

**THE
MACARONI
JOURNAL**

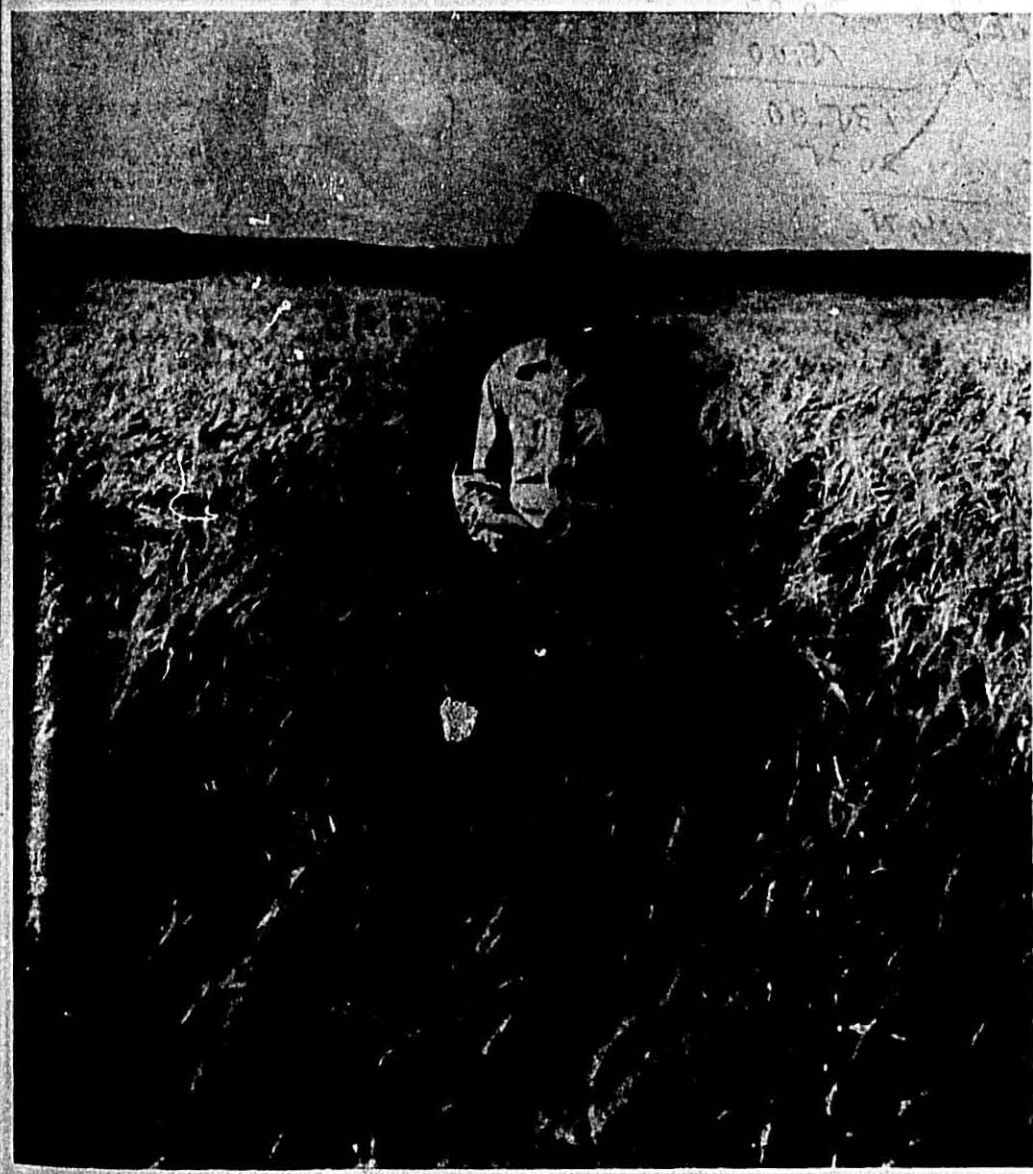
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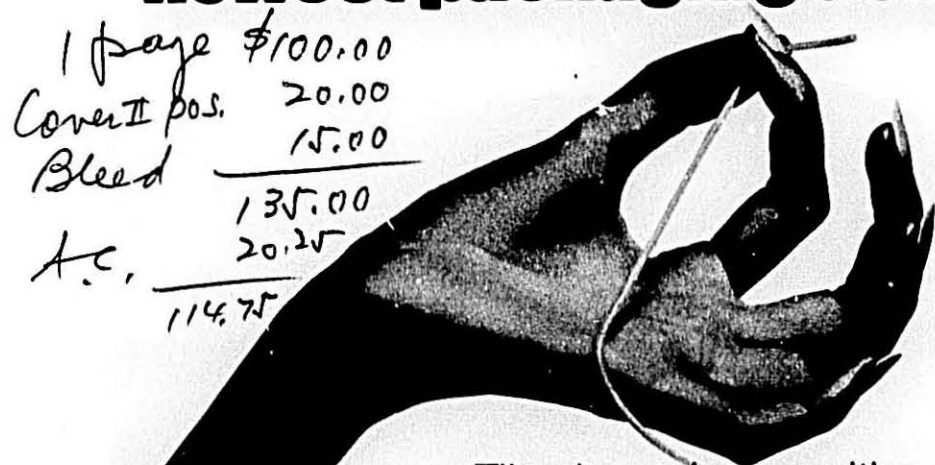
SEPTEMBER, 1974

Macaroni Journal



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The Macaroni Journal

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SEPTEMBER, 1974

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Editor's Notebook:

It has been a weather year. Floods in the spring prevented planting. Then drought came and hot dry weather pushed spring planted grains to early maturity.

The Burlington Northern Railroad reports: "Following a late spring, the crop headed out on short straw and is now reaching maturity well ahead of normal. Some fields are being cut for hay. The crop has been extremely variable all season and the harvest results continue to reflect the wide variations. Yields reported in early August ranged from poor to good with generally light test weights."

Crop reports will be followed closely until all of the durum is in the bin.

Mystery in U.S.D.A. data

Milling & Baking News reports: "Astonishingly, the U.S.D.A. prelimi-

nary review of the wheat situation indicates 1973-74 domestic utilization of durum at 51,000,000 bushels, up from 40,000,000 a year ago. Reason for the consternation is that blending with other classes of wheat in pasta products has become so prevalent this season because of the wide margin of semolina prices over hard wheat farina and flour. In a crop as small as durum, data are difficult to pinpoint, but consensus of observers is that domestic use in 1973-74 was far short of the U.S.D.A. estimate. For 1974-75, the Department projects domestic use of 43,000,000 bushels, commenting that 'domestic food use is expected to continue strong while improved durum supplies overseas may hold down exports.'"

Representatives of U.S.D.A. and the Department of Commerce, Bureau of Census, have been invited to the NMMA Meeting in Washington, September 17, to review industry statistics.

The Durum Outlook

Melvin G. Maier, administrator of North Dakota State Wheat Commission, referred to blending in the U.S. and abroad in his convention presentation. "In Italy, especially," he said, "we are disturbed over a vast increase in utilization of other wheats in durum blends for pasta products." What long-term effect this will have on world export demand is difficult to assess," he added. "Similarly, we expect there has been increased production of blends in this country as our own millers and manufacturers struggle with profit and loss statements."

From an industry-wide viewpoint, the 1973-74 marketing year must rank as "one of the most turbulent ever experienced." Production of the fourth largest crop of record and a 37,000,000 bushel carryover resulted in total supplies of 122,000,000 bushels. Mr. Maier scored "misleading export sales commitment reports" as partly responsible for the sharp increase in international demand for food and the resulting fears that the U.S. would be "out of durum" by June 30, 1974, or certainly before the 1974 harvest.

Prices & Costs Spiral

"Producers' durum prices surpassed levels well beyond the expectations of the most foolish or most learned forecaster," he observed. Many were able to sell not only much of their 1973 crop, but also old crop from previous years at these higher price levels—when transportation was available."

"It was a good year for North Dakota wheat and durum producers," Mr. Maier acknowledged, "but the glow of its memory has been dimmed by rapidly spiraling costs of production, the full impact of which will be felt only this year and in the years ahead." Durum production costs have risen in similar proportion to the cost increase for pasta manufacturers.

"Despite the higher price of the raw material, domestic consumption this past year has increased and may reach a new high of 44 million bus for the year just ended," Mr. Maier said. "Yet, the U.S. has not run out of durum because early in the marketing year, price began to ration demand in the export market and expectations turned to disappointment."

Decrease in durum exports is accounted for largely by the lack of a repeat 19 million bus to the U.S.S.R., Mr. Maier told the convention. "Anticipated larger sales to Europe did not materialize and, in fact, France, the United Kingdom, West Germany and



Melvin G. Maier

Italy all imported less durum this past year than the year before," he reported. This decrease he attributed to blending because of price.

Floods, Then Drought

Mr. Maier presented a series of photographic slides showing the difficulties encountered by North Dakota durum farmers in planting the crop this spring. "Based on a large number of local observations, visits with producers, elevator managers and county agents, we feel that North Dakota durum producers did increase durum planted acreage over 1973 by at least 10%," he said. This compares with U.S. Department of Agriculture reports of planting intentions in January and March, showing increases of 45% and 39%, respectively, over 1973.

Since mid-June, North Dakota has been dry and most parts of the state could now use a good rain, Mr. Maier said. Big factor in the outlook for 1974 durum production is weather, he observed. Most prevalent durum varieties require 90 days of growth from emergence to maturity. Allowing a week or 10 days for emergence, 90 days from the first two weeks in June would indicate maturity in the latter part of September. Risk of frost damage is obviously considerably greater because of the late growing season, Mr. Maier stated.

Could Total 87,000,000 Bu.

"The 1974 durum crop is a long way from the bin," Mr. Maier said. "However, assuming a 24-bu yield on a 10% increase in harvest acreage (2,882,000 acres), North Dakota alone could produce 69 million bus in 1974. U.S. production, assuming average yield in other producing states, could total about 87 million bus."

"Another factor is that of what producers might do with 1974 production," Mr. Maier pointed out. "We estimate

that there is enough empty storage space in North Dakota to take care of all 1974 production of the major crops. At least 500 million bus of space is available and 85% is on-farm bin space. There is a strong possibility that wheat and durum prices could weaken by the time the harvest has moved to North Dakota. Many farmers, even if prices should hold at current levels, will place their 1974 crop in the bin.

Durum Production

Durum wheat production was forecast July 1 at 100 million bushels, up 18 per cent from 1973 and 37 per cent above the 1972 crop. Acreage was set at 3,677,000 and yield at 27.2 bushels per acre.

In North Dakota planting was continuously delayed by excess moisture and turned out to be the latest since records began in 1950. Planting of small grains was finally completed by June 18. Development is behind schedule with more than half of the durum still in the stooing stage or earlier on July 2. Hot dry weather during July brought grain to an early maturity and some deteriorated to the point where it was cut for hay.

