S. Food Store Sales								
7	5	3	5	5	8	8	10	11
Index of U.S. Consumer Prices, 1967=100								
5	4	2	1	4	7	7	8	10
6	6	6	5	6	7	7	6	7

Dollar and Tonnage Trends	52 Week Data				12 Week Data			
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Dry Grocery Non-Food	10.9	11.9	9.2	1.4	11.1	2.5		
Frozen Foods	6.3	7.2	15.1	1.5	14.4	3.0		
Refrigerated Foods	2.5	2.8	12.2	3.6	13.0	7.3		
Health & Beauty Aids	3.0	3.4	12.7	2.5	12.3	5.5		

TOTAL U.S. PASTA VERSUS ALLIED CATEGORIES	Pound Basis—Annual Percent Change Versus a Year Ago				
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Canned Pasta Dishes	+ .6	— 6.5	+ 3.9	— 4.0	— 2.2
Italian Food Sauces	+13.1	+14.6	+10.3	+ 3.3	+ 7.4
Dried Rice	+ 3.0	— .5	+ 1.1	— 1.2	+ 1.4
Prepared Rice	— .4	— 5.0	+12.0	+ 5.9	+ 4.6
Dry Packaged Dinners	—12.4	— 2.6	+ 2.0	+ 5.5	+12.1
Instant Potatoes	+ 4.2	—15.7	+ 5.6	— .1	+ 1.5
Frozen Potatoes	— .9	— 5.3	+ 2.5	+ 7.1	+ 1.0
Total Dry Grocery	0	— 1	+ 2	0	+ 1

have a common total U.S. 52 week dollar share of 40% or more in 195 categories.

The top three brands in pasta have a combined 52 week dollar share of 33.2%!

PASTA VERSUS TOTAL DRY GROCERY

Past	Annual Percent Change				
	1974	1975	1976	1977	1978
Dollars	+44.8	10.9	— .3	— 1.8	+ 5.8
Pounds	+ 3.1	3.9	+ .8	— .5	+ 1.8
Retail Price	+40.5	6.7	— 1.1	— 1.3	+ 4.0
Total Dry Grocery					
Dollars	+25	+12	+5	+9	+9
Pounds	0	— 1	+2	0	+1
Retail Price	+25	+14	+2	+9	+8

PASTA CLASS ANALYSIS

	Dollars			Pounds		
	1977	1978	Change	1977	1978	Change
Long Goods	39.1	40.0	+ .9	43.0	43.8	+ .8
Short Goods	28.6	27.9	— .7	30.7	29.8	— .9
Egg Noodles	18.7	18.4	— .3	14.0	14.0	0
Specialties	13.6	13.7	+ .1	12.3	12.4	+ .1
Total	100	100		100	100	

SEASONALITY INDEX—POUND BASIS

	Total	Long	Short	Noodles	Specialties
December	98	95	94	108	103
January	101	102	98	106	102
February	118	122	111	124	111
March	114	110	110	135	112
April	98	95	95	100	110
May	97	99	97	93	96
June	91	90	100	83	85
July	94	87	113	78	88
August	93	89	109	75	88
September	93	93	99	81	90
October	100	105	95	96	97
November	109	118	95	109	110
December	100	100	89	113	111

NEW PRODUCT ANALYSIS FROM ALLIED CATEGORIES

Period Ending December 15, 1978	MBL	\$ Volume	Number of Markets	
			12 wk.	Year Ago
Dry Packaged Dinners	12 wk.	\$2.7	15	17
Betty Crocker Mug O Lunch	\$8.1	\$15.2	4	39 (all)
Mapleton Lite Lunch	7.6	10.8	4	39 (all)
Dehydrated Soup				
Sp Ramen	\$2.7	\$11.1	15	17
Aruchan	1.3	5.3	24	26
Aruchan Won Ton	.4	1.8	19	22
Aruchan Supreme	.8	3.7	26	26
Aruchan Pride	.5	3.0	20	21
Noodles of Noodles	2.2	7.7	19	23
Noodles to Go	.5	2.4	18	25

NUMBER OF BRANDS WITH ANNUAL VOLUME OF AT LEAST ONE MILLION DOLLARS

Pasta	38
Canned Pasta Dishes	21
Italian Food Sauces	15
Dried Rice	21
Prepared Rice	11
Dry Packaged Dinners	16
Instant Potatoes	7
Frozen Potatoes	29

Wholesale Distribution Industry

The wholesale distribution industry (including food), in contrast to the manufacturing sector of the economy, continues to be dominated by small-to-medium size closely-held, family owned business. Of the 202,000 merchant wholesaler-distributor corporations filing tax returns in 1973, 99% had assets of less than \$10 million, and accounted for about 65% of the industry's sales volume. The wholesale distribution business provides year-round employment for 3.5 million. In 1977, average hourly earnings (\$6.78) in wholesale trade exceeded those for all private industry (\$5.14) while average weekly earnings (\$212) were 15% above those in private industry (\$185). Industry sales in 1977 totalled \$532 billion and are expected to reach approximately \$665 billion in constant dollars in 1982, according to Commerce Department estimates.

Fewer Children

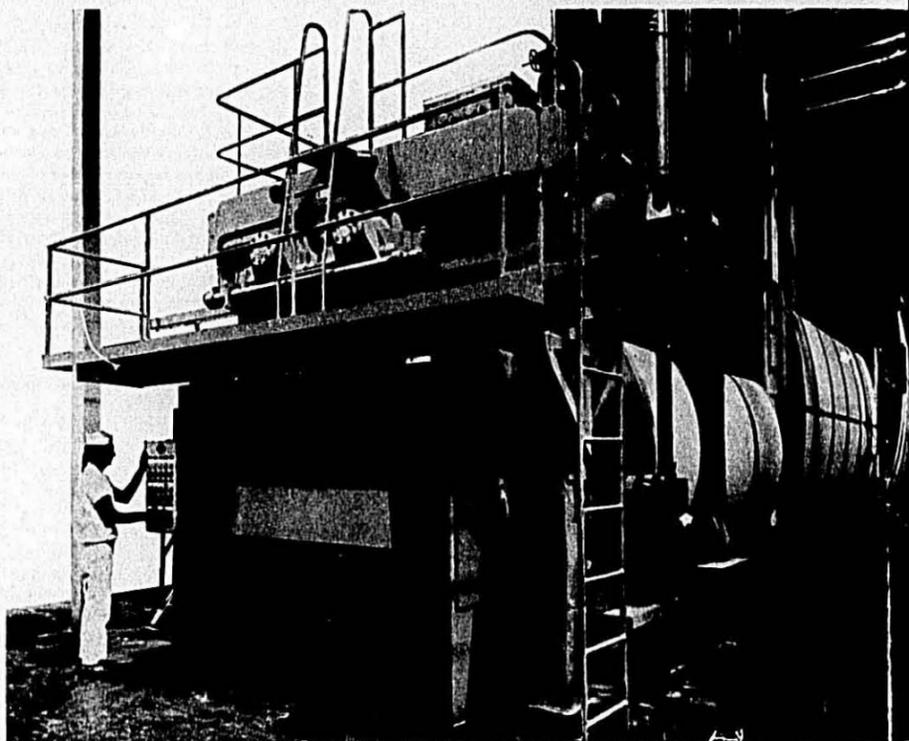
Lower birth rates and changing migration patterns have had a marked impact on the age makeup of state populations in the 1970's according to the U.S. Department of Commerce's Bureau of Census. Nationally, there was a decline since 1970 of about 2 million (11.2%) in the under 5 population and about 3.5 million (6.7%) in the populations 5 to 17. The decline was particularly sharp for the Northeast and North Central states. In the South and West, population losses in these age groups due to declining fertility were offset by migration gains. Florida, Nevada and Arizona continue to lead the nation in percentage gains of those 65 and older. Since 1970 the older population has grown considerably, now representing 10.9% of the population. The slowest growing segment during the 1970's is the 45 to 64 group, reflecting the low birth rates of the Depression years.

Agree to Disagree

"We are each other's compatriots, not enemies. There's no room or reason for hatred for our political and economic system. We should be able to disagree without being disagreeable."—Thomas Murphy, chairman of the General Motors Corp.

BUHLER-MIAG LONG GOODS LINES

Performance You Can Depend On!



Long goods line with maximum capacity of 3000 lbs/hr. Line consists of Double Screw Press TFB, Spreader TSSA, Dryers TDEC-3/TDCA-4/TDFB-11, Stick Storage TAGB, Cutter TST and Stick Return.

Three Standard Models . . . 500 to 4500 lbs/hr

LONG GOODS DRYERS

MODEL	CAPACITY
TDEC/TDCA	500 to 1000 lbs/hr.
TDCA/TDCA	1000 to 2500 lbs/hr.
TDCA/TDFA	2000 to 4500 lbs/hr.

Product quality and consistency sell. Buhler-Miag quality and reliability give you the selling edge.

THE MACARONI JOURNAL

Reliable Performance

Sturdily-constructed 2- or 4-stick spreaders allow selection of ideal extrusion area for a given capacity.

Spreader, Dryer and Stick Storage are continuously driven and controlled by one variable speed drive.

All stick conveying chains and drives are heavy duty and contain automatic tensioners. Dryers have lubricating systems requiring an absolute minimum of maintenance.

Automatic climate controls ensure proper conditions at every stage. Zones are completely separated, cutting down on required supervision.

Motors, sprockets and drive chains, in addition to electrical and climate controls, are standard U.S. components.

Efficient Energy-Saving Design

New dryers are smaller sized. High temperature and high humidity drying requires a minimum volume of fresh air. Fan motors for air circulation are mounted inside dryers, utilizing 100% of electrical energy. (New style, energy-efficient motor is optional). A most energy-efficient design!

Panels are 1 1/2" thick with polyurethane foam core. Aluminum lining on inside for heat reflection and absolute vapor barrier. No heat bridges.

Bacteria Control

High temperature drying controls bacteria growth. Dry bulb temperature is adjustable from 100°F to 180°F.

Dryer is absolutely tight, yet easy to clean, maintain and supervise. Swing-out side panels extend entire dryer length, allowing fast cleanout and service.

Quality Product

High drying temperatures in both final drying stages improve product texture, cooking quality and appearance.

Steady, high temperature drying ensures a straight product, ideal for the high speed packers of today. The high humidity drying climate gives the product an appealing golden color.

Contact us for information on Buhler-Miag Long Goods Lines and other Macaroni Processing Equipment.



Super sanitary design for easy maintenance. All-plastic panels swing out for easy access to all machine parts. Extra-thick polyurethane insulation and off-the-floor construction prevent condensation.



Each spaghetti strand travels exactly the same path, so you can count on consistent drying results. Positive control stick elevator keeps sticks from rolling or sliding from transfer point to the drying tiers.



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SENATOR GEORGE MCGOVERN SPEAKS TO THE FOOD GROUP

Washington, D.C., March, 1979

The word "nutrition" first entered our political vocabulary in the early 1960's. At that time "malnutrition" was equated only with the problems of the hungry. Clearly that was the Nation's most urgent nutrition problem — to get food to those who were without.