Durum Varieties

Rolette was the leading variety of durum wheat planted in North Dakota in 1974, comprising 38.4 per cent of the total acreage planted. This is more than double the proportion devoted to this variety a year earlier. Leeds dropped to 28.2 per cent of the acreage, whereas last year Leeds made up half of all durum planted in the state. Wells came in third with 17.5 per cent of the acreage, also a decrease from a year earlier when it comprised 27.8 per cent. Ward, a new variety in 1973, is in fourth place with 12.7 per cent of the acreage. Hercules lost considerable ground with 1.4 per cent of the acreage planted compared with 4.6 per cent a year earlier.

The total durum acreage planted in 1974 was 3,190,000 acres. Nineteen per cent above 1973.

International Wheat Situation

"Total world trade in durum in 1974-75 should be substantially below the 3.2 million tons expected to be traded in 1973-74," Koy L. Neeley, senior economist, foreign commodity analysis, Grain and Feed Division, U.S. Department of Agriculture, told the Macaroni Convention delegates.

"Such a statement should be tempered," he added, "with the knowledge

that crop prospects in Africa and the Middle East can change quickly, and we are far from certain of what production will be in the U.S. and Canada."

Prices to 'More Nearly Normal'

Mr. Neeley stated that, "If our present view of the situation is correct, durum supplies for the domestic market in this fiscal year should be more plentiful and prices should be more nearly normal than during 1973-74."

Last year's production of durum was poor in Italy, the Middle East and North Africa, and consequently stocks can be assumed at rather low levels, Mr. Neeley suggested. In recent years, the main areas importing durum wheat have been the European Community, the durum-producing countries of North Africa, the U.S.S.R. and the People's Republic of China, he said. This year, crop prospects are good in France, Italy, North Africa and the Middle East, as well as the U.S.S.R., so import requirements should be lower than in recent years. It seems unlikely that the U.S.S.R. will be a substantial importer, Mr. Neeley predicted, adding that "What the P.R.C.'s requirements will be is anybody's guess."

China Could Have Major Impact

In his comments on the international wheat situation, Mr. Neeley outlined potential crops and demand in various countries. He made the following comments about the People's Republic of China: "Wheat crop conditions in the P.R.C. have been reported as good but there are conflicting stories of drought in some important wheat producing areas. They perhaps will not reach the reported record production of the past two years and this could have a major impact on the world wheat market."

Regional Problems' Could Plague India

The monsoons in South Asia are late and seem to be weak thus far this year, Mr. Neeley reported. "If the poor monsoons of 1972 were repeated, real problems could develop in India and some neighboring countries," he cautioned. "Although rice is the crop affected by the monsoon, the rice supply has a direct impact upon demand for wheat."

Wheat Consumption Drops in Japan

According to a Reuters report, the Japanese Food Agency estimates that during the past few months consumption of bread and noodles declined by more than ten per cent as compared to the same period last year. The higher cost of wheat has caused Japanese consumers to turn to lower priced rice and other staple foods.



George Smith, chairman of the North Dakota State Wheat Commission, addressed the National Federation of Press Women at a luncheon on June 29 in Bismarck. More than 300 press women attended the luncheon as well as Senators Milton R. Young and Quentin N. Burdick.

Wheat Commission Honors Press Women

More than 300 women from across the United States attended a luncheon sponsored by the North Dakota State Wheat Commission Saturday, June 29, as part of the National Federation of Press Women convention held June 26-29 in Bismarck, N.D.

Chairman Speaks

George Smith, chairman of the NDSWC, thanked the delegates in his luncheon remarks for all the help they had given the wheat industry by publishing recipes calling for the use of wheat or durum products. But he wished, however, the women would receive more recognition for the important work they do.

"Lately," Smith continued, "the North Dakota farmer has been in the spotlight for the quality grain he produces, and it's hard earned recognition. But you have been diligently producing a quality product too."

"So that's the reason we decided to honor the NFPW," Smith said, "and thank you for all the help you have given the grain and food industry in the past and hopefully for all the help you will lend in the future."

Pasta Salad Served

The luncheon menu included beef cheese soup, hard rolls, broccoli, Richshaw salad (winner of the national pasta recipe contest) and fresh fruit.

The following were honored by the NFPW at the luncheon: Dr. Ruth Bacon was given an honorary membership; Mary Wright, Arkansas, Wilma Collins, Iowa, and Mary Lou Pence, Wyoming were honored for 25-year memberships in the NFPW; and Kathy Wyde, Indiana, and Ann Johnson, Fargo, were given youth project awards.

Pasta Research Progressing

Consumers shopping for pasta products, such as macaroni or spaghetti, seldom have to worry about variety in today's market. Some 180 forms of pasta products are already available for their choosing. Unfortunately, little variety exists when it comes to choosing a pasta product with a varying amount of nutritional value as almost all have a 10 or 11 per cent protein content.

One bright spot is a report on high protein pasta research being conducted by the Cereal Technology Department of North Dakota State University (NDSU). The report covers six months of research in a 30-month project aimed at developing durum-based pasta products with high protein and improved nutritional content.

The study under the auspices of the National Wheat Institute and the North Dakota State Wheat Commission also seeks to investigate the unique functional characteristics of durum wheat and to find potential applications of durum ingredients in a wide range of food and industrial products.

The Cereal Technology Department has six persons working on the research. Dr. Orville Banasik and Dr. David Walsh are co-project leaders, Dr. Merlin Breen is in charge of laboratory operations and JoAnne Bell, Tom Thielges, and Bruce Johannes are laboratory technicians.

Fundamental Research

Banasik, chairman of cereal technology, says "the research has been quite successful. We have been doing some basic and fundamental research in the first two quarters. Our first thrust in the project is to develop a good macaroni product, of high protein, that can be used commercially."

The January 1 to March 31 second quarter report shows they are producing (Continued on page 8)

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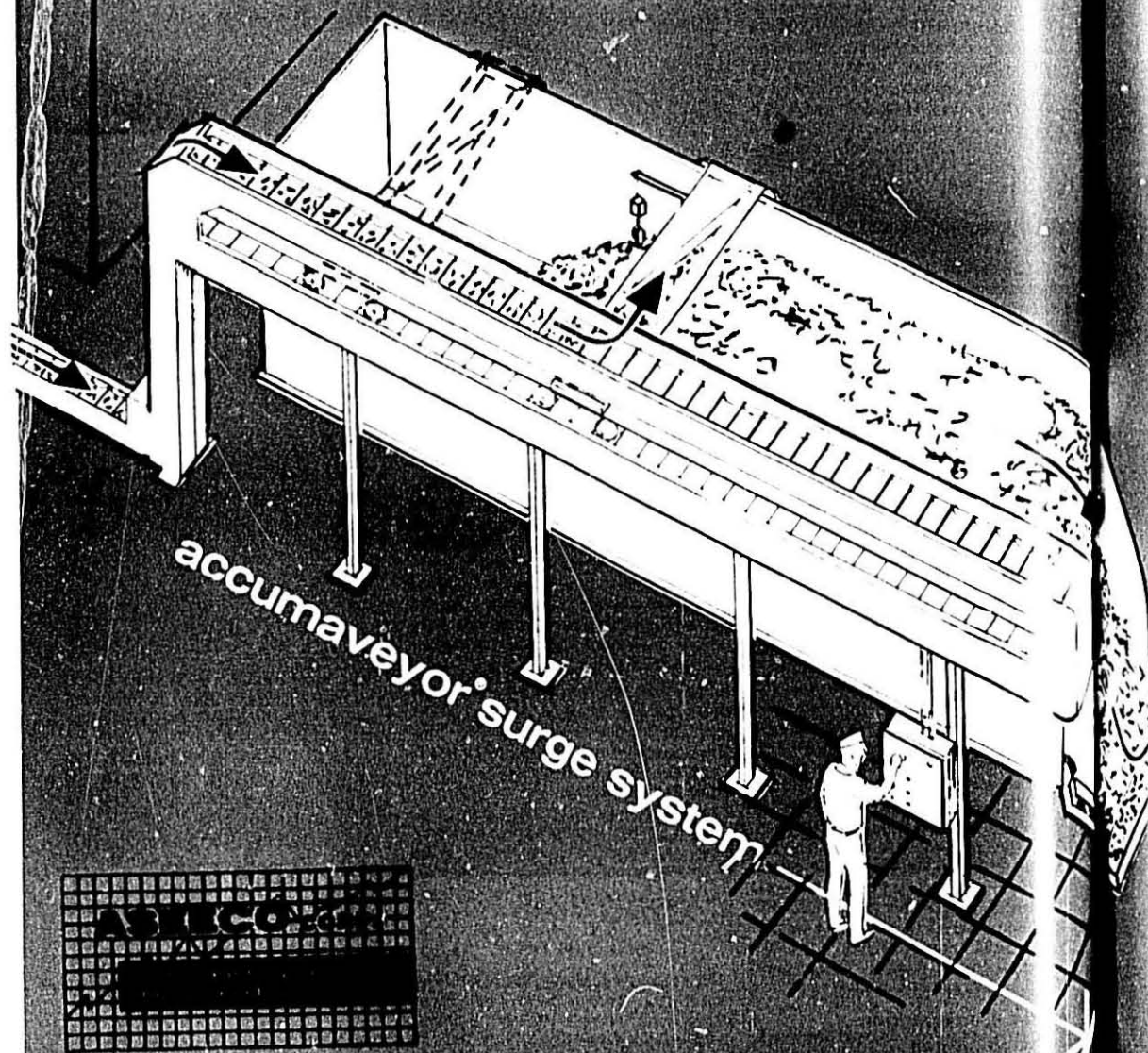
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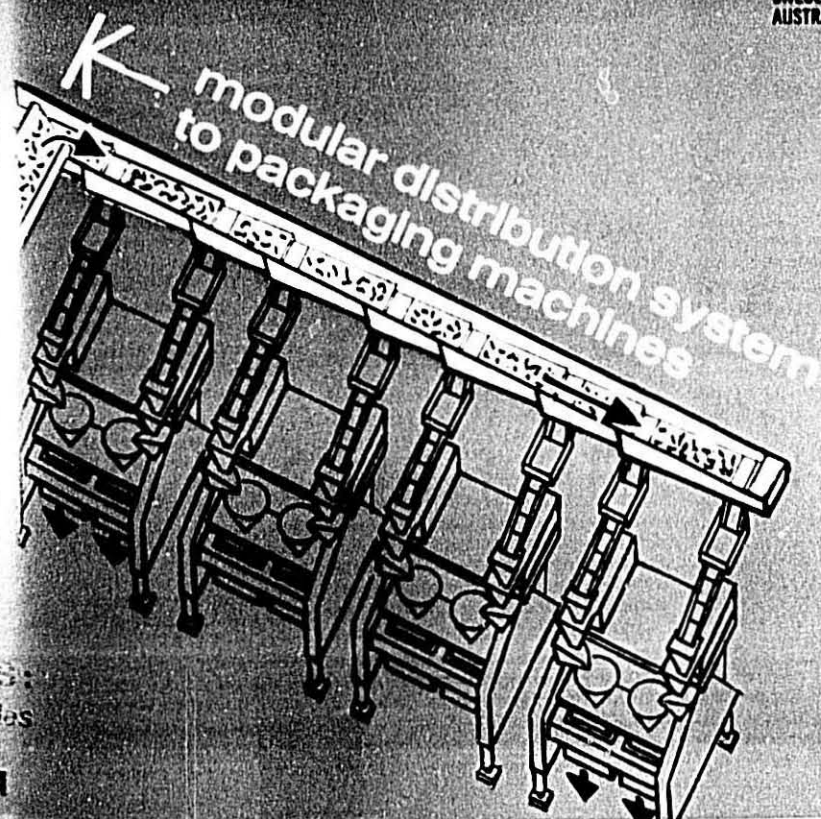
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Pasta Research

(Continued from page 5)

gressing towards that goal. The report covers three main research areas: (1) Pilot scale testing of high protein pasta formulations; (2) Preparation of high protein extracts from wheat bran; and (3) An air classification study to increase the protein content of durum flour.

Protein Sources

The first quarter report released in January emphasized testing of 51 different commercial sources of protein which were blended with durum semolina to bring a resultant flour mixture of 20 to 21 per cent protein.

Some of these mixtures, the first quarter report showed, had adverse effects on the spaghetti. Removal of these detrimental effects, such as change of color with soy, sunflower and fish protein additives, was not only a goal of the second quarter research, but will be of future research also.

Mixtures Tested

During the second quarter, the 20 to 21 per cent high protein mixtures were processed and tested under experimental conditions similar to commercial practice. After these pilot scale processing tests were conducted, using blends of high protein and semolina mixtures, they were then extruded to form spaghetti.

Evaluation of the spaghetti showed it to be darker in color than spaghetti now available and usually grainier in texture in the cooked form. Attempts are being made to eliminate the texture problem by experimenting with isolated protein additives, such as soybean isolates, but this research is not yet completed, according to the report.

The second research area was an investigation of the feasibility of extracting protein from durum bran. Objectives of the bran investigation were to extract and concentrate proteins from durum bran and evaluate its use for enriching pasta products. Bran is generally sold as animal feed, so the extraction of the bran protein would provide an excellent opportunity to recover these quality wheat proteins for human food uses.

Testing results are not yet available on the bran enrichment, but a process has been developed to extract protein from the durum bran.

High Protein Flour

The third major area of research was to develop a high protein durum flour without the use of any additive. This was attempted by air classification in which durum flour was pin milled to a

fine particle size and separated by density.

The report shows that the fine, low density fractions contained from 16 to 21 per cent protein and thus it may be possible to manufacture very high protein pasta with durum wheat as the only major ingredient. Several high protein durum flour samples have been prepared and data is now being assembled for publication in a scientific journal.

Banasik said they are still awaiting the arrival of a few more pieces of equipment such as a cooker-extruder and a device to measure nutritional content of semolina which is being purchased by the North Dakota State Wheat Commission before all the research can be completed.

Improved Formulations

In the third quarter of research now under way, studies will concentrate on completing the processing attempts to develop improved formulations for high protein pasta, Banasik said.

Attempts will also be made to further minimize the detrimental effects the high protein pasta has had on some spaghetti by utilizing a computer to identify combinations of ingredients which optimize pasta quality, according to Banasik.

"We want to come up with a number of high protein pasta products that can be used commercially," Banasik stresses. "We may change the shape and color a little more, but we're confident it can be done."

It all adds up to good news for the consumer.

USDA Flour Buying Phased Out

Domestic relief flour and corn meal buying program of the Department of Agriculture has been phased out after 18 years, it was announced by Donald L. Gillis, director of the Minneapolis office of the Agricultural Stabilization and Conservation Service. Mr. Gillis notified mills that no additional purchases of processed commodities are contemplated for the school lunch or needy family programs, eliminating domestic relief awards except for occasional purchases for Indian and supplemental feeding programs. Export donations purchases will continue under P.L. 480.

In the fiscal year ended June 30, 1974, A.S.C.S. purchases of flour amounted to 4,178,105 cwts, compared with 4,378,225 cwts in the previous year and 4,937,440 cwts in 1971-72. In this total was 191,835 cwts of durum flour.

General Mills Hits \$2 Billion

General Mills, Inc. reported that sales in the 1974 fiscal year exceeded \$2 billion, or 20% over the previous year, and that net earnings soared 13%. Both sales and earnings were at new records, noted James P. McFarland, chairman and chief executive officer.

Net sales of General Mills for the 52 weeks ended May 28 totaled \$2,000,103,000, compared with \$1,661,961,000 in the previous year. It was only in the 1970 fiscal year that the company's volume exceeded \$1 billion. Ten years ago, in the 1964 fiscal year, sales were \$541.3 million.

Milling Among Top Contributors

Mr. McFarland said that in each of the company's three major product areas operating profits rose by 10% or more. Also, each of the seven product lines in the three major groupings reported profit gains. Largest year-to-year advances were scored in crafts, games and toys; combined flour milling and grain operations, and breakfast products. These three accounted for more than half of the total sales gains.

Earnings decreases occurred in several mix lines and Tom's Foods. The company's small doubleknit fabric corporation operated at a loss.

Mr. McFarland indicated that the strongest gains in the last fiscal quarter came from most of the same activities that had done well earlier in the year. An exception was Gorton's Seafood, which saw a softening in demand and selling prices lead to lower earnings after impressive gains in the first three quarters.

ADM Earnings Up

In a preliminary, unaudited report for the fiscal year ended June 30, 1974, Archer Daniels Midland Co. said net earnings climbed 74% over the previous year to a new all-time record.

Net income of ADM for the fiscal year is estimated at \$29,410,000, equal to \$1.97 a share on the common stock. That compares with earnings of \$16,895,000, or \$1.15 a share in the previous year. The company's net for the 1972 fiscal year was \$11,905,225, or 84¢ per share.

Earnings per share in the 1974 fiscal year are calculated on the basis of an average of 14,917,058 shares of common outstanding, compared with 14,649,051 in the preceding year. The latter total was adjusted for a two-for-one split of the common stock effected in December, 1973.

Peavey Buys Stock

Executive committee of Peavey Company authorized the purchase by the company of up to 150,000 shares of its common stock from time to time through July 31, 1975, the end of the next fiscal year. Purchases will be made on the open market, by private purchase or both.

Peavey said acquired stock will be primarily used to fund the company's contribution to its profit-sharing and investment plan. That plan is being amended to provide that all company contributions shall be made either in shares of Peavey common stock or in cash to buy Peavey common stock.

Anniversaries at International

Don Haller, plant chemist at International Multifoods' B mill in St. Paul, was awarded an atmos clock for 25 years of service. Bob Bruning, manager of quality control at the Central Laboratories in New Hope, cut the cake and served it to co-workers honoring him for 25 years service.

Cereal Chemists

Howard C. Becker, vice president of flour research and technical services, ConAgra, Inc., Omaha, Nebraska, has been named President-Elect of the American Cereal Chemists.

Elected as treasurer is Roland A. Morck, director of research & development, Nabisco, Inc., Fair Lawn, New Jersey.

James W. Doty, president of Doty Laboratories, North Kansas City, Missouri, won a two-year term on the Association's Board of Directors.

The newly elected officers will be installed at the Association's 59th Annual Meeting in Montreal, October 20-24. Dr. Francis E. Horan, Archer Daniels Midland Co., Decatur, Illinois, current President-Elect, will assume the Presidency at that time.

Outfit

In all the years between the founding of our republic and the middle of World War II, federal government spending totaled about \$300 billion.

The budget for the next fiscal year proposer \$300 billion for that single year.

Does that make sense to you? If it doesn't, let your Senators and Congressman know you want spending brought under control.

NMMA Washington Meeting
Hotel Washington
September 17th

Railroads Need Profits

There is a simple logic behind revival of the railroads, says Alan S. Boyd, Illinois Central Gulf president. That logic is: When railroads are permitted to ask a fair return for service rendered, they will become profitable.

"When they become profitable they will generate the capital needed for replacing and upgrading their physical plant — right-of-way, rolling stock, shops, and so forth. When that happens, railroad service will be very good."

Boyd is optimistic that in the long run there will be the kind of change in public policy that will revitalize the nation's railroads by modernizing the legal and financial framework in which they operate.

"Today, when railroads must compete with every type of freight carrier, many of them indirectly subsidized by the public, the red tape involved in obtaining a rate change cannot be justified. It is an example of over-regulation which hampers railroad performance."

More Railroad Cars

Interstate Commerce Commission moved recently to force most of the nation's major railroads to buy a total of 70,000 new freight cars to alleviate freight car shortage. The order, should it go into effect, would also require the railroads to put 18,000 out-of-service cars into usage condition, both within two years. The new cars would have to be additions to the railroad fleet and not replacements.

The order gives railroads 60 days to file written comments with the Commission.

"We are convinced that a serious freight car shortage exists today and that inadequate ownership of freight cars is the cause of the shortage," the I.C.C. said. Noting that past efforts to alleviate the shortage through less stringent measures had failed, I.C.C. said, "The size of the fleet is decreasing and the persistent reported shortages are increasing."

The Commission added it now must take more direct measures which we believe are necessary to reverse the alarming depletion of the nation's railroad car fleet and the resulting chronic car shortages which plague the shipping public."

The Commission said that as of Jan. 1 more than 87,000 cars were out of service for repairs. This represented 6.3% of the fleet. The order would reduce the level to 5% by channelling 18,000 cars back into service.

The Commission said that the level of out-of-service cars had not fallen below 5% for 11 years.

Acknowledging that the railroads have been making more efficient use of freight cars, I.C.C. said the use of larger cars has not increased carrying capacity enough to offset the decrease in the number of cars owned by the lines.

Computer System Tracks Grain Boxcars

One thing common about grain grown in the United States is that it has to be transported somewhere to be used. Most of the time, that transportation is by rail, for grains generally have to be moved long distances to be processed or exported, and rail is the most economical means of shipment.

Through the 1973 harvest and continuing into this season, grain shippers have been experiencing problems in locating enough rail cars to move grain as their contracts require. When they can't get cars, this causes artificial shortages, which in turn can drive prices up.

That means higher prices for many items like bakery products, cereal, and even meat and poultry.