In his 1963 farm message to Congress, President Kennedy asked for legislation to expand and make permanent the pilot food stamp program he had initiated by Executive order in 1961. President Johnson cited the food stamp program as one of a number of measures "to protect those who are especially vulnerable to the ravages of poverty." In 1964 the Congress passed legislation establishing the food stamp program on a permanent basis.

In 1968 the CBS documentary "Hunger in America" brought the face of malnutrition into American homes with a heart-rending impact on our national consciousness.

The Congress again responded.

Select Committee

Acting on a resolution which I introduced, my colleagues in the Senate created the Select Committee on Nutrition and Human Needs "to study the food, medical and other related basic needs among the people of the United States".

In the decade that followed:

- The food stamp program was expanded to all 3,000 counties and approximately 16 million persons.
- A uniform, national free and reduced-price school lunch program was created in 1970.
- Other feeding programs were developed to reach the very young and the very old.
- A special program for women, infants and children was launched.

As we became more knowledgeable in the area, we began to enlarge our definition of the word "nutrition". We grew to realize that there were two faces of malnutrition in the United States: The problems of underconsumption resulting from poverty, as

well as the illnesses that can affect us all as a result of a poor diet or excessive consumption of food.

Policy-makers in Washington started to think of nutrition not as a "fad," but as an important policy area with major implications for both American agriculture and the health status of the Nation.

The first witness before the Select Committee on Nutrition in its series of hearings on the relationship between diet and health, begun in July 1976, was the then Assistant Secretary for Health, Dr. Ted Cooper.

He told the Committee:

"In formulating health policy, I believe that we have now reached a crucial point.

"Many of today's health problems are caused by a variety of factors not susceptible to medical solutions or to direct intervention by the health provider.

"While scientists do not yet agree on the special causal relationships, evidence is mounting and there appears to be general agreement that the kinds and amount of food and beverages we consume and the style of living common in our generally affluent, sedentary society may be the major factors associated with the cause of cancer, cardiovascular disease, and other chronic illnesses."

In concluding the series of hearings a year later, the present Assistant Secretary for Health, Dr. Julius Richmond, concurred with his predecessor.

In all, 6 of the 10 leading causes of death were linked to diet. It was this realization, more than anything else, that led to the publication of Dietary Goals for the United States in 1977 and the updated second edition later that year.

Dietary Guidelines

The concept of setting dietary guidelines has been well established since 1943 when the Food and Nutrition Board of the National Academy of Sciences set forth "Recommended Dietary Allowances" (RDA) for the first time. The RDA, which focus on

micro-nutrients, protein and total energy in the diet, are now in their eighth edition and were most recently revised in 1974. Dietary Goals for the United States simply extended to macro-nutrients the same approach the NAS had been using for years with regard to micro-nutrients.

I cannot envision the Congress legislating specific national dietary guidelines. The Dietary Goals Report was intended as the Committee's best advice on how to minimize the disease risks associated with our current diet. The Dietary Goals should be viewed in an ongoing context as part of the evolution of a national nutrition policy.

Where Are We?

Now where has the last decade taken us?

How do we continue to piece together what amounts to a national food and agriculture policy?

First, we must continue to monitor and improve our national food programs.

The school breakfast program is available to only a small percentage of those students who participate in the school lunch program.

The WIC program, the special supplemental food program for pregnant women, infants and children, deserves to be expanded based on the remarkable medical evaluations it is producing.

This year there will be a major effort to repeal the current specific authorization ceilings in the food stamp statute in order to allow the program to maintain its present level of assistance. If the food stamp ceiling is not modified, benefits will have to be reduced 15-20% — and probably twice that much — during much of FY 80. Finally, many important questions must still be addressed with regard to other feeding programs.

Nutrition labeling is clearly a primary public concern whose time has come. With approximately 18,000 food items offered on today's supermarket shelves, of which a majority are processed food products, the buyer is in need of sound, useful nutri-

tion information in order to make a more informed choice.

A recent survey by Yankelovich, Skeel and White found that:

Interest in nutrition . . . is growing in giant leaps and bounds — with 77% of the consumers interviewed indicating that they are more interested in nutrition than they were a few years ago. "Information about nutrition is more modest, with only 24% of the public indicating they consider themselves to be well-informed on the subject: 63% fairly well-informed; and 13% not well-informed at all."

Nutrition Labeling

On February 23rd, the Nutrition Subcommittee completed the oversight part of its nutrition labeling and information hearings. Those hearings led to the formulation of the following action principles:

- 1) A balanced diet is a critical factor in preventing disease and maintaining good health.
- 2) Individual foods, and meal patterns are the critical building blocks of one's total diet, and on a nutrient density basis, some foods are more nutritious than others.
- 3) Macro-nutrients — fat, carbohydrate, protein and alcohol — are equally, if not more, relevant to today's health problems than micro-nutrients.
- 4) Industry has a responsibility to give consumers the tools and information with which to determine easily how individual foods, food products, and meals fit into their diet.
- 5) Relevant, objective nutrition labels, which include a concerted effort to educate the public on how to use the nutrition information on the label, is part of the government's obligation to facilitate communication.
- 6) Nutrition labeling efforts to date have confused the regulatory and information functions thereby undermining the objective of providing accurate and useful nutrition information.
- 7) In order to be comprehensive, a nutrition labeling and information program should include, at a mini-

mum, packaged and processed foods, fresh foods and fast foods.

- 8) A nutrition labeling system that uses standardized values in a uniform labeling format adequately satisfies public health concerns, would reduce systemic costs by providing greater flexibility and increase the access to nutrition information.
- 9) Finally, we must protect the consumer's right to know what is in the foods they select as well as their right to choose those foods which they desire to eat.

I believe we are in a good position to pass legislation this year that meets the needs of all concerned parties. There is a consensus that the system should move towards standardized, representative values. FDA has agreed to work with the fast food industry, and USDA with the perishable food producers, to develop nutrition information systems that are consistent with the labeling of packaged foods. I think consumers and industry alike will benefit for no additional cost. In fact, the proposed reforms could be less costly than the current labeling system. Thus, we are seeking and expect to receive industry support for this legislative initiative.

Nutrition Education

A less visible but important long-term concern is nutrition education for medical students, and the training of researchers in human nutrition. If we are going to alter our current medical practices towards a more preventive approach, it is critical that nutrition and other health promoting tools be taught to both our new physicians and those who already are practicing medicine. In particular, it has been said that, "If the doctors of today do not become the nutritionists of tomorrow, then the nutritionists of today will become the doctors of tomorrow."

If we are going to bring the present research emphasis around to a preventive mind set, then one necessary action is to encourage the training of new researchers who view nutrition as their primary investigative focus. To date the Subcommittee has held two hearings on nutrition education in medical schools, and we plan to continue our investigations in this critical area.

Nutrition Research

The 96th Congress will continue to support the growth of human nutrition research. Three reports in the last year have emphasized the need for more nutrition research. The Congress last year agreed to develop, under the direction of the Department of Agriculture, two more major human nutrition research laboratories at Tufts and Baylor Universities.

There have been encouraging signs at HEW as well. Dr. George Bray recently became the department-wide nutrition coordinator, and NIH proposed to establish ten clinical nutrition units over the next 12-18 months. At the same time, I find it very unsettling that, even though 70% of all deaths in this country result from chronic illnesses in which nutrition is a risk factor, Dr. Fredrickson, the NIH Director, has no plans to increase NIH's nutrition research investment above 3% of the total budget.

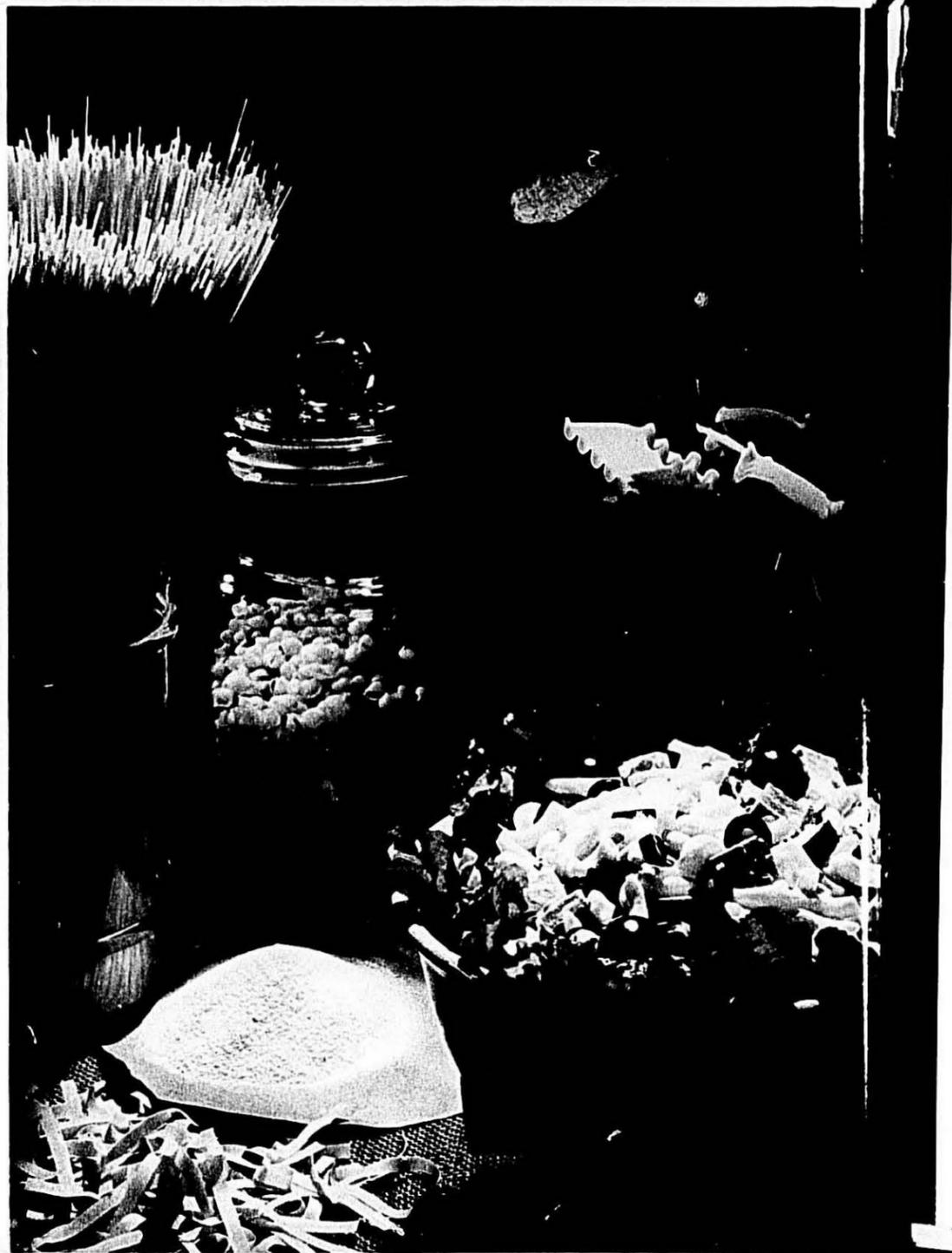
Thus, I am still concerned about what I believe to be the less than total commitment by such critical actors as NIH to alter established medical perception about the role of clinical nutrition. In light of our medical school hearings, the same could be said for the Board of Medical Examiners, and the American Medical Association and the American Association of Medical Colleges' Liaison Committee on Medical Education which accredits medical schools.