USDA Help

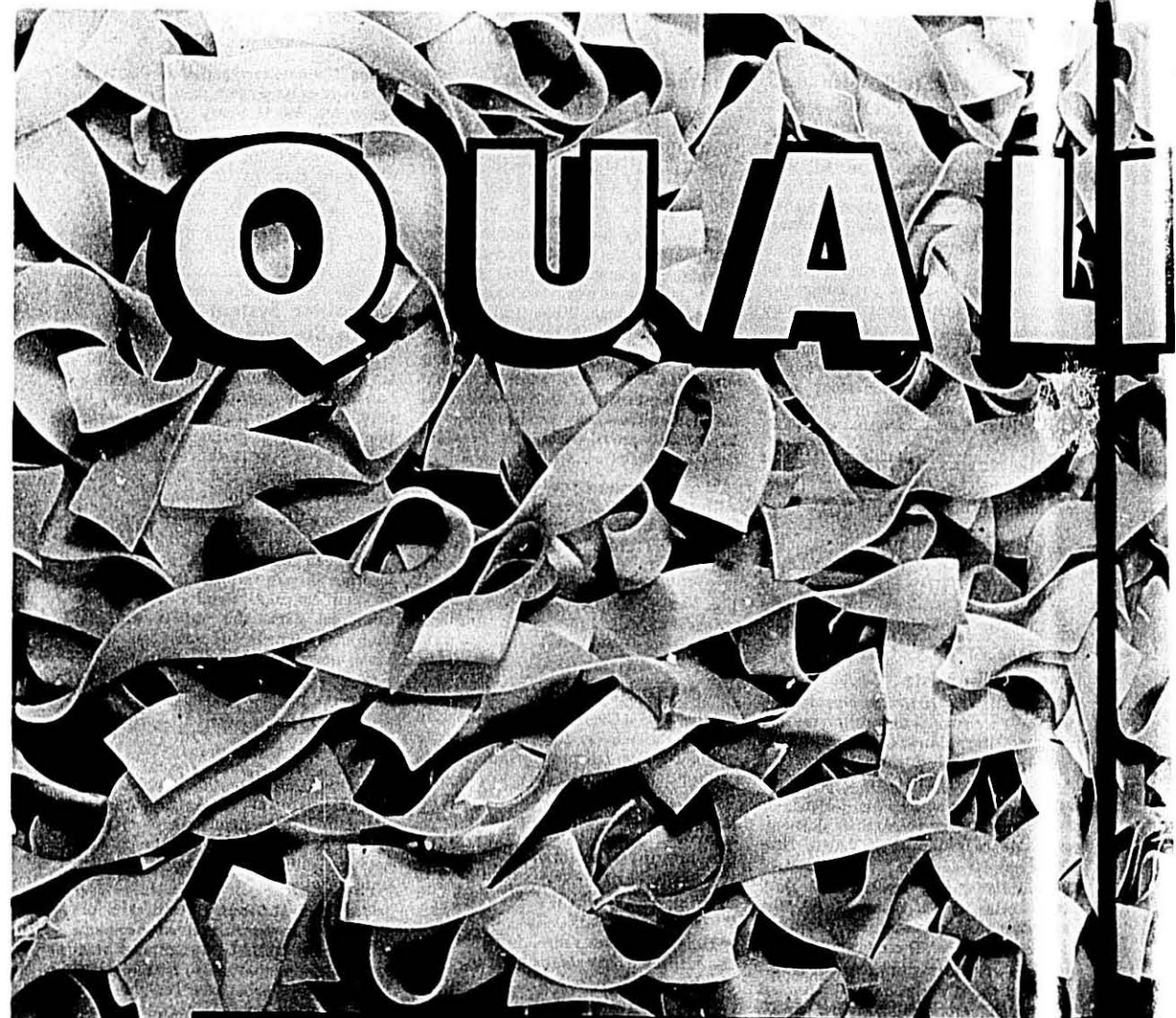
To help alleviate this problem, the U.S. Department of Agriculture initiated in late September a monitoring system to pinpoint areas of the country having difficulty getting adequate transportation.

Operators of country grain elevators across the country received questionnaires from USDA's Agricultural Marketing Service that are to be completed and sent to Washington, D.C., weekly. The returned data, reporting railcar shortages, is compiled and computer processed into lists of geographical areas that are having the greatest difficulties.

The lists are then sent for further action to the agencies and organizations with direct control over the situation, such as the Interstate Commerce Commission, the U.S. Department of Transportation, and the American Association of Railroads.

All of this could mean steadier supplies of grain to the various users and processors like flour millers and cattle feeders, and hopefully will help hold down the prices that consumers pay for much of their food.

36th Annual Durum Show
Langdon, North Dakota
Oct. 21-22-23



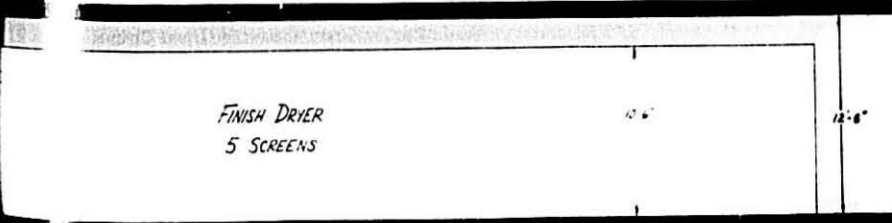
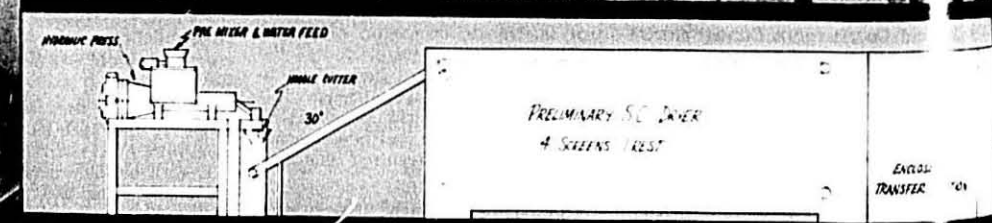
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Annual Report of the Durum Wheat Institute

THE 1973-74 year proved somewhat hectic for members of the Durum Wheat Institute—with decisions required on whether to protest School Lunch specifications for an "Enriched Macaroni with Fortified Protein"; expanding membership; and participation with the North Dakota State Wheat Commission and the National Macaroni Institute in the production of a new film to replace "Durum—Standard of Quality." In all cases, the decisions would up as "imponderables."

Plagued by rising costs, shortages of durum wheat, frozen retail prices, the National Macaroni Manufacturers Association met in early July in Hot Springs, Virginia, at The Homestead, in an atmosphere of crisis. A special delegation of growers, millers and manufacturers was dispatched to Washington. A second meeting in Boca Raton, Florida, in late January was held under more salubrious circumstances.

See and Taste

In the interim, Durum Wheat Institute members took bows for a "See and Taste" session featuring pasta products for the upper echelon personnel of the United States Department of Agriculture in Washington. It proved the most popular meeting to date for that kind of activity for the Plentiful Foods Divisions of Agricultural Marketing Service, a program closed down August 1.

In response to publication in the Federal Register, April 12, the Durum Wheat Institute also protested a proposal to amend the Federal School Lunch Program regulations to permit the serving of so-called "Enriched Macaroni with Fortified Protein" to the 28.5 million children fed everyday in that operation. The protest was joined by the National Macaroni Institute and the North Dakota State Wheat Commission. It was lodged against the use of the word "macaroni" to describe a product which might be made of proportionately larger combinations of corn and soy flours rather than wheat—the traditional basic ingredient of pastas.

While the School Lunch proposal at first seemed to be held in abeyance, it appeared again in the Federal Register on March 17, 1974—indicating that its proponents in the USDA did not intend to permit the issue to drop. At that late date, it appeared that the National Macaroni Institute would again resist the effort to supplant "macaroni" with an inferior, imitation product even though restricted to School Lunch use.

A new producer of durum flour, semolina and granulars, ConAgra of Omaha, was enrolled in the Durum Wheat Institute during the year.

New Film

Throughout the year, the Durum Wheat Institute worked with the North Dakota State Wheat Commission and the National Macaroni Institute in negotiations to finance a new movie in color to replace "Durum—Standard of Quality," a film originally produced by wheat growers represented on the North Dakota State Wheat Commission. The Durum Wheat Institute and other cooperators each continued to pay one third the cost of distributing the film.

During the year, five issues of the home economics bulletin, "Durum Wheat Notes," were produced, featuring 29 recipes, as well as a special photograph. The periodical has circulation in excess of 45,000 copies for each issue.

The Durum Wheat Institute also served as an office for negotiations with the Grain Division of the Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture, concerning specifications for the ASCS purchases of durum flour. Difficulties in meeting ASCS protein levels, maximum 14 per cent moisture, and sieving to a degree of fineness that exceeded the Standards of Identity were problems pointed out to ASCS authorities as the probable cause for lack of bids by durum millers.

Durum Macaroni H-R-I Program

A special program in behalf of durum pasta products in the Hotel-Restaurant-Institutional field is jointly financed by the Durum Wheat Institute, National Macaroni Institute and the North Dakota State Wheat Commission. Under such auspices, a film, "Macaroni Menu Magic," and filmstrip, "How to Cook Macaroni Foods," together with narration guide and quantity recipe cards were produced. These were followed by a "Pasta Recipe Contest" patterned after the National Sandwich Idea Contest open only to H-R-I personnel.

In the 1973-74 year, circulation of the film, "Macaroni Menu Magic," through a commercial distributor was discontinued because costs were consuming almost all available resources of the H-R-I program. The 98 copies of the movie thus made available were offered to schools specializing in training H-R-I personnel, schools where facilities for the care and storage of the film were

also available. In response to the first offer, 12 copies of the movie were placed in the film libraries of such schools.

The year also brought the production and management of the second National Pasta Recipe Contest. A total of 510 entries were received from H-R-I students and quantity foodservice personnel. This was the first time the Contest was open to students.

Preliminary judging was accomplished by an experienced panel of home economists. After extensive reading of recipes, 45 dishes were prepared. Twelve were later submitted to a group of final judges, including—Mrs. Loretta Canan, Test Kitchen Supervisor, Chicago Board of Education; Miss Isabel DuBois, Home Economics Editor, "Chicago Daily News"; Dr. Maxine Hart, Assistant Executive Director and Director of Education, American Dietetic Association; Bruce Smith, Editorial Director and Vice President-Editorial Development, "Food Service Marketing"; Miss Nancy Snider, Food Editor, "Institutions/Volume Feeding Management"; and Chef Louis Szathmary, The Bakery Restaurant, Chicago.

Recipe Winners

The judges selected the following "Top Three" recipes:

"Moussaka Romano"—by Simone Billuni, Sous Chef, Ten Downing Restaurant, San Diego, Calif.

"Mandarin Chicken Salad"—by Sister Anna Marie Halar, O.S.F., Food Service Supervisor, St. Coletta School, Jefferson, Wisconsin.

"Hungarian Fried Noodles and Cabbage Budapest Style"—by James V. Young, Columbus Adult Education Services Center, Columbus, Ohio.

From these the Grand Champion, "Moussaka Romano," created by Simone Billuni, was chosen.

The three finalists each received \$100 and a trip to Boca Raton, Fla., where the Grand Champion was announced at the mid-winter meeting of the National Macaroni Manufacturers Association. In addition to this prize, the Grand Prize included a two-week all-expense tour of Italy for two.

Sponsorship of the Contest was enlarged to include: the Council on Hotel, Restaurant and Institutional Education (CHRIE), Durum Wheat Institute, National Macaroni Institute, and the North Dakota State Wheat Commission, in cooperation with the National Automatic Merchandising Association and the National Restaurant Association.



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Egg Review

The nation's laying flock produced 5,430 million eggs during June, slightly below the previous year. Number of layers on hand averaged 280 million, 2% below a year earlier. Average rate of lay during June was up 2% from a year earlier. Layers on farms July 1 totaled 278 million, down 2% from 283 million of 1973 and 1% fewer than one month ago. Rate of lay on July 1 averaged 84.3 eggs per 100 layers, up from 63 a year earlier but down slightly from the rate in June. Egg-type chicks hatched during June totaled 44 million, 2% below year ago production. Eggs in incubators on July 1 at 32.8 million, were 11% below the 1973 figure.