As one result, the bio-medical research community persists in putting the bulk of its marbles in the "cure" basket when the most viable long-term solution is the prevention of our killer diseases. Thus, it comes as no surprise that the generally low status afforded nutrition research has raised grave misgivings about the direction of this Nation's bio-medical research.

This same problem is apparent in the current discussions about National Health Insurance (NHI).

Access to medical care was the primary concern in an earlier period of the health insurance debate. Today we face rampant inflation in medical care costs, and thus we hear more and more about health insurance as a means to contain these costs. I believe that national health insurance has the potential to slow the escalation of

(Continued on page 28)



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Peavey Industrial Foods Group

Senator McGovern

(Continued from page 25)

medical expenses. But we must not forget that insurance is a financing mechanism which principally determines who shall pay, and does not necessarily address health care practices. It is my opinion that it should do both.

As our experience with medicare and medicaid has so vividly demonstrated, in order for health insurance to lessen medical care costs to the desired degree, we must simultaneously address the basic lifestyle patterns associated with our chronic degenerative disease—heart disease, cancer, stroke, and diabetes. Otherwise, what we call national health insurance might actually establish only a national medical care insurance program which by itself will neither reduce our medical costs nor solve our health problems. National health insurance will not succeed and could even prove to be a fiscal nightmare if it and our national health programs do not include the concepts of health promotion and disease prevention.

Clearly, nutrition is a vital weapon in maintaining one's health, and in healing the sick. Thus, I cannot over-emphasize the importance of including health promotion provisions and incentives in any insurance package that we develop. For example, besides reimbursement for both in-patient and out-patient nutrition counseling, perhaps there should be non-reimbursement in cases of hospital caused malnutrition.

Food Safety

Lastly, there is the question of how to proceed in developing a consistent and reasonable food safety policy. The saccharin debate in 1977, and the nitrite findings in 1978 have intensified public interest about the chemicals being added, purposefully or inadvertently, at the various stages in the food production chain.

Much attention has been centered on the Delaney clause and whether it is still a reasonable or useful regulatory mechanism. But I suspect that our energy is being misplaced. I am concerned that our sporadic, crisis-oriented excursions into the issue of chemicals in our food lack perspective. I am disturbed that the absolute-no-risk-of-cancer position de-

manded by the Delaney clause is causing myopia and preventing rational discussion about what is the relative risk of various chemicals in our foods.

An even more critical question, and one which is as yet essentially unexamined, is how do the risks from the various chemicals, single and in total, compare to the risk from the amount of fat, sugar and salt that we consume? Finally, it is not clear that the means even exist with which to determine the relative risk between, say, nitrites and pesticides, or saccharin and dietary fat.

In short, we must recognize that the consumer is interested in the healthfulness of the total food supply. In addition to the absolute and relative risks of individual foods and food additives, consumers want to know if they are eating as healthy a diet as the American farmer can produce?

Thus, our perception of what is safe is undergoing some significant modifications.

Just as the Congress must take responsibility to encourage a practical and comprehensive nutrition labeling and information system, we must also begin to articulate a sound food safety policy. No longer can we accept the rather narrow, legalistic definition of safety. It is time to incorporate into our original concepts of a safe food supply the broader understanding of how our food system can be most helpful. This undoubtedly will be a multi-year process, and will require the time and cooperation of government, industry and the American public. The Agriculture, Nutrition, & Forestry Committee will be in the forefront of this effort beginning with hearings this year.

Conclusion

In conclusion, we have made great strides during the last decade in fashioning a national nutrition policy. The result could not be viewed as perceived or rigorously consistent. Rather, as is often the case with the development of a national policy, it reflects many individual decisions, and executive actions, judicial rulings and legislative initiatives. But no matter how one characterizes it, there definitely is a policy being formulated.

An agriculture, food and nutrition policy is every bit as important as an

energy policy or a water policy or an urban policy. It is important to our health, our farm economy, our balance of payments, and our environment.

In the past, success in the nutrition policy arena has been largely measured by the growth of the major Federal food programs. Our achievements in the next decade will be gauged more by how well we meet the challenges outlined above. While I cannot speak for all the parties who may be involved, I look forward to continued creative and energetic leadership from my colleagues in the Congress. By working together we can't help but succeed.

Reasons for Vitamin Enrichment

Cereal fortification is not a solution to the problem of malnutrition, but it is an important step every country should consider for improving nutrition. Peter Ranum, laboratory director, Pennwalt Corp., Broadview, Ill., said at the Sixth International Cereal and Bread Congress in Winnipeg.

Data presented by Mr. Ranum appear to show that "white flour," defined as flour made with an extraction rate of not more than 80% and an ash content of not more than 0.8%, has become quite common throughout the world. Countries which show evidence of nutritional deficiencies should consider fortifying this type of flour with the deficient nutrients, he said.

Mr. Ranum, who collaborated in his presentation with Karel Kulp, American Institute of Baking, Manhattan, Kas., and Fred F. Barrett, Department of Agriculture, Washington, spoke on "Fortification of Wheat Flour with Vitamins and Minerals." He stressed that while there is no single solution to the problem of malnutrition it has been proven that wheat flour fortification is technically and economically feasible and has proven effectiveness "in reducing nutritional deficiencies."

Cost of Fortification vs. Malnutrition

"We cannot estimate cost of malnutrition but there can be no question that for many it results in ill health, inability to support oneself and a need for institutional care, all of

which add up to many times cost of a cereal fortification program," he said.

Mr. Ranum in his conclusion presented a theoretical example in which an imaginary country of 20 million persons with a per capita white flour consumption of 120 lbs a year instituted a fortification program to help relieve niacin, vitamin A, iron and zinc deficiencies.

"It is decided that wheat flour should be fortified with niacin, iron and zinc to restoration levels and vitamin A added so as to supply 20% of the dietary requirement," Mr. Ranum said. He estimated the cost of this program would be \$1.55 per tonne of flour and this, he maintained, works out to a total annual cost, including equipment and administration expenses, or around \$1.8 million per year or about 9¢ per person per year. In this connection, he noted that the cost of two F-15 jet fighters would equal the expenses of running this program for an entire generation. "Even if you look at it as a national defense measure, cereal fortification may be more cost-effective than these fighters," he said.

Starting a Program

Reviewing how a developing nation can start a cereal fortification program, Mr. Ranum noted that both technical and financial start-up assistance are available for developing countries. The World Bank and the U.S. Agency for International Development are two such sources of assistance, he said. Developing countries also can take advantage of fortification provided under the U.S. Food for Peace Program, he said. Most Title II commodities donated under this program are vitamin and mineral fortified and if the purchasing country makes the request, Title I commodities will be fortified with the additional cost borne by the U.S. government. He added that this provision under P.L. 480 (Section 114(b)) is rarely used by countries qualifying for Title I purchases.

Mr. Ranum also gave his audience estimates on the cost of fortifying wheat flour with various nutrients. "The most expensive nutrients are vitamin A and magnesium," he pointed out. The cost of adding calcium and magnesium is reduced somewhat by the flour replacement savings accrued

% of Dietary Requirements (US RDA)/100 Grams Flour

Restoration	% of Dietary Requirements (US RDA)/100 Grams Flour	
	10%	20%
Thiamin	14c	1c 7c
Riboflavin	12c	9c 22c
Niacin	34c	7c 25c
Vitamin B6	4c	10c 24c
Folic Acid	3c	3c 6c
Pantothenic Acid	18c	15c 36c
Vitamin A	—	53c \$1.06
Iron	7c	3c 9c
Calcium	*5c	*20c *40c
Magnesium	** ***62c	**
Zinc	8c	3c 10c

* Plus or minus.

** Not technically feasible.

*** More than.

to the miller, he added. For calcium fortification this can actually result in net savings if an inexpensive local source of calcium is available, Mr. Ranum said.

Cost of Wheat Flour Fortification

Cost of wheat flour fortification in cents per tonne where the goal is to restore nutrients to the original level found in wheat or to supply a fixed percentage of U.S. Recommended Daily Allowance (10% or 20%, assuming daily consumption per person of 100 grams of flour) was presented as follows by Mr. Ranum in a slide presentation:

Recalling the theme of the Congress, "Better Nutrition for the World's Millions," Mr. Ranum stressed that cereals play a crucial role in feeding the world.

"In order to achieve this goal we need effective and practical programs for improving both the quality of cereals available and the quality of cereals consumed," he said.

"Cereal fortification, the addition of needed nutrients to basic cereal staples like wheat, corn and rice, is one of the oldest and most effective methods for improving the nutritional quality of the diet."

Mr. Ranum pointed out that both the United States and Canada have proposed expanding their current cereal fortification programs to include additional nutrients. "Added vitamins have been shown to be quite stable in storage and baking," Mr. Ranum said. He added that one question previously uninvestigated is whether they are stable in the pres-

ence of typical wheat flour treatments used to improve baking quality. In this study, flour was supplemented with seven different vitamins and subjected to six commonly used flour treatments agents added in different combinations. These were added at normal and up to 16 times normal treatment rates to insure finding an effect if one might be present.

"No significant loss in any of the vitamins occurred within the normal assay error," he said. "Chlorination caused some loss of vitamin A, B6 and folic acid, but even these losses were small enough to be acceptable. The use of bleaching, maturing and oxidizing agents is thus quite compatible with vitamin fortification."

Two Reasons for Fortification

Mr. Ranum pointed out that traditionally there have been two different reasons for fortifying cereals:

"One is to restore those nutrients removed by the milling process providing that there is evidence of potential risk of deficiency within the population.

"A second rationale is to use the cereal as a carrier for deficient nutrients. Here any nutrient, regardless of whether or not it is naturally present in wheat, may be added at whatever level is required to prevent a nutritional deficiency."

Based on Nutrition Needs

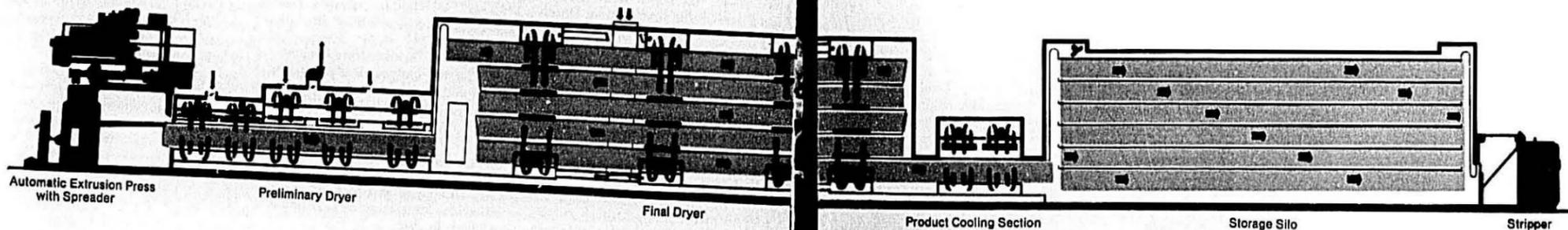
Types and levels of nutrients used in a cereal fortification program should ideally be based on nutritional needs and per capita consumption of the cereal to be fortified in the target population, he said.

"Because such data is not always available, or difficult and expensive to obtain, some countries simply restore deficient nutrients back to the original level contained in wheat," he noted. "Such fortification should take into account the natural levels of the nutrients contained in the flour produced. These levels will vary depending on the types of milling practice in use."

Mr. Ranum noted that in a recent study on the nutrient composition of internationally milled flours, about 80% of the flours collected had a flour ash of 0.8% or lower. These flours had an average nutrient score about a third that of whole wheat flour. Only

(Continued on page 32)

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Reasons for Enrichment

(Continued from page 29)

when ash was above 0.8% did nutrients show a significant gain, he said.

"While this sample collection can by no means be taken as representative of worldwide wheat flour production, it does illustrate that flour with a significantly reduced nutrient content has become quite common throughout the world," Mr. Ranum said. "This is the type of flour one would want to fortify on an enrichment basis."

School Lunch Tests New Bread Patterns

Administrators of public lunch programs have been authorized by the Department of Agriculture to voluntarily test new meal patterns which include increasing servings of bread and bread alternates and an expanded list of foods in the bread alternate category.

In an interim rule published in the Federal Register of Aug. 22, Carol Tucker Foreman, assistant secretary of agriculture, states that the new meal patterns may be used on a test basis until Feb. 2, 1979.

Secretary of Agriculture Bob Bergland, in proposing the new patterns in September, 1977, described the plan as offering the most significant changes in the national school lunch program since its inception in 1946.

More Bread

Schools will be permitted to increase the amount of bread or bread alternates on a weekly basis to students three years of age and older. The previous requirement that one serving (one slice) of enriched or whole-grain bread, or bread alternate, be served daily is replaced with a weekly serving requirement.

The new weekly requirement provides for five servings of bread or bread alternates to one and two-year-olds in the preschool group, eight slices in all other pre-school and elementary age groups to age 12, and 10 slices for students 12 years of age and older. Thus, students in the latter age group will be offered twice the amount of bread or bread alternates now served in a one-week period.

One-half slice of bread or an equivalent amount of bread alternate must

be served with each lunch, with the total requirement being served during a five-day period.

Macaroni Alternate

The new patterns also add "enriched or whole-grain rice, macaroni, noodles and other pasta products" to the list of bread (enriched or whole-grain) alternates. The list of alternates previously included "biscuits, rolls, muffins, etc., made with whole-grain or enriched meal or flour."

The interim rule notice points out that U.S.D.A. received 408 comments in favor of expanding the bread alternate list and 72 opposing the plan. "The majority of those opposing," the notice says, "expressed that (1) too much bread/bread alternates was being specified as a serving; and (2) that bread should remain as a traditional component of a meal."

"One of the results of the Department's review of the Type A pattern was the recommendation to increase quantities specified in the bread/bread alternate component to more accurately meet the nutritional needs of children for iron and other nutrients provided by bread/bread alternates. In response to the majority of favorable comments, this provision remains unchanged."

New School Food Program Booklet

The Food Research and Action Center (FRAC) published a new booklet providing an overview on how School Lunch and Breakfast Programs work. Write to FRAC, 2011 Eye Street, N.W., Washington, DC 20006 for a copy. \$1.00 per copy and 75¢ each for orders of 50 or more. Knowing more about the customer and how he operates can be of strong assistance to sales effectiveness.

Feeding a 260-lb. Lineman

Defensive linemen get paid to eat quarterbacks. To maintain their strength for that weekly chore, linemen must keep up their weight by eating.

That's why Steve Furness, defensive tackle of the Pittsburgh Steelers, spends \$125 per week in Cattaneo's Shop 'N Save in McMurray, Pa. Breakfast of Champions

Furness starts his day with a hearty breakfast. "First, Steve has a bowl of

fruit," comments Mrs. Furness. "Then he'll eat five pieces of French toast, five sausage links, and some home fries. And if he's still hungry, which he usually is, he'll have a few bowls of cereal."

Furness needs food in his stomach before the daily practice, but the most important breakfast is the eight a.m. meal eaten with the team before the weekly Sunday game. This is eaten at the hotel where the players sleep the night before the game.

A pre-game breakfast includes steak, eggs, juice, toast and a lot of pasta. "Starchy foods are better for the stomach because they burn off slower, giving more energy on the field," Furness says. "We don't eat dinner until seven, so we need a lot of food in the morning."

Not a light lunch

Noontime is a break in practice. The club serves lunch.

"It's a choice of hamburgers, hot dogs, chicken, rigatoni and other lunch foods. The players can eat all they want, but they never get anything good—like a corned beef sandwich."

After filling his belly with a few plates of lunchtime food, Furness practices until five p.m.

Wife Debbie prepares dinner. She was a home economics major at the University of Rhode Island. She cooks a different dish almost nightly, with her favorites being chicken tetrazzini and tzimmes, a Jewish dish made of corned beef, carrots, potatoes and a sugary sauce.

"Steve likes to eat fattening things, so I serve a lot of pasta and meats with sauces," says Debbie. "We often have things like potatoes au gratin because Steve needs that extra cheese in his diet."

Furness drinks beer with a milk chaser with his evening meal.

Steve often cooks on the grill in the backyard. "We cook out almost every night in the summer," explains Debbie. "Steve likes charcoal broiled steaks so much that at least once a week in the winter he will put on boots and go out in the snow to grill his steak."

Mrs. Furness heavies up on stews and hearty soups in the winter. "I always cook double to freeze things," she notes. "But it's hard to have leftovers when you're married to a football player."

ASEECO BIN STORAGE SYSTEMS

BIN STORAGE

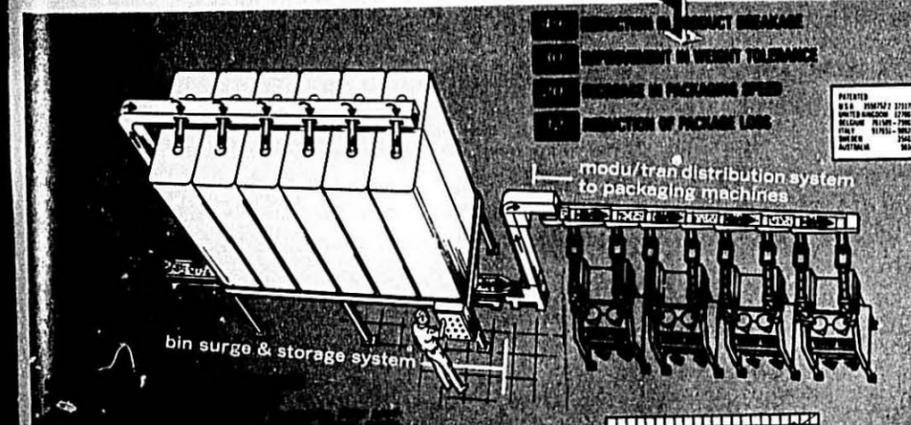
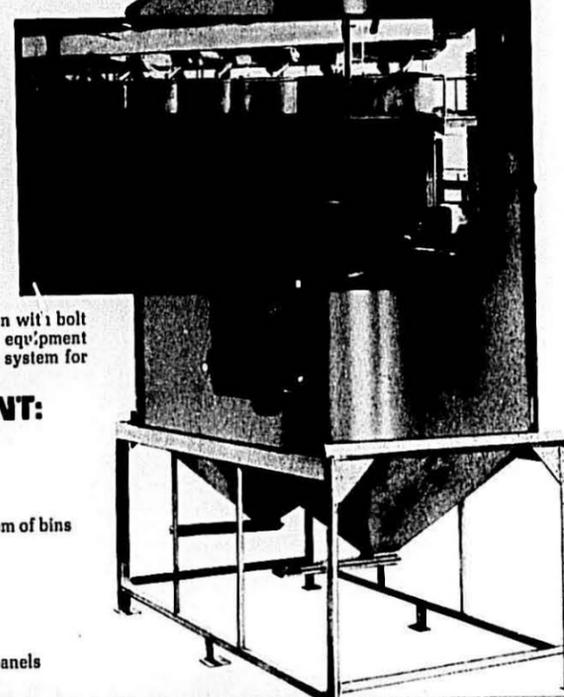
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The Food Dollar— Where It Is Spent

Food Institute Staff Analysis

American consumers spent \$186.4 billion on domestically grown food products in 1977. This was \$7.6 billion or 4.3% more than in 1976. The analysis that follows will be as objective as possible, considering that USDA continues to make revisions in past released numbers. In future Weekly Digest's expenditures on a commodity-by-commodity basis will be discussed.

All of the figures here pertain only to domestic farm-originated food products, and do not include imported foods, seafoods or other foods not of U.S. farm origin. Obviously, they also do not include alcoholic beverages or nonfoods. Therefore, the totals will vary from those issued by other statistical reporting services, such as the Department of Commerce.

Away from Home Increases

In 1977, 67.4% of the consumer expenditures for food were made in retail food stores. This represented \$125.6 billion, which was 2.5% greater than that spent in 1976. The away-from-home market posted a 7.9% gain from the previous year with \$80.8 billion spent, an overall share of 32.6% of the food dollar. Of the foodservice dollars spent, public eating places accounted for \$49.3 billion, or 81.2% of this total, while institutions had 28.8%. (Revised 1976 figures show the breakout was 89.9% for public eating places and 19.1% for institutions.)

It is popular in the food industry to talk about the continuing growth in away-from-home food sales. On a strict dollar basis—domestic farm foods only, consumers allotted 29.7% of their food dollar to the away-from-home market in 1970. In the following years it moved to 29.9%, 30.6%, and down to 29.1% in 1973. However, share started back up in 1974 at 29.4%, then to 31.4% the following year, to 31.5% in 1976 and last year was pegged at 32.6%. Over the past eight years the share of market has averaged 30.5%; and this is only the allocation of consumer expenditures, not reckoning with the actual volume of foodstuffs included in the total bill.

aged 30.5%; and this is only the allocation of consumer expenditures, not reckoning with the actual volume of foodstuffs included in the total bill.

An examination of the farm value of foods consumed away-from-home perhaps presents a clearer picture of the physical volume of goods going into this segment of the industry. In 1977, farmers received \$57.5 billion for the products they produced, down \$107 million from the previous year. The away-from-home market accounted for 18.6% of these dollars, up from the revised 18.4% in 1976. Public eating places accounted for 14.7% of the farm dollar, with 3.9% going to institutions.