Processed Eggs

A total of 75.9 million dozen shell eggs were broken May 26 through June 30, 1974 under the USDA's Egg Products Inspection Act—up 19 per cent from the May 27 through June 30 period of last year. Per cent increases from last year by regions were: North Atlantic, 42; Western, 23; North Central and South Central, 15; and South Atlantic, 13.

During the five weeks, 114 million pounds of liquid egg products were used in processing—up 19 per cent from the period last year. Ingredients added in processing totaled 3.9 million pounds, 10 per cent less than a year ago.

Liquid egg production (including ingredients added) for immediate consumption and processing totaled 38.2 million pounds during the five-week period—up 22 per cent from the period last year. Products for immediate consumption totaled 14.1 million pounds, compared with 13.1 million a year earlier. Those for processing totaled 22.1 million pounds, compared with 16.5 million last year.

Frozen egg products amounted to 44 million pounds, 10 per cent more than last year. Dried egg production was 9.0 million pounds, 14 per cent above the five-week period a year ago.

Cumulative totals July 1, 1973 through June 30, 1974 and percentage increases from the corresponding 1972-73 period are as follows: Shell eggs broken—608 million dozen, 10 per cent; liquid eggs used in processing—912 million pounds, 11 per cent; liquid products for immediate consumption and processing—301 million pounds, 16 per cent; frozen products—387 million pounds, 9 per cent; and dried products at 73 million pounds, 11 per cent.

Canadian Eggs Dumped?

The Treasury has matched an inquiry to determine whether chicken eggs from Canada are being sold in the U.S. at less than fair value.

The department said the investigation followed a complaint that the eggs were being "dumped" in the U.S., or being sold here for less than in Canada. In 1973, imports of Canadian whole eggs were valued at about \$4.7 million.

Under the Antidumping Act, if the Treasury finds the eggs are being dumped, the Tariff Commission would investigate to determine if U.S. industry is being hurt. If both findings are affirmative, the case goes back to the Treasury for assessment of special penalty duties.

The complaint was filed with the Treasury by United Egg Producers, and the American Farm Bureau Federation.

Poultry Farmers Cut Flocks

When he was offered the "ridiculous" price of four cents a pound for 2,200 laying hens he was culling from his flock recently, egg farmer Walter Ross of El Reno, Okla., gave them away instead.

In Springdale, Ark., Tyson Foods Inc., a major broiler producer, drowned 300,000 chicks and destroyed 800,000 eggs that would have hatched broilers, as the first steps in phasing out a facility until broiler production becomes profitable again.

Those are some of the more dramatic reactions lately of frustrated egg and poultry farmers. Others simply have been quietly losing money.

Industry Woes

The woes of the poultry industry have been all but overlooked amid headlines about the troubles of the nation's cattlemen. But depressed prices, despite some recent rises, and high feed costs that plague meat producers are a problem for egg and poultry farmers also. As is the case with beef and pork, the producers' plight was accompanied by increasingly lower retail prices for poultry and eggs.

The reduced retail prices followed the lowest wholesale prices for eggs and broilers in more than 18 months; wholesale turkey prices recently reached a five-year low. These sharp reductions in what farmers get for their products occurred while their costs, particularly for feed, have been soaring. Corn, for example, which accounts for about two-thirds of the feed rations for broilers, turkeys and laying hens, is currently quoted at \$3.2175 a bushel in Chicago, down from the rec-

ord \$3.33 reached in February, but well above the year-ago price of \$2.45 a bushel.

Lower prices than a year ago for soybean meal, another key feed ingredient, have eased the producer's burden slightly, but recently both corn and soybean meal have risen in price. If they continue to do so, farmers say they will remain in a cost-price pinch, even if poultry and egg prices rise.

Meat Prices Hurt

Poultry and egg prices were depressed by falling prices for beef and pork, which compete for the consumer's spending on protein foods. Also, many consumers apparently changed their eating habits in rebellion against the high prices of last summer and haven't returned to their old ways even though prices have fallen. Farmers also contend retail chains haven't reduced prices as much as they should have in response to lower wholesale prices, and that this delayed a return to previous consumption patterns.

In any event, farmers are cutting back on production in an effort to reduce their losses. Placements of broiler chicks on feed in recent weeks have been 2% below year-ago levels, after being as much as 5% higher early this year. Turkey farmers had planned to raise 140 million birds in 1974, up 6% from last year, but now the increase may be less than 3%. Egg production is down about 1% from 1972 so far this year.

Egg producers could see the quickest return to profitability, industry observers say. Wholesale prices have risen as much as 10 cents a dozen since mid-June, reflecting lower output due to hot weather.

Poultry & Egg Institute Of America

A budget approaching a million dollars for the coming year has been approved by the executive committee of the Poultry and Egg Institute of America, according to M. J. Chamberlain, chairman of the board of directors and the executive committee.

Chamberlain is president of Seymour Foods, Inc., Topeka, Kansas.

Meeting in Chicago, the 10-member executive committee reviewed the proposed budget for Institute activities and approved a total of \$992,325 for domestic programs.

Since the Institute now has members in 20 countries, the committee decided Fact Finding should be made an annual world conference for people in the poultry and egg business.

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The recipe hunter.

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SPAGHETTI PIE

6 ounces spaghetti
2 tbsp. butter or margarine
1/3 cup grated parmesan cheese
2 well-beaten eggs
1 pound ground beef or bulk pork sausage
1/2 cup chopped onion
1/4 cup chopped green pepper
1 8-ounce can (1 cup) tomatoes, cut up
1 6-ounce can tomato paste
1 teaspoon sugar
1 tsp. dried oregano, crushed
1/2 tsp. garlic salt
1 cup (8 ounces) cottage cheese
1/2 cup (2 ounces) shredded mozzarella cheese

Cook the spaghetti according to package directions; drain (should have about 3/4 cups spaghetti). Stir butter or margarine into hot spaghetti. Stir in parmesan cheese and eggs. Form spaghetti mixture into a "crust" in a buttered 10-inch pie plate.

In skillet, cook ground beef or pork sausage, onion, and green pepper till vegetables are tender and meat is browned. Drain off excess fat. Stir in undrained tomatoes, tomato paste, sugar, oregano, and garlic salt. Heat through.

Spread cottage cheese over bottom of spaghetti "crust." Fill "pie" with tomato mixture. Bake, uncovered, in 350 oven for 20 minutes. Sprinkle the mozzarella cheese atop. Bake 5 minutes longer or till cheese melts. Makes 6 servings.

the durum people



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Food Is More Than Just Something To Eat

Prepared by the U.S. Department of Agriculture and Health, Education and Welfare in cooperation with the Grocery Manufacturers of America, and the Advertising Council.

"Food Is More Than Just Something To Eat" is in eight parts. Two parts appear in this issue:

- (4) Food For All Ages.
- (5) Nutritional Labeling.

Next month:

- (6) A Daily Food Guide.
- (7) The Value of Processed Foods.
- (8) The Many Ways of Eating.

Last month:

- (1) Food Is the Basis of Life.
- (2) The Major Nutrients & Where to Find Them.
- (3) How It All Works Together.

Food For All Ages

Regardless of age, everyone needs the same nutrients but often in different amounts. People doing hard physical labor need more energy than those who are less active. Women need more iron than men.

The six-footer needs more food than a little person; the steelworker more than the clerk. When a patient is on the mend from an illness, he may need more nutrients than when he is in good health.

One thing is certain: nutrition affects everyone from the day he is born, actually even before he is born.

Nutrients for the unborn child's growth and development come from the mother, which means that her diet during pregnancy is especially important.

While parents guide their children to good eating habits they might take a good look at their own food attitudes. If the food they don't like is never served, then the family will never get a chance to eat it regardless of how nutritious it might be.

Changing poor food habits is usually harder than starting out with good food habits, but it can be done.

The parents' example will teach children to eat foods that are not their favorites usually without the children ever even thinking about it.

The more foods people learn to enjoy, particularly among the fruits and vegetables, the easier it will be for them to change their diets if it becomes necessary because of health problems, military service, foreign travel or some other reason.

Of course, somewhere along the road to a healthy old age, you learn that you must fit your diet to the amount of energy you use.

Regular exercise, like proper food, is a vital factor in continuing good health.

Before Birth

The woman who reaches child-bearing age well nourished and who maintains a good diet during pregnancy is more likely to have a healthy pregnancy and a healthy baby than the woman whose diet is poor.

But pregnancy can be a problem, particularly when expectant mothers are still teenagers. The body must cope with its own growth needs as well as the needs of the baby. A young girl—17 years or younger—who is in less than the best of health when she becomes pregnant, is borrowing trouble for herself and lending it to the child she carries.

And it is not just the poverty-stricken teenager who faces such problems.

Many a woman with enough money for a good diet copes with pregnancy in a state of semi-starvation because of the cult of slinness.

Pregnancy for an older woman can also be a hazard if her body stores of nutrients are already depleted by numerous pregnancies.

A woman who has always eaten well will not, ordinarily, have to make many changes in her diet because of pregnancy.

A daily diet during pregnancy should include at least two servings of lean meat, fish, poultry or eggs; four or more servings of vegetables and fruits including some which are good sources of iron, vitamin A and vitamin C; four servings of enriched or whole-grain breads or cereals and three or more cups of milk. Some of the milk and other foods such as margarine may be fortified with the vitamin D which is needed during pregnancy.

These foods provide the extra proteins, vitamins and minerals needed to maintain the expectant mother's body and for the baby's growth.

It may be hard to get all the iron and folic acid needed through food alone and the doctor will often prescribe a supplement to supply them.

Healthy women usually gain an average of 24 pounds during pregnancy.

Pregnancy is certainly no time to try to lose weight; there will be time enough for that later. If a mother decided to nurse her baby, she should

continue to include foods which will give her more protein, vitamins, minerals and calories.

A pint of milk and an egg added to a diet which was nutritionally adequate before pregnancy will provide all the additional protein and almost half of the vitamin A needed. Using milk as the source of extra protein also contributes to the mother's need for fluid when nursing.

The continued use of the green vegetables and fruits recommended for pregnancy will supply most of the other minerals and vitamins needed.

The Infant

A child grows and develops more rapidly during the first few years of life than at any other time. Thus good nutrition is especially important. Feeding does more than nourish the infant's body, it also can help a child to establish warm human relationships with parents and other persons.

Milk is the baby's first food—milk either from the mother's breast or from a bottle. Since milk supplies a large proportion of the nutrients needed during the first two years of life, the choice of kind of milk or formula must be made with care.

Human milk is custom-made for the baby, is clean as it comes from the breast, can save a lot of work and can be a satisfying experience for both mother and baby.

Human milk will ordinarily supply adequate amounts of all of the essential nutrients during the first few months of life with the exception of vitamin D, fluoride and iron.

If a commercially prepared infant formula, evaporated milk or homogenized whole milk is used, it will usually have vitamin D added to it. If not, then the baby will need to be given a vitamin D supplement.