Thus, since 1970 the regular grocery trade has been accounting for between 68% and 71% of consumer dollars and from 81% to 82% of the farm value. The away-from-home

markets have been taking 29% to 32% of the consumer dollars—with the trend decidedly on the upside—and between 18% to 19% of the farm dollars.

Who Got It All?

Farmers received \$57.5 billion, or 30.8% of the total. This compares with a revised 32.2% in 1976 and 32.0% ten years ago. Labor's share of the total marketing bill was 32.2%, amounting to \$59.8 billion. This compares with 30.2% in 1976 and 28.7% in 1967. At any rate, farmers and workers accounted for 63.0% of the consumer dollars spent on food in 1977. (Revisions of the 1976 figures were not nearly as drastic as they were last year when USDA revised labor's share down sharply for a number of years past, and added to the residuals. USDA now has revised figures that go back to 1947.)

Packaging and advertising costs are often pointed out by consumerists as adding inordinately to the cost of the food market basket. In 1977, packaging materials amounted to \$16.2 billion, and were 8.7% of the consumer bill. Ten years ago, packaging accounted for 8.0% of the marketing bill. As for advertising, in 1977 and 1976 it accounted for 1.5% of consumer expenditures; ten years ago it was 1.6% (these shares have been measurably revised since last year.)

Pass Through Items

There are many other "pass-through" items involved in food marketing, such as transportation,

WHERE THE FOOD DOLLAR GOES
(Source: U.S. Department of Agriculture)

Billion Dollars:	1977	% of Total	1976	% of Total	1972	% of Total	1967	% of Total
Farmers	\$ 57.5	30.8	\$ 57.6	32.2	\$ 39.1	32.9	\$ 28.8	32.0
Labor	59.8	32.2	54.0	30.2	37.4	31.5	25.9	28.7
Packaging materials	16.2	8.7	15.0	8.4	10.2	8.6	7.2	8.0
Rail and Truck ¹	10.0	5.4	9.5	5.3	6.1	5.1	4.3	4.7
Business Taxes ²	5.1	2.7	4.8	2.7	3.3	2.8	2.4	2.7
Depreciation	3.7	1.9	3.5	2.0	2.3	1.9	1.8	2.0
Rent	3.5	1.8	3.2	1.8	2.0	1.7	1.5	1.6
Advertising	2.8	1.5	2.7	1.5	1.8	1.5	1.5	1.6
Repairs, Bad debts, Contributions	2.1	1.2	2.0	1.1	1.3	1.1	0.9	1.0
Interest	1.6	0.9	1.5	0.8	0.7	0.6	0.4	0.4
Residual ³	15.6	8.4	17.1	9.6	10.6	8.9	12.4	13.7
Corporate income tax	4.0	2.1	3.7	2.1	2.1	1.8	1.6	1.6
Corporate net profit	4.5	2.4	4.2	2.3	1.9	1.6	1.8	2.0
Total Consumer Expenditures	\$186.4	100.0%	\$178.8	100.0%	\$118.8	100.0%	\$89.9	100.0%

¹ Excludes charges for local hauling, includes charges for heating and refrigeration.

² Property, social security, unemployment, insurance, state income and franchise taxes, license fees and other fees but not Federal income tax.

³ Foodservice in schools, colleges, hospitals and other institutions, utilities, fuel, local for hire transportation, and other costs not shown separately.



After 25 years, it's still number 1.

Twenty-five years ago this year, GATX introduced the Airslide Car.

Based on an extremely simple and ingenious idea, it allowed shippers to unload finely divided commodities, like flour, sugar and starch, more easily and quickly than ever before possible.

Today, 25 years later, the Airslide Car is still the most widely used car of its type in the U.S., with 14,060 cars built to date and additional cars now on order. It continues to be produced annually, to meet a demand that lives on and on.

And no matter how hard transportation engineers try, they have yet to invent a more efficient, economical or reliable covered hopper for finely divided commodities.

This year, GATX proudly celebrates the anniversary of a product with a record that is quite probably unequalled anywhere in the railroad industry: The Airslide Car, still number one after 25 years.

GATX

General American Transportation Corporation/120 South Riverside Plaza/Chicago, Illinois 60606

Where Food \$ Goes

(Continued from page 34)

business taxes, depreciation, rent, insurance and so on. After all of these expense items, corporations were able to earn \$4.5 billion in 1977 after taxes—and that is all corporations, from packers and manufacturers through wholesalers and retailers—or 2.4% of the total spent by American consumers. This compares with a revised 2.3% in 1976.

Much of the above information can be found in the U.S. Department of Agriculture's Agricultural Outlook (November). There is a more detailed accounting on file at USDA (much of which used to be in the now defunct USDA Marketing and Transportation Situation). The Food Institute has drawn on this material for some of the statistics shown here.

Fast Food Takes Bigger Bite

Sales at fast food restaurant chains may expand by 20 percent this year as more people stop for quick hamburgers, pizzas, steaks and chicken, the U.S. Department of Commerce states.

More of the nation's grocery chains are countering the threat by installing their own carry-out operations, including delicatessen counters, the Department added.

"With 35 cents of every food dollar going to food eaten outside the home, grocery chains are planning extensive sales campaigns to fight the fast food encroachment," it said.

"A number of supermarkets are even installing sit-down restaurants in their stores while others are opening restaurant chains of their own."

In a report on business franchises, the department said, "The franchised fast food restaurant continues its success and popularity and more dramatically than ever has made a major impact on the food service industry."

These restaurants are expanding their menus to get more breakfast and dinner business, the department said.

It said sales of franchised fast food restaurants reached \$21 billion in 1978, up 17 percent over a year earlier. That is about \$100 for every adult and child in the United States.

Sales are expected to jump about 20 percent to \$25 billion in 1979, the

report said. Part of the increases may reflect higher prices.

The number of franchised fast food restaurants increased from 51,972 in 1977 to 57,878 last year. There will be about 66,000 units this year.

"The highest concentration . . . continues to be in California, Texas and Ohio," the department said. Employment in fast food franchising was 1.23 million in 1977.

"The trend today is to build brand loyalty for fast food chains in the same way manufacturers build brand loyalty for their products," it said.

A Kitchen for Customers

From the architectural magazine "Kitchen Planning"

At the Pasta Mill, New Brighton, PA, customers are invited into the kitchen to place their order and watch cooks prepare and serve it on the spot.

While the restaurant uses a cafeteria type counter to channel traffic, the difference is that Pasta Mill "sells" its food right from the cooking and preparation stations. There are no waitresses or waiters. Customers watch pasta and other hot dishes being prepared fresh—inches away—and order directly from the cooks.

The Idea Works

The idea works—so successfully, in fact, that since his restaurant opened in October, 1978, owner Louis Pappan has realized a 25 percent bigger gross than the \$8,000 weekly he anticipated. He reported one week's receipts were \$18,000. And plans for expansion are already in the works with Pittsburgh slated as the site for Pasta Mill No. 2. This 3,600 square foot restaurant will eliminate some of the kinks Pappan has discovered—the biggest being lack of space.

At Pasta Mill three to five cooks man the steam kettles, hot warming plates, spaghetti boiler, a steam cabinet and hot food bain marie. They cook and serve the limited menu: spaghetti and meat balls, lasagne, beef stroganoff, veal parmigiana, and chicken caesalatore. Further down the line is a Gyro station where sandwiches or plates of the Greek beef and lamb specialty are broiled and served with grilled pita bread.

Another change in Pappan's new restaurant will be the location of the salad bar. The second one will be

in the kitchen also, so diners don't have to put down their plate or chopsticks to cool while they fix their salad in the dining room.

The dining section of the 3,600 square-foot restaurant is constructed with peaked roofs and the capability of solar heating with a wheat flour mill motif. Wood is a heavily used design feature. The theme has been carried into the kitchen where dining room milling machinery, exposed wood beams, wooden shipping crates, colorful pictures of pasta shapes are transformed into stainless steel holding and cooking units and actual pasta.

Geared for Fast Service

The kitchen is geared for fast service—even to the inclusion of a drive-through window, a popular traffic builder. Table turnover inside is less than 20 minutes, speed helped along by quick delivery of spaghetti and noodles out of the spaghetti boiler. The pasta is precooked from its raw, hard form in about seven minutes, then portioned into nine-ounce plastic cups, which when the order is placed, can be dipped in hot water and within seconds put piping hot onto the plate with sauce and meat.

Silver and china are disposables, oval plastic "foam china" which holds the heat plus heavy plastic silverware

How to Cook Macaroni Foods

Send \$1 for 36 frame filmstrip and narration guide for training restaurant personnel. Box 338, Palatine IL 60067.

Food Stamp Participants

Participants in the food stamp program in October numbered 15.5 million, against 15.3 million in September and 15.9 million a year ago, the Department of Agriculture said. Total value of food stamp coupons issued in the month was \$702.8 million, which included \$441.1 million of "bonus" coupons, compared with \$670.4 million and \$404.1 million, respectively, in October, 1977.

Number of children participating in the national school lunch program in October was 26.9 million, against 26.7 million a year ago, with 12.1 million receiving free or reduced-price lunches, against 11.9 million in the same 1977 month.

NEW STEP TOWARD OFFICE OF THE FUTURE

An innovative office product that prints with a laser, receives and transmits documents electronically through ordinary telephone lines and word processing and data processing, was announced by the Office Products Division of the International Business Machines Corporation.

The new IBM 6670 Information Distributor brings together multiple technologies into a single unit. It combines electronic communications, laser printing for both word processing and data processing applications, text processing and copying. The product will initially be marketed in New York City, Chicago and Los Angeles.

Its laser printer condenses oversized computer printouts onto letter-size paper of original quality. It also prints on both sides of a page and electronically changes typestyles on the same page. Printing formats can be individually customized, text and data can be merged, and the unit can be used as a convenience copier.

"We believe this product represents a significant evolutionary step toward the much discussed office of the future," said J. Richard Young, IBM vice president and president of the Office Products Division. "The IBM

6670 Information Distributor's combination of technologies can greatly simplify the dissemination of information.

"It makes a new dimension of printing quality available to the office and enhances communications through its capability of being linked to computers and their data bases," he said.

The IBM 6670 can print multiple sets of documents at speeds of up to 1,800 characters per second, or 36 pages a minute.

Each printed page is of original quality. Numerous recipients of a one-page letter or lengthy report, which has been distributed electronically, can each receive copies.

The multi-purpose IBM 6670, newest member of the Office System 6 family, provides these capabilities and functions:

- High-speed, non-impact printing of information from communications lines or magnetic cards, with the ability to process the text, or merge text and data, in customized print formats.
- Condensed format printing of oversized computer generated printouts in a high-quality typestyle on both sides of letter-size



paper, without special computer programming.

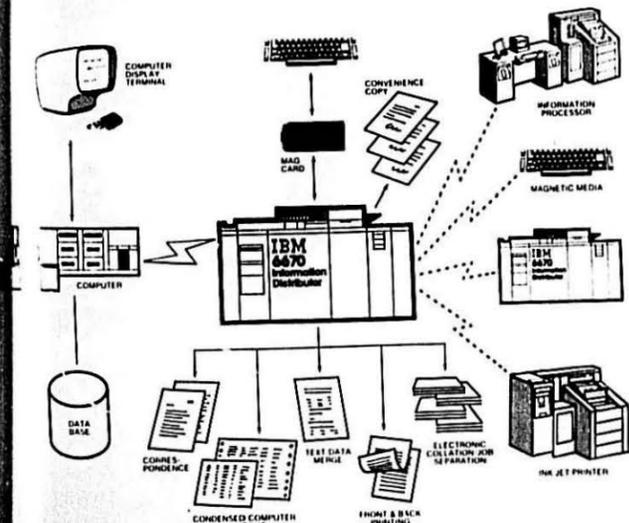
- High-speed communication of documents over switched or leased telephone lines.
- Convenience office copying at up to 36 copies a minute, with the ability to interrupt a communications or text-processing function and automatically resume that function when copying is completed.
- Magnetic card reading and recording. The IBM 6670 can store multiple customized formats.

The IBM 6670 Information Distributor expands the choices for users of print technology in the office. Laser printing is now added to the traditional impact printing of the IBM "Selectric" and electronic typewriters and Office System 6, and the ink jet printing of the IBM 6640 Document Printer.

As an extension of IBM's Office System 6 family of products, the Information Distributor can be used in conjunction with Office 6 Information Processors, IBM Mag Card Typewriters, IBM 6640 Document Printer, suitably programmed computers, or other IBM 6670 units. A communications network can be designed using various configurations of these products, depending upon the user's requirements.

The unit's laser technology permits up to four separate typestyles to be printed on a single page in any sequence. As an example of its flexibility, individual characters can be

(Continued on page 40)

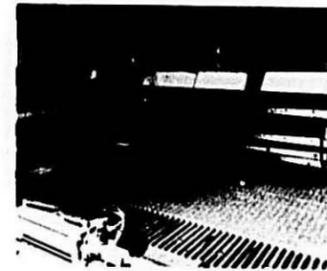


This illustration indicates how the new unit can play a central role in a business organization through its ability to access and process a wide variety of information. The IBM 6670 prints with a laser, receives and transmits documents electronically, processes text and data, and can also make convenience copies.

acb
BASSANO
bassano pasta equipments

long pasta line

Rollnox



- Bassano exclusive patent
- Macaroni, Ziti and special pasta
- Fast drying at medium and high temperature
- Standardized productions : 500 to 1.800 kg/h

Cannelux

- Traditional process on canes
- Spaghetti
- Medium and high temperature drying
- Standardized productions : 250 to 2.500 kg/h

short pasta line

Processing and drying lines for

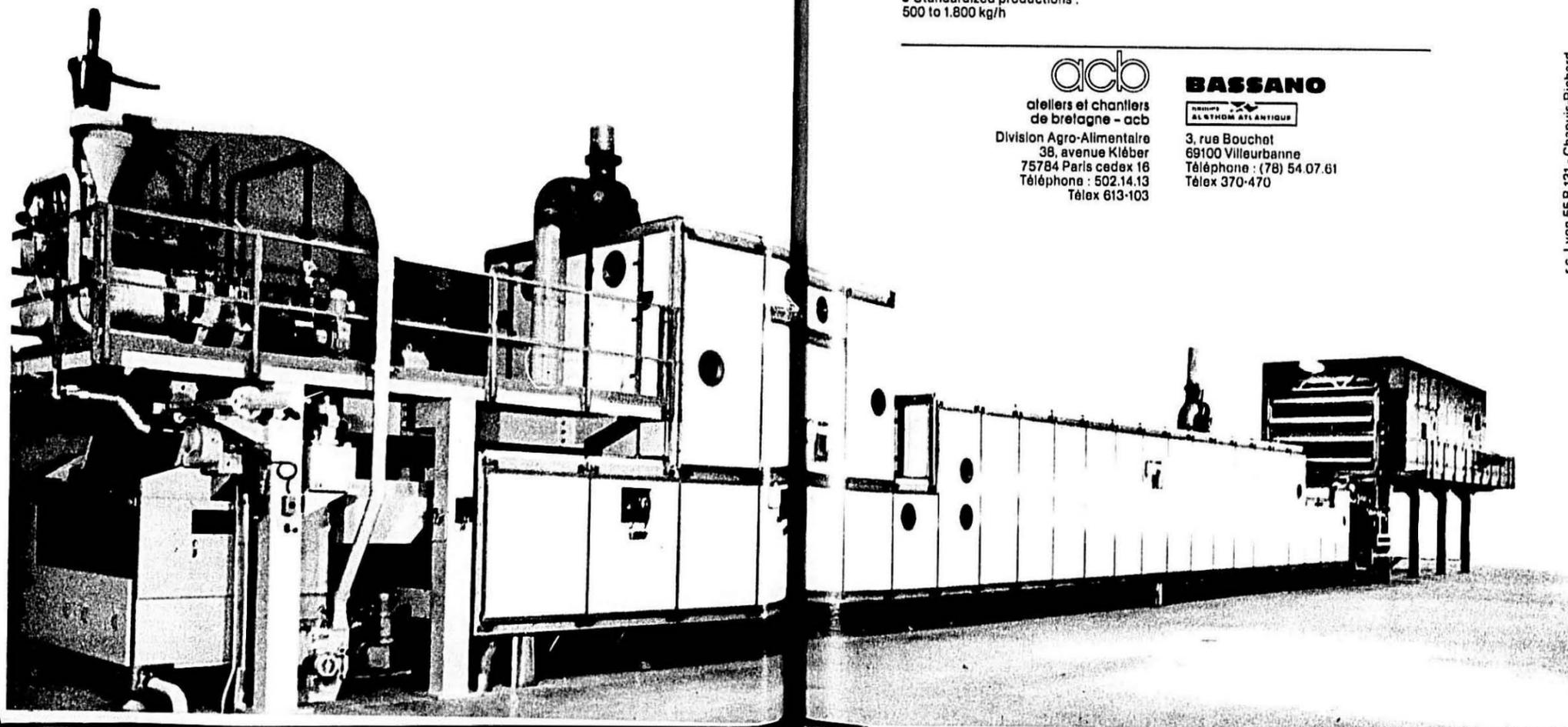
- Soup, noodles or small sizes pasta
- Pasta of all sizes
- Large pasta
- Standardized production from 250 to 2.500 kg/h according to the different dryer lines

acb

ateliers et chantiers
de bretagne - acb
Division Agro-Alimentaire
38, avenue Kléber
75784 Paris cedex 16
Téléphone : 502.14.13
Télex 613-103

BASSANO

ALSTHOM ATLANTIQUE
3, rue Bouchot
69100 Villeurbanne
Téléphone : (78) 54.07.61
Télex 370-470



IBM 6670

(Continued from page 37)

printed alternately in any of the four typestyles. Nine typestyles are available.

The IBM 6670 Information Distributor also electronically collates documents, whether printed from magnetic cards or via communications from IBM word processing products or computers.

The IBM 6670 Information Distributor is available through a six-month rental plan for \$1,565 monthly with 5,000 prints/copies included and 2.8 cents per additional print/copy; lease plans of 24-months for \$1,375 per month with 5,000 prints/copies included and 2.5 cents per additional print/copy; and 36-months for \$1,315 per month with 5,000 print/copies included and 2.4 cents per additional print/copy. Purchase price is \$75,000. First deliveries are scheduled for the second quarter of this year.

The product was developed and is being manufactured in the Office Products Division's facility in Boulder, Colorado.

Personal Computing

The use of computers in big and medium sized businesses is not news.

The use of computers in small businesses (the personal business) is news. This is due to the development of the microcomputer—the so called computer on a chip.

Now any office, from a one man shop up to a 30 employee operation, can afford and efficiently use a complete microcomputer system. Now there is even a magazine to help this personal business get started in and operate their computer. It's called Personal Computing.

Free Copy

Personal Computing discusses inventory control, accounts receivable, accounts payable, payroll, government forms, etc. For a free copy of the magazine, all you have to do is call 800-325-6400 and order a trial subscription and they will immediately mail out a copy. When the \$14 one year subscription invoice arrives, you can pay it if you like the magazine, or write cancel on it and return it if you do not, and keep the issue free of charge.

Success Tied to Motivation

Proper motivation is the key to a company's labor-management relations and productivity success, a group of executives, human resource specialists, educators and labor officials agreed at the 14th Annual Food Management Conference, sponsored by Sigma Phi Omega in cooperation with Western Michigan University.

"State of mind" and "attitude" were words that recurred throughout a presentation by Michael Wright, president of Super Valu, Hopkins, Minn. Better productivity cannot be achieved for any length of time in any company, Wright said, unless attitude conducive to achieving the desired state is created.

He chided those who equate motivation with "the carrot or stick technique." The image generally associated with such a technique is that of a jackass, he said. If the supervisor, or whoever is attempting to motivate positively, starts with the premise that he is dealing with a jackass, he is doomed to failure, Wright said.

It is difficult to create, and even more so to maintain, positive attitude, he said. But the most difficult of all is to convert a negative attitude into a positive one.

"If you treat each person you deal with as if you fully expected a superior performance, the chances are that you will get it." If a supervisor's expectations are high and this is transmitted through confidence, the chances of success are far greater than an attitude of expecting failure. "It is a self-fulfilling prophecy," he said.

Set Positive Goals

He warned executives to set positive goals—but not to set them unattainably high. When delegating responsibility or assignments, give the subordinate enough leeway to succeed and enough responsibility to show confidence in the delegate's ability to perform successfully, or failure is automatically built into the assignment, he said.

"Treat employees with respect at all times," Wright said, suggesting the full use of the Golden Rule in dealing with all employees.

Don't Talk Recession

Tim Hammonds, senior vice president of Food Marketing Institute,

warned against talking ourselves into a new recession. In recent years "we have faced nine out of our last three recessions," and while many factors show that "the coming recession" is not imminent, he said many economists and political, media and business leaders are assuming there will be a recession, which the assumption alone might bring on.

Hammonds warned that one must always be alert to the direction of the motivation. Too often, we motivate negatively rather than positively, and then wonder why our efforts have failed, he said.

"People are the key to a company's success. Productivity is the result of motivating people, more than automation."

"When you are lucky enough to find good people, overpay them, delegate responsibility to them, even if it means shifting responsibilities," he urged. Companies should adapt themselves to make the best use of talents that often are wasted or overlooked. It is possible to motivate-out losing attitudes, he said.

Employees expect management to be flexible and to let them take responsibility and participate, and the management team that takes advantage of this desire will be the successful one, he said.

As supermarkets grow in size, department managers often are responsible for as many employees as a smaller entire store employs, he said. Yet management has not seen fit to train many of these people in how to direct and motivate their subordinates, he added.