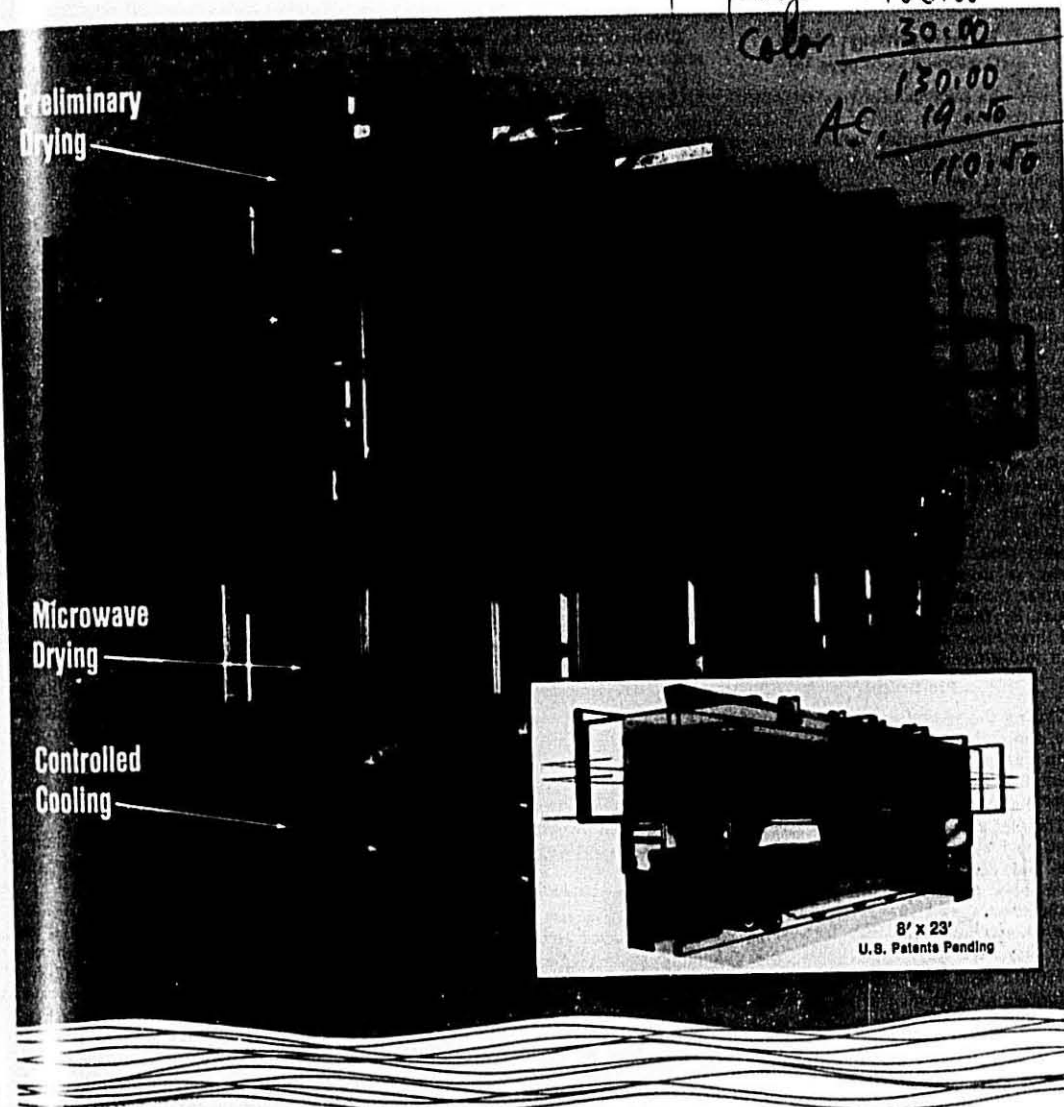
The baby needs vitamin C early in life. Human milk and commercially prepared infant formulas usually provide adequate amounts of vitamin C.

If the baby is being fed evaporated milk or cow's milk formula, then vitamin C should be given in the form of drops. Otherwise a fresh, frozen, or canned fruit juice that is naturally rich in vitamin C or fortified with vitamin C can be used.

A source of iron should also be added to the infant's diet early in infancy.

(Continued on page 18)

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17

Food Is Something More
(Continued from page 16)

Unless the baby is receiving iron-fortified formula, the doctor may suggest using an iron-fortified infant cereal or medicinal iron, beginning between 1-2 months of age.

Whether or not a fluoride supplement is given to the infant will depend upon how much water the infant takes and the amount of fluoride in the water supply of the area.

Solid foods, such as cereals, strained fruits and vegetables, may be added by 1 to 3 months of age. Gradually other foods such as egg yolk, strained meat and fish are added. Be careful in choosing commercially available strained foods for baby; there are wide variations among them in the amount of calories and other essential nutrients.

By the time the baby is six months old, he or she will be receiving some "table food." When 7-9 months old, a baby is usually ready for foods of coarser consistency—chopped or junior foods. By then he or she will likely be on three meals a day with mid-morning and mid-afternoon snacks.

Pre-School

During the second and third years of life, the child grows much less rapidly than during the first year. Little children still need foods that help them grow and provide the energy they need.

The diet started in infancy should be continued with larger servings of meat, fish and eggs, as well as fruits and vegetables, plenty of milk and whole grain cereals and bread. Children in this country often get less vitamin A than they need.

Parents need to try especially hard to include dark green and yellow vegetables such as broccoli, collards, kale, carrots, sweet potatoes and winter squash in children's meals. Butter and fortified margarine also supply generous amounts of vitamin A.

Children may be short of vitamin C, because they do not eat enough citrus fruits or juice, tomatoes, raw cabbage or other foods which are rich sources of that vitamin.

Fortified milk is a good source of vitamin D. The child who drinks less than one pint of milk a day may need a supplemental supply.

Preschool children may need snacks to tide them over to the next meal.

Some well chosen snacks are milk, small pieces of fruit, cut-up raw vegetables, cheese cubes, crackers spread with cottage cheese or peanut butter, and cereals.

Pick snacks that carry their weight in food value—don't let sweets become the rule.

Children should be served small-sized portions and come back for "seconds" if necessary. Some children get fat because they are taught to eat more than they need, even as infants. It is possible that the habit of overeating in infancy and early childhood may continue to obesity in later years.

Between Toddler and Teen

The elementary school child needs the same kind of foods the preschooler does, but, perhaps, larger servings.

Going to school, however, calls for a routine and a schedule. The preschool child can play for a while until he or she feels like breakfast. Not so the school child; there are carpools, buses and school bells to be coped with.

Going to school may be the beginning of the child's independence in choosing food. The child may need help in learning how to make wise choices.

If the elementary school child is getting too plump, take a good look at the amount of exercise he is getting and at what and how much he is eating.

The Perilous Teens

There are two good reasons for concern about the food habits of teenagers. Teenagers are casting off the habits of childhood while still trying to find their own identities. As a result, good food habits may be lost for a while.

One out of every four mothers has her first child when she is less than 20 years old. The teenage appetite is often huge, but appetite alone is not enough to insure that the teenager will get all of the nutrients he or she needs.

During their teens, boys and girls grow at a faster rate than at any other time except in infancy. A boy's nutritional requirements during the time he is becoming a man are higher than at any other time in his life.

Those of a girl becoming a woman are exceeded only during pregnancy and lactation (the period following birth when the mother's breasts are manufacturing milk). So, a pregnant teenage girl has even greater nutrient needs.

A teenage boy may suddenly shoot up as much as four inches in height and gain 15 pounds in weight in a year.

A teenage girl's total gain is not usually so large, but it is considerable.

Growth involves more than increases in height and weight alone. Body fat is lost while bones increase in density and muscles develop in size and strength.

The endocrine glands—the glands that manufacture, or secrete, hormones, the chemical substances that control many body processes—are growing and developing.

The teen years are also a period of stress—physical and mental.

Teenage eating habits are often bad and the reasons are not hard to find: school clubs and part-time jobs keep teenagers away from home at mealtime.

Their eating habits are being influenced by friends more than by parents.

Some skip breakfast because they don't leave enough time for it. Some choose snacks that are too rich with fats and sugar.

Teenage girls sometimes eat too little because they dread getting fat, whether they are overweight or not.

Diets have to be planned carefully for boys as well as girls. Both have such great need for protein, the B vitamins and vitamin C—and in fact every nutrient—that they cannot afford to fill up on foods that contribute empty calories alone.

A teenage boy usually winds up with a better diet than a teenage girl because his need for calories is so great that if food is available he will eat it.

Some boys, however, may neglect foods containing important nutrients.

A teenage girl's need for calories is considerably less. She is more likely to get enough vitamin C because of her liking for salads and fruits, but her protein and iron intake may be low.

Both boys and girls tend to neglect foods containing calcium, vitamin A, riboflavin and iron. During the growth spurt, ample supplies of all the nutrients are needed for muscle, bone and blood.

The overweight teenager may eat the same kinds of foods as his average friend, but too much of them. Rich desserts and many of the usual snack foods could be replaced with fresh fruits and vegetables. Also, he may be less active.

Instead of a crash diet to take off pounds in a hurry, an overweight teenager should develop the well-balanced eating habits he needs for the rest of his life.

The underweight adolescent may or may not be satisfied with his state and may need help in learning how to gain weight.

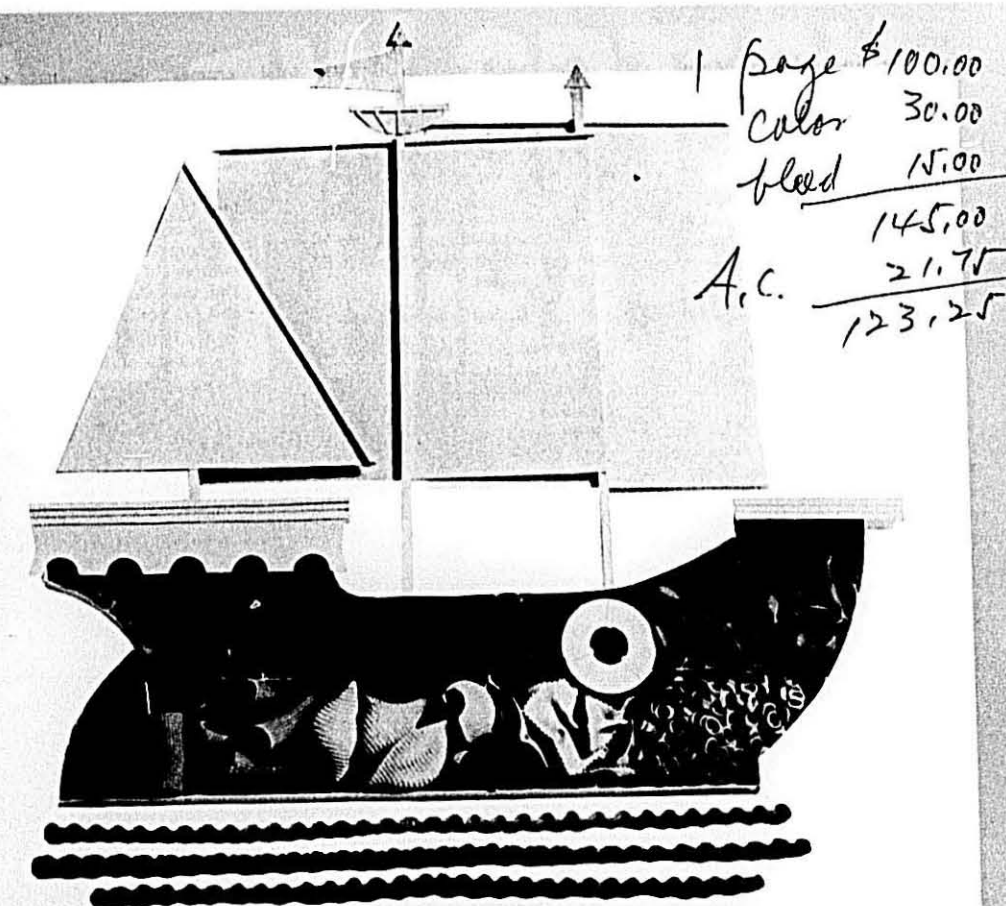
It should be noted that anemia may occur in both sexes at this age, although the monthly blood loss from menstruation puts girls in the more dangerous position.