"Remove the roadblocks from the paths of your people—get out of their way yourselves," he admonished, "and give them the opportunity to succeed."

Selective Perception

Walter Davis, special assistant to the president of the Retail Clerks International Union, spoke of "selective perception" to which we are all prone. Management and Labor look at the same problem, want the same results and see different things, he said.

There are many considerations other than wages, he said. The employer-employee relationship creates problems as well as solutions, he warned. Regardless of how good that

(Continued on page 42)

Introducing Hoskins Company



Charles M. Hoskins

Glenn G. Hoskins Company was launched in 1941 as a business and technical consulting service to the Macaroni Industry. Over half the industry in North America subscribed to the Hoskins service. During the consulting years substantial contributions were made to the technology and operation of the industry.

Temperature and humidity controls of macaroni dryers were first introduced by Hoskins and then disseminated throughout the world.

Plant operations Forums were held for 13 years. Members of the industry and suppliers discussed technology and theory of macaroni manufacture. The most valuable contribution of these meetings was a free exchange of information which substantially increased the technological competence of the industry.

One of the proudest contributions to the industry was Bob Green, the Secretary of the NMMA, who originally entered the industry through our organization.

We acted as consultants in designing a number of new factories and expanding old factories. This included the Creamette Company, American Beauty, A. Zerega's Sons and Ronco.

In the 1960's the name was changed to Hoskins Company and the nature of the business was changed to a Manufacturers Sales Representative for:

DEMACO, the principal domestic manufacturer of complete pasta production lines.

ASECO, a manufacturer of storage systems and mechanical conveyors for noodles and short cut macaroni products.

SEMCO, a manufacturer of systems for pneumatically conveying and storing semolina and flour.

RICCIARELLI, an Italian manufacturer of pasta packaging machines, systems for conveying long spaghetti from saw to packaging machine and specialty machines for making bowties and twisted vermicelli.

CLERMONT, a manufacturer of noodle cutters, noodle sheeters, Chinese noodle production lines, crepe manufacturing lines and related equipment.

Selective Perception

(Continued on page 40)

relationship is, the larger the number of employees a company has, the larger the number of problems it has and the character of the work has absolutely no relationship to the number of problems that exist, he said.

Regardless of how much either side tries, it is impossible for labor or management to look out for the other side's interests, he warned.

Tough Questions to Ask a Job Candidate

- What's wrong with your present job?
- Does your boss know you are looking for a job?
- Why have you made so many job changes?
- Why are you interested in our company?
- How ambitious are you?
- What are your three greatest strengths?
- What are your three greatest weaknesses?
- Where do you want to be in five years?
- Where do you think you'll be?
- Are you technically or management oriented?
- Do you feel you have top management potential? Why?
- How good a manager are you? Details?
- How good a leader are you? Details?
- What have you disliked most about past jobs?
- What do you think you would like best about this job?
- If you were just starting out after graduating from school, what would you do differently from what you've done?
- How important to you is salary compared to other aspects of the job?
- What five things have you done that you're most proud of?
- What does the word success mean to you?
- What types of job are you looking for?
- Why aren't you making more money?
- Why should we be interested in hiring you?

Source: "The Executive's Guide to Finding a Superior Job" by William A. Cohen, AMACOM, 135 West 50 St., New York 10020, \$12.95.

Multi-Company Experience: Prerequisite for CEO's

The old "I-started-at-the-bottom-and-worked-my-way-up" tradition of company presidents or chief executives seems to be fading in corporate America.

At least that's what a recent survey of executive hiring practices and trends, conducted by the (Century City) Los Angeles-based executive search firm, Genovese & Co., revealed recently.

President and founder, Donald P. Genovese, said he polled over 500 U.S. executives who were either president or chief executive officer of up to \$4 billion company.

"Most of them (77%) had multi-company experience," (up to five different companies) he said. "Only 19% had never worked for another company."

Furthermore, most of them indicated multi-company experience is clearly a prerequisite for manager/executive positions, according to the survey.

The survey disclosed that 90% of the respondents had been either president or chief executive for less than ten years.

"Of those executives hired from outside the firm, an executive search firm was used in approximately half of those placements," reported Genovese.

Interestingly, advertisements were never a means of bringing the executive to the attention of the company.

Results of the survey, which covered the presidents' offices, managers/executives, MBA's, use of executive search firms and minority hiring, are now available in a booklet published by Genovese Co. For a free copy, write: Genovese & Co., 1880 Century Park East, Los Angeles, CA 90067, (213) 277-7421.

Multifoods Report

International Multifoods Corp. reported record earnings for the 11th consecutive year along with record sales and increased unit volume for the fiscal year ended February 28, 1979.

Earnings for fiscal 1979 were \$24.5 million or \$3.06 per share on sales of \$931.0 million. This compares with prior year earnings of \$22.3 million or

\$2.81 per share on sales of \$827 million.

William G. Phillips, chairman said that Multifoods closed the year with strong momentum, finishing with the best two quarters in the company's history.

Results for the fourth quarter ended February 28, 1979 including net earnings of \$8.0 million or \$1.01 per share on sales of \$241.3 million. Earnings for last year's fourth quarter were \$6.3 million or 80 cents per share on sales of \$214.0 million.

According to Darrell Runke, president, all four of the company's worldwide market areas contributed to the sales and earnings improvement for the year.

In the Industrial area, Runke said that sales and earnings were improved as increased unit volumes were reported by all major product lines. Substantial earnings improvement was reported in Canada for bakery and export flour as well as poultry meats.

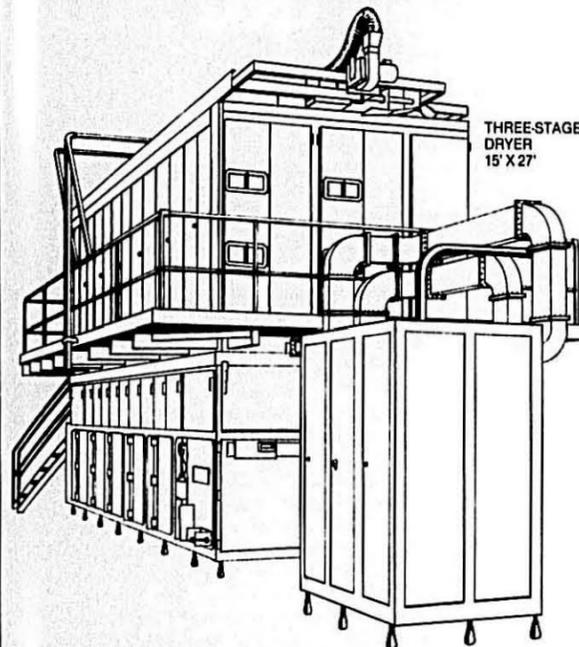
Runke said that improvement in the Consumer area was aided by volume gains for cheese products in the United States, and frozen food products in Canada, while substantial improvement was also achieved for family flour. He added that the decorative accessories group reported strong volume increases and earnings approached the break-even level from a heavy loss position the previous year.

According to Runke, increased volumes and better margins for animal feed and health products contributed to the overall gains in the Agriculture area. Strong performances also were recorded by the veterinary supply and seed corn groups. He said that we successfully disposed of our U.S. egg operations by year-end.

In the Away-From-Home Eating area, Runke said that improved performance from Mister Donut's franchised operations and increased volume in the Boston Sea Party restaurants were the major factors contributing to increased sales and earnings.

According to Phillips, Multifoods entered its new fiscal year in good operating condition. He said the past year the company was able to achieve fine results in a number of product areas and was able to implement corrective measures in several areas experiencing difficulties.

TODAY'S DRYER



UNITS IN THESE LBS./HR. CAPACITIES: 1500, 2500, 3000 and 4,000 ARE OPERATING TODAY AT:

- GOLDEN GRAIN, San Leandro, California 2 units
- GOLDEN GRAIN, Chicago, Illinois 2 units
- D'AMICO, Chicago, Illinois 1 unit
- CAPELLI, Montreal, Canada 1 unit
- GOOCH, Lincoln, Nebraska 1 unit
- O.B., Fort Worth, Texas 1 unit
- LIPTON, Toronto, Canada 2 units
- GILSTER MARY LEE, Chester, Illinois 2 units
- WESTERN GLOBE, Los Angeles, California 1 unit
- SKINNER, Omaha, Nebraska 1 unit

THE PIONEERING IS OVER

The microwave dryer is standard 24 hour/7 day equipment for any size macaroni or noodle plant.

- Up to 4 times the production in the same feet of floor space (a barometer in itself with construction costs of only \$40 sq. ft. range).
- Reduces infestation up to 99.99% of bacteria, Salmonella, E. Coli, molds, yeast, weevils and insects.
- Most easily sanitized dryer. Hose down or steam it clean.
- Makes a richer looking product; no blanching.
- Energy savings reported: 52% less BTU's; 6% less KW's.
- Lowest downtime. "We keep an accurate record of all downtime and express it as a percentage of time down to time scheduled. Microdry leads our list at less than 2%". Pitt. Mgr., leading mid-west operation.
- "All future equipment will be Microdry" - Tech. Dir., Large pasta plant.

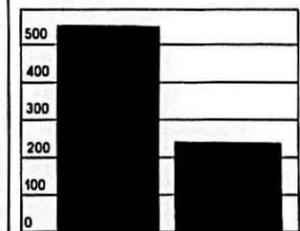
Completely fabricated and assembled in our plant. All stainless steel construction. Complete microwave and process control instrumentation systems with the unit - no extras to buy. Personnel generally can learn operation in one day. Continuing consultation with Microdry.

Microwave dryer compared with conventional dryer

MICRODRY Corp. World leader in industrial microwave heating



Dept. , 3111 Fosteria Way San Ramon, CA 94583, 415/837-9106



Pasta drying operation from production line comparisons by two major processors



NEW! Die washer by Microdry. More compact; 2000 p.s.i. water nozzle pressures.

WHAT EXPLAINS OUR SUCCESS?

by
Richard L. Lesher
President
Chamber of Commerce
of the United States



Ask most Americans why this nation is great and powerful and here are some of the answers you will get back:

1. "It was God's will."
2. "It was our destiny."
3. "It was our superior endowment of natural resources."
4. "It was our science."

Certainly, we can put an end to many of these myths. America has never been the most populous nation. And until recently, we trailed many of the advanced nations in science and technology.

What about resources? We were never overendowed with natural resources—a truth people are just now "discovering." In fact, there are many underdeveloped nations with vast reserves of natural resources and population, and they are still classified as underdeveloped nations of the "Third World." Think about that and ask why.

The secret of our success is—and always has been—embodied in a people and a business system which place great premiums on competition, individual initiative, hard work and good organization and management.

These are the elements of our society which hold together the fabric of our greatness invisibly like Adam Smith's "unseen hand." Therein lies the vulnerability of the system. The intangible essence of these most precious resources could be brutally murdered and it might be years before the death is discovered—much too late to think about looking for a villain.