Acne, the other blight on the teen years, is usually caused by hormone changes and not by diet.

Late Teens and Early Twenties

Growth ends somewhere during the later teens and early twenties when maturity is reached and the body's slowdown begins.

(Continued on page 20)



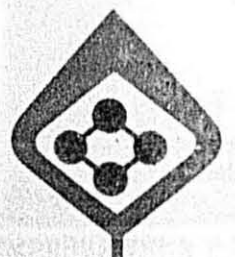
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Food Is Something More

(Continued from page 18)

Compared with their youth, men and women need less protein and calcium—about two cups of milk a day provides enough calcium.

Men usually get enough iron without making a special effort. Women must be sure to get extra supplies in their diets.

The amount of vitamin D adults get in fortified milk is enough.

Allowances for vitamins A and C are about the same as they were in younger days. Adults can get enough vitamin A in dark green leafy vegetables or deep yellow ones when eaten three times a week.

They need to be eaten along with the recommended daily servings of such foods as whole milk, vitamin A fortified skim milk, cheese made from whole milk, and butter or vitamin enriched margarine. One serving of citrus fruit or juice along with other fruits and vegetables is an easy way to get enough vitamin C.

Most adults use fewer calories than they did in their teens and weight control may be a problem.

Gross overweight usually means medical problems, so, generally, an adult should try to maintain for the rest of his life the weight considered normal for him at age 25. This means that the right amount of food at 30 may be too much at 40.

Calorie counting becomes necessary. A mere 20 extra calories a day could add two pounds of weight in a year.

What's two pounds? It's 80 extra pounds between the ages of 25 and 65.

Adults have some choice about which foods to limit. Such foods as pastries, cakes, salad dressings, gravies and nuts, if eaten frequently may supply too many calories for many people.

Frying may add fat no matter how well the food is drained.

Sugar, candies, syrup, jellies, soft drinks and alcohol add calories but few nutrients to the diet. Of course, cakes, dressings, jams and candy do make the diet more interesting, but when used, the extra calories should be compensated for by reducing portions of food. Foods such as meats, milk, fruits, vegetables and cereals or bread are necessary—the need for vitamins, minerals and protein continues even though calories are being reduced.

Be careful when you are counting calories. A diet that furnishes 1,500 calories a day could be lacking in some important nutrient, depending on the choices made.

The easiest way to bring the total nutrient value of a low-calorie diet up to standard is to be sure that each food does double duty.

For a mid-morning pickup, fresh fruit or juice can provide vitamin C and A with relatively fewer calories.

By the same token, a plate of fresh fruit, instead of apple pie for dessert, can provide vitamins C and A in addition to calories.

Eating in Later Years

The process of aging begins the moment a person is conceived.

It is hard to say exactly when youth becomes middle age, or middle age becomes old age. Calendars tell only part of the story.

Some men and women in their eighties are still going strong; some are feeble in their sixties. The cells of an older person's body undergo changes and some of the cells are damaged. The body's organs don't function as well.

Vision is not as clear, hearing is not as sharp, and the digestive systems may act up.

The older person's condition is affected by all the accidents, infections and other hazards of living that he has experienced during his lifetime.

This is when the results of a poor diet through the years can be seen.

All the nutrients that have been supplied—are giving the cells more—or less—strength to fight the aging process and disease.

The food likes and dislikes developed over the years may become barriers to good nutrition. Older people need fewer calories.

Men and women 55 to 75 years old need 150 to 200 fewer calories per day than when they were 35 to 55, but their needs for essential nutrients are unchanged. It is more important than ever for each food to do double duty. There is not much room for low nutrient, high calorie food.

Old age like the teen years is a time of learning to live with changes. Often the changes are serious and tiring.

The strains of old age may be made worse by changes in living patterns. The eating habits of the elderly can be influenced by loss of teeth, retirement, reduced income, moving out of a familiar house or neighborhood, or the number of people with whom they live.

Nutritional Labeling

It is one thing to know what nutrients we need; it is another to get them. Of the 8,000 or more items in a large food store today, half or more are packaged foods. Industry and gov-

ernment, therefore, have cooperated to provide for the listing of nutrient content on packaged foods.

This new development, "nutritional labeling," represents a major change in food labeling. Foods with nutritional labeling have a Nutrition Information panel on their packages. On the panel the consumer will find the serving size, number of servings in the container, and the calories, protein, carbohydrate and fat per serving.

In addition, the statement gives the percentage of the U.S. Recommended Daily Allowance (U.S. RDA) of protein and seven major vitamins and minerals per serving.

Additional nutrients may be listed. Also, information on sodium, cholesterol and unsaturated fat content may appear.

Nutritional labeling is voluntary except when a nutrient is added or a special nutritional or dietetic claim is made, and then the label must provide nutritional labeling. The standard for declaring the nutrients, the U.S. Recommended Daily Allowance (U.S. RDA), has been developed by the Food and Drug Administration of the Department of Health, Education, and Welfare from the Recommended Daily Dietary Allowance set by the National Academy of Sciences' Food and Nutrition Board. The National Academy has developed twenty-four sets of allowances covering different age groups.

These have been simplified for nutritional labeling and consumer use as the reference standard U.S. RDA. Why nutritional labeling?

Nutritional labeling provides a means of identifying the specific nutrients and the nutrient content of foods. It also provides nutrient information for the new fabricated products which often don't seem to fit into traditional food guides.

Persons interested in weight control or those on special diets for other reasons will find the information helpful in selecting the proper foods.

Nutritional labeling, in conjunction with the traditional methods of selecting a diet of many kinds of foods or a diet based on the basic four food groups, can help the consumer improve and maintain the quality of his diet.

Guides to Explain Nutrition Labeling

A set of guidelines to help newspaper and magazine food editors, copy writers in advertising agencies and food company advertising departments, as well as school teachers explain nutrition

(Continued on page 28)

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Nutrition Education Programs

by Mary Lou De Zeeuw, R. D., Nutrition Education Specialist,
American School Food Service Association

"A full stomach is like Heaven—
everything else is luxury."

—Chinese Proverb

It is widely accepted that attitudes toward food and eating are formed in childhood. From birth, a child learns the meaning of food. He learns from his family about meal patterns, "proper" breakfast, lunch and dinner foods. From what is given to him to eat he learns what is considered edible and what is not. And after most of his attitudes, assumptions, and beliefs about food and eating are already formed, he may learn about nutrition.

A child learns these attitudes toward food and eating as an important part of learning to survive in his culture. We determine how he shall live, feel, relate to others, work, play and eat.

Learning about food, values of food, and the meaning of food, is learning what a particular culture assumes and knows. Too many of the ongoing nutrition education programs have placed all their emphasis on the knowledge of food instead of the role food plays in our daily lives. I recall a college professor who said "the best way to remember the essential amino acids is to connect them to a saying. The class developed the saying "T.V. Till P.M." then the only problem was filling in the missing letters. The point is—the essential elements of this learning situation was the cramming of facts for an exam. Instead, the real goal was untouched—creating a learning situation where behavioral change would occur, creating a personal understanding for the need of essential amino acids. The teacher's efforts had concentrated on only learning facts without a basis for applying principles learned.

We all need to re-evaluate the purpose of nutrition education from the standpoint of behavioral change. Certainly, knowledge of nutrition is important so people do not become food faddists. People should have available to them sound nutritional information. Your recent pamphlet "Nutritive Values of Macaroni, Spaghetti and Egg Noodle Products" is an excellent tool to help educate the layman about the contribution these products make to the daily diet. However, this isn't enough. Nutrition education, in many instances has been dull, uninteresting and unimaginative.

Make It Alive

What is being done to make nutrition education become more alive?—more exciting?

First, think of nutrition education as an active activity, not a passive activity. It is something you must become involved with and learn how to apply it to your lives. This is no longer a spectator sport. Since the onset of nutritional labeling, everyone is aware of the catcher's seat industry has been thrust into. Nutrition has suddenly become big business, according to Swift and Company, to the tune of \$230,000.

Recent studies of nutritional status, dietary practices, and food consumption, congressional hearings and inquiries have revealed a sizeable number of children and adults, particularly in low-income families, with iron-deficiency anemia, stunted height and weight, dental caries, obesity, and many other conditions commonly associated with poor nutrition.

The causes appear to be varied, including inadequate money for food, lack of proper storage and cooking facilities, emotional and psychological problems, as well as limited knowledge and understanding that the selection of food can make a difference in individual and family physical, social and economic well-being.

Today, this nutritionally uneducated individual faces approximately 10,000 items every time he enters the supermarket. The food purchasing decision for the homemaker is complex indeed! New products appear constantly often short-lived. Whole new families of unknown food origins are appearing in the market place in the form of convenience foods, substitute foods, and snack foods. This newly created "non-stop" snacking generation no longer eats three balanced meals a day. Five years ago, one out of four meals were eaten outside the home. Today, this figure has been reduced to one out of three.

The recent T.V. documentary on the "Food Crisis" revealed that \$34.00 today bought \$28.00 worth of food in 1973. How many incomes have increased to match this 18% rise in food costs alone?

How does all of this relate to what's being done to make nutrition more alive, more exciting? One of the exciting happenings in school lunch is nutri-



Mary Lou De Zeeuw

tion education—kids are learning to like vegetables at school—especially when they are cooked properly and have some flavor to them, and they are learning what all foods can do for their health.

Child Nutrition Act

The Child Nutrition Act of 1967 for the first time mandated providing nutrition education to children. Almost never before this time were good, interesting fun classes in nutrition taught to school children.

As this Child Nutrition Act has been updated each year, more impetus has been given to this subject. Across the country programs are being developed that tie a good classroom nutrition project into kid's lunches at school. The lunchroom is becoming a classroom for some 52 million kids. Children are learning that it takes more than hamburgers, french fries and coke to keep them bright and alert in the classroom.