It is always easy to justify one more government program to benefit one worthy group or another. It is always easy to find an abuse somewhere that can be "corrected" by a new law or a new regulatory agency.

But unfortunately it is *not* easy to stand back, take a look at the whole picture, and see where we are headed.

The growth of government is crippling what's left of the private economy in three ways:

First, through direct competition, in which government agencies subsidized with tax dollars offer the same services as taxpaying, private firms.

Second, in competition for funds in the capital markets. The government's enormous borrowing drives up interest rates and makes it more difficult for private firms to raise capital.

Third, the economy is crippled through excessive regulation, which decreases competition, decreases efficiency, dulls initiative, and increases costs.

Why does capitalism have a bad name? Why are we in ever increasing danger of destroying those very qualities that have long sustained us? I think there are three major reasons:

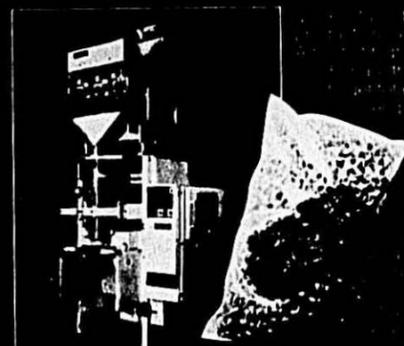
The first is simple misunderstanding. Our business system is often interpreted by the wrong people, people who are hostile to it, and they explain it to those who are ignorant of it.

The second bad influence on the capitalist image is the standard of comparison. To be honest, the results of our economic system should be compared with competing systems. But somehow, the opposition has succeeded in discouraging such comparisons. Instead, capitalism is held up to some abstract standard of perfection, and it falls short. Well, no wonder! No economic system run by imperfect human beings is going to be perfect, and capitalism is no exception. *But it should be judged on the scale of the possible, not the fantasy of the ideal.*

The final problem distorting our perception of capitalism is our confusion over certain national—and personal—goals.

Do we want a *higher* standard of living for everyone? Or, a more *equal* standard of living? I submit that we cannot have both and we had better face the need to make a clear choice between the two—we had better decide whether it is preferable to dine on half of a sparrow or a quarter of a turkey.

You won't find the top name in pasta in any pot.



TRIANGLE

You're always ahead when you start with the very best.

Belt Storage Systems Have Wide Adaptability

Continuous belt storage machines from Food Engineering Corp. are used to automatically provide temporary accumulation or surge in industrial processes for a wide variety of granular, pelletized, or other particle-sized products. The machine has been designed to handle non-free flowing items such as chips, flakes, and other flat or curly items, as well as free flowing products.

The belt storage systems provide first-in first-out accumulation of products on a continuous basis and allow a non-interrupted flow of product to packaging or further processing on demand from the downstream equipment.

The machines are offered in single, double, or triple level, depending upon a customer's building or process requirements. The machines are available with optional dust cover systems, catwalk and ladders for easy access and service, control panels with graphic displays, moving gate discharge systems, and vibratory discharge scalpels for the removal of product fines and/or lumps.

Features

The storage machines are relatively simple in mechanical operation and are also very rugged and dependable. Some of the main features follow:

1. An infeed shuttle car distribution system travels up and down the length of the continuous storage chamber. It is equipped with a rotary probe for sensing of the peak position of the product on the storage belt and always operates to fill product at the peak location. The shuttle rotary probe and reversing and forwarding clutches obtain all power for operation from the troughed belt conveyor that brings product to the shuttle. The patented shuttle design is mechanically simple and does not require cables and pulleys or electric cords or reels connected to it. It is designed for 24 hour per-day operation.

2. The storage conveyor system is made of high strength metal slats of stainless steel, carbon steel, or aluminum, depending upon the product requirements. The slats are attached

to large carrier roller chains on each side. They do not require any intermediate support beneath them and are capable of carrying relatively large loads. The manufacturer asserts that the conveyor system does not have tracking or other problems which are sometimes associated with other types of belt systems. Machines are offered with storage capacities of up to 100,000 pounds or over 8,000 cubic feet for each conveyor level, depending upon the product bulk density. Product depths are available to 8 feet or more and the machine length is available as required.

3. The storage unit may be equipped with Food Engineering's patented moving gate discharge system, which may be the only device available that will discharge delicate or non-free flowing products at a uniform rate. Electric sensing eyes or other devices are not required to control the discharge flow. The discharge of the storage unit is independent of the infeed and may or may not operate while the infeed is running.

4. The sidewalls of the storage chamber slope inward to reduce the product loading against the walls, resulting in lower drag and, in some cases, a much reduced tendency for product marking or breakage as it moves along the storage walls.

One typical use of the accumulating systems is to provide a buffer between packaging and the process line. Temporary packaging machine breakdowns will then not cause process line shutdowns, resulting in significantly greater line yields.

Another use is to accumulate products from batch operations and provide continuous downstream process operation. In addition, the storage units are used to accumulate products for two shifts to allow packaging to operate on a single 8-hour shift for 24 hour-per-day operation.

For further information, write to Food Engineering Corp., 2765 Niagara Lane, Minneapolis, Minn. 55441.

Food Labs Directory

A directory describing the capabilities and areas of expertise of about 450 food testing laboratories and consulting organizations has just been made available by the Institute of Food Technologists.

The 1979 IFT "Regional Guide to Food Testing Laboratories and Consultants" is organized according to the six U.S. Census regions, to make it easier to locate needed services in any given part of the country. It also contains a section listing non-U.S. organizations, for those having testing requirements abroad.

In addition to brief descriptions of the testing capabilities and consulting services for each organization, the directory carries the name and phone number of the director or contact person of each organization, and its full address.

The 44-page two-color directory is available from IFT Regional Guide, Lockbox 94332, Chicago, IL 60690 for \$10.00 per copy, postpaid.

Energy Tips: Insulate and Humidify

"No man is an island," no individual is self-sufficient within himself. With our increased demand for energy, we, as individuals, must become more responsible in using the energy resources we have wisely.

Here are a few tips on how we can better conserve energy, and at the same time save money by practicing conservation.

1. Set your thermostat at the lowest setting which is reasonably comfortable. The suggested maximum for daytime is 65 degrees. At night, it is suggested that you set the thermostat at 55 degrees or less. Try not to change the thermostat setting very often.

2. Adequately insulate your home.

3. Cold drafts from a window or door can cause you to lose as much as 30% of your heat. This problem can be solved by installing weather stripping and caulking around leaking frames.

4. High humidity helps your body hold heat. This is especially important in the winter because dry, warm heat absorbs moisture from the skin causing you to feel chilly. This factor can be offset by properly humidifying the home. Place a pan of water near a heating outlet or purchase a humidifier.

Washington Meeting
Mayflower Hotel
September 12, 1979

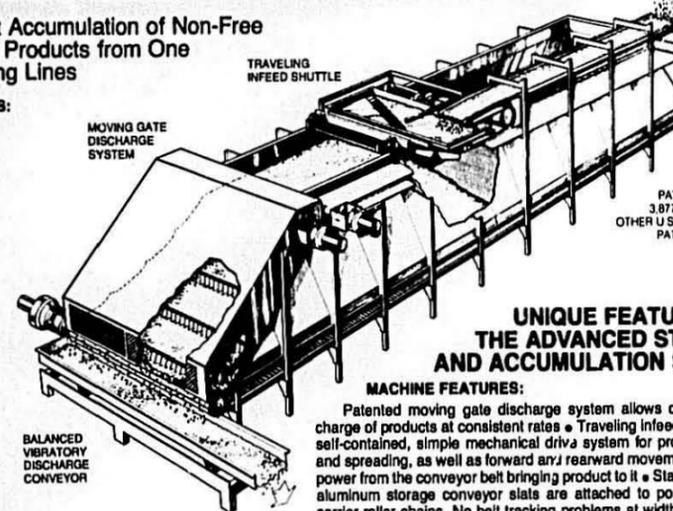
THE MACARONI JOURNAL

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Copies of the booklet are available by sending 55 cents for each to cover postage and handling to: The Macaroni Journal, P.O. Box 336, Palatine, IL 60067.



Nick Rossi Metro New York Sales Manager

Joseph P. Viviano (right), President of San Giorgio Macaroni, Inc., Lebanon, Pa. based manufacturer of macaroni and related products, has announced the appointment of Nicholas Rossi (left) to the position of sales manager for the metropolitan New York market.

Mr. Rossi will maintain his present position as vice president in charge of sales and marketing of Procino-Rossi products. He assumed this post in 1978 when San Giorgio, a division of Hershey Foods Corp., acquired the Procino-Rossi Corp. Prior to that he had been president and sole owner of Procino-Rossi.

Mr. Rossi grew up in the pasta business as the son of one of the founders of the original company, Alfred Rossi. In this new position he will be working directly with Davey L. Jimison, District Manager, San Giorgio, northern New Jersey and New York.

Promotions Announced By Gooch Foods

Gooch Foods, Inc., a Lincoln based food manufacturing subsidiary of Archer-Daniels-Midland Company, has announced the appointments of Mr. Orville Lowry as Vice President and director of marketing, Mr. Brent Braun to General Sales Manager for branded products and Mr. Mike Thissen to Division Sales Manager for the Central Division.

Mr. Lowry began his career in retail store management and joined Gooch in 1965. In 1971 he became Sales Manager and in 1977 was elected General Sales Manager.

Mr. Braun was also in retail store management prior to joining Gooch in 1968. Mr. Braun has most recently been the Central Division Sales Manager.

Mr. Thissen joined Gooch in 1976 as a sales representative for Kansas and Nebraska. Previously, he had been in retail store management.

Wright Machinery Names Gatlin

Wright Machinery Division of Rexham Corporation announces the appointment of James E. Gatlin, Jr., as salesman for the Central States. Gatlin will concentrate on applications in the five-state area for Wright Machinery's form / fill / seal, rotary weighers, and modular inline packaging systems.

Gatlin previously was purchasing and marketing manager for Funston Nut Division of Pet, Inc. in St. Louis. Before joining Funston in 1971 he served four years in the U.S. Army as chief warrant officer in Vietnam.

A native of Andalusia, Alabama, Gatlin attended Modesto Junior College, Troy State University, and Southern Illinois University.

From Edwardsville, Illinois he will represent Wright Machinery in Missouri, Kansas, Nebraska, Iowa, and Southern Illinois.

Wright Machinery systems are used by food, snack, nut, coffee, tea, cereal and candy manufacturers for packaging a variety of dry, free flowing and semi-free flowing products in flexible and rigid packages. The Durham, North Carolina based firm began operations in 1893. Its packaging systems are used in 24 countries in North and South America, Europe and Asia.

Deadly Game

"Economists seem to be indulging in a deadly kind of competition trying to outdo one another in predicting when the bottom will finally fall out and our country plunge back into another economic recession. It's been that the economists have predicted twelve of the last five recessions accurately. . . ." Thomas A. Murphy, chairman of the General Motors Corp.

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