The United States Department of Agriculture has funded several pilot programs concerned with nutrition education: between 1971 and 1972, five nutrition education seminars for school foodservice personnel were sponsored by USDA in Kansas, Wisconsin, Florida, Pennsylvania, Utah, and Minnesota. One hundred School Foodservice Personnel attended each two-week seminar. Presentations included information on new knowledge of nutrition, why children participate in child nutrition programs, how to improve current programs through better merchandising of foods, and how to develop nutrition education activities utilizing the lunchroom as a learning laboratory.

Other projects conducted in the area of nutrition education include: —New England State Education Council ETV Project

tion specialist responsible for coordinating state efforts in nutrition. This person would coordinate the use of the school foodservice laboratory by supplying materials for taste-test food parties, equipment, demonstrations . . .

"Food for Youth"—developed in conjunction with Boston TV station WBH and Harvard University's Nutrition Department. Production is a ten segment television series dealing with food and nutrition to be used as a structured course for school foodservice workers and parents. The course includes a study guide with exams and upon completion the individual receives a certificate.

—State Nutrition Education Specialists Six states—Alabama, New York, Nebraska, Arkansas, California, and Pennsylvania are exploring and assessing various ways and approaches that could be used in nutrition education on state level under supervision of a nutrition education specialist.

One of the most successful pilot projects is the Arkansas Nutrition Team. This project focused on assessing current nutrition education efforts in the local school districts and then determined ways to include nutrition education in the present curriculum. The teachers tied nutrition education into their regular studies, using as a basis a two-week course in nutrition education which was taught by the state nutrition education specialist. The course covered basic nutrition with special emphasis on the USDA Type A meal served by all schools participating in the National School Lunch Program. This team approach offers one exciting avenue to teaching nutrition.

—Nutrition Education for Teachers and School Foodservice Personnel Presently, in the process of identifying competencies needed by teachers and school foodservice persons to cooperate in effective nutrition education programs. The five states involved are Georgia, Alabama, Tennessee, Florida and Mississippi.

Basically, this recaps some of the current government programs involved in establishing nutrition education programs.

You Are What You Eat

Members of the American School Food Service Association have used their promotion of good-food-at-school-means-good-health-for-you-all-through-life, by the theme "You Are What You Eat." Each year a different circus animal has been chosen to depict this theme. First a tiger, then a dancing bear and now a cavorting elephant, have had good food pictured on their skins. These animals and their good food bodies have triggered the imagina-

tion specialist responsible for coordinating state efforts in nutrition. This person would coordinate the use of the school foodservice laboratory by supplying materials for taste-test food parties, equipment, demonstrations . . .

4. The intended recipient is the student, however, the teacher and principal have received a greater understanding of the importance of nutrition education . . .

5. And, finally, the parent will learn about the child's nutrition lessons through special school assemblies and PTA meetings.

This team concept focuses on the Second Nutrition Seminar theme held August 1, 2, 3, at the University of Maryland. The 1973 Annual Report of the National Advisory Council on Child Nutrition urges Federal, state and local officials to work toward the goals of making nutrition education an important part of total school programs and of having the health and well-being of the nation's 52 million children be a key consideration in educational policy making. It also endorses the "team approach" to implementing nutrition education.

Fragmented Education Until legislation is passed at all local levels, nutrition education will be taught in fragmented segments. Perhaps through the recent National Nutrition Policy Conference impetus will be placed on the formulation of a structured nutrition education program for all people. Until this occurs, we will continue through our Association magazine School Foodservice Journal, to keep school foodservice personnel up to date in the latest nutrition education programs, techniques, merchandising suggestions and new material developments.

Nutrition education programs have been successful in many ways. We think that for nutrition education to become a part of behavioral change in America, it will take all of those state, local and federal government programs—plus all of you in industry working together as a team to promote good nutrition principals. And that's what nutrition education and school lunch is all about!

"A popular Government without popular information or the means of acquiring it is but a Prologue to a Farce or a Tragedy; or, perhaps both. Knowledge will forever govern ignorance. And a people who mean to be their own Governors, must arm themselves with the power which knowledge gives."

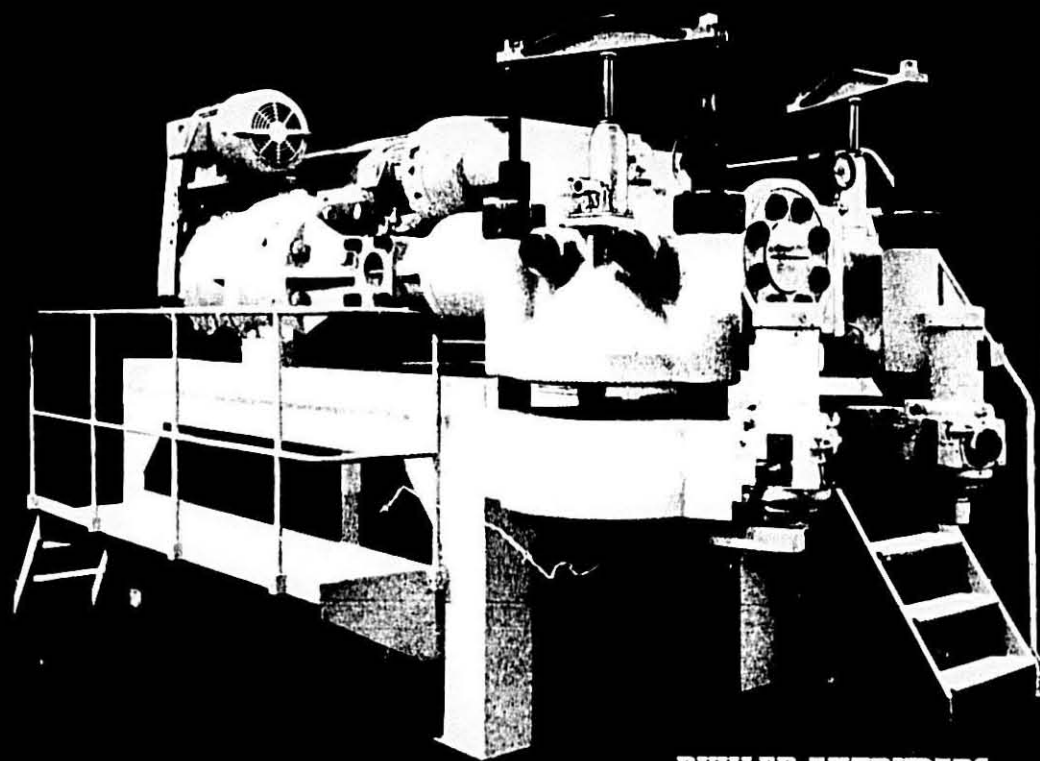
—James Madison

1. The principal, who says "yes" we need nutrition education in our schools . . .

2. Who in turn, expects the teacher to teach the subject after she has had some training in basic nutrition education principles by the . . .

3. School foodservice person who has been designated by the state as a nutri-

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TPCV (Four Screw)	8,000-16,000

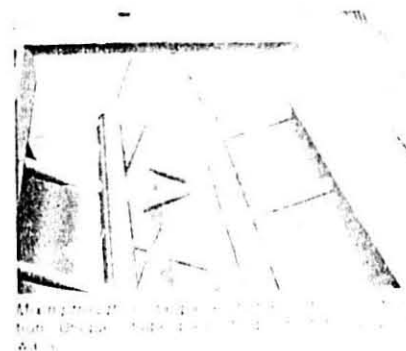
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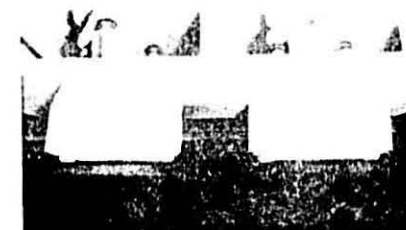
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Nutritional Labeling

(Continued from page 20)

Labeling is near issuance by the National Nutrition Consortium, according to Dr. D. Mark Hegsted, professor of nutrition at Harvard University, president of the consortium. He said the consortium decided last week to assemble a comprehensive set of guidelines for communicating information on the label's content and use and to help the public understand and benefit from the labeling. Two expert panels drafted the guidelines and a third panel is at work reviewing communication techniques to determine the best way to teach various segments of the public, particularly those groups having the greatest concern or need for such information. The National Nutrition Consortium, a non-profit, tax-exempt organization, is sponsored by four professional societies—American Dietetic Association, American Society for Clinical Nutrition, American Institute of Nutrition and Institute of Food Technologists.



Left to right: Joe Bradley, Bob Strom, Stan Wilde.

Main Dish Guidelines Set

Guidelines regulating content, fortification and labeling of main dish products were proposed by Food and Drug Administration as part of the agency's June 14 package of food labeling proposals.

Nutritional quality guidelines would be established for three types of main dish products—macaroni or noodles and cheese, pies and pizzas, and combination recipes. In order to bear the FDA guideline, "This product provides nutrients in amounts appropriate for this class of food as determined by the U.S. Government," each main dish must include at least one specified source of protein and one or more vegetables, fruit, potatoes, rice or other cereal-based product, in addition to meeting nutrient requirements.

Macaroni or noodles and cheese contain cheese as the major source of protein and a form of a macaroni or noodle product; plus pizzas contain a major source of protein(s) derived from meat, plant protein product, poultry, fish (seafood), cheese or eggs; and vegetable(s), pastry, bread dough shell or crust top.

Combination recipe main dish products would contain a source of protein along with the guidelines as the pies and pizzas classification, and "one or more vegetables, fruit, potatoes, rice, or other cereal-based products."

The nutritional quality guidelines set minimum levels of daily nutrient contribution for each of the three main dish product classes.

"The National Academy of Sciences/National Research Council Committee," FDA commented, "recommended that whenever flour or macaroni or noodle products are used they be enriched so that the addition of discrete nutrients will be minimized. The proposed guideline does not incorporate this as a requirement, but it is expected that manufacturers will use the enriched products when needed to meet a guideline nutrient(s) level."

Fould's Inc.

Robert B. Strom of Vesley Foods, Joseph Bradley and Stanley A. Wilde, employees of Grocery Store Products Company, have purchased Fould's, Inc. in Libertyville, Illinois from the Clorox Company.

Fould's Milling Company was originally established in Cincinnati, Ohio, and moved to Libertyville, Illinois in 1907 to establish a macaroni plant.

In 1923 Grocery Store Products acquired the Fould's Division at Libertyville and Gold Medal Macaroni in Los Angeles.

In 1971 the Clorox Company purchased Grocery Store Products thereby acquiring the Fould's Division. Just prior to this transaction, Grocery Store Products had sold Gold Medal to Anthony Macaroni Company of Los Angeles.

Robert Strom, president of the new venture, has been in the food business all of his business life starting with J. Walter Thompson Advertising Agency and moving on to Quaker Oats and then the Armour Company. In 1968 he acquired Cicero Macaroni Company and established the specialty line of Mrs. Vesley products.

Both Stan Wilde and Joe Bradley were trainees at Grocery Store Products in West Chester, Pennsylvania. Mr. Wilde started in 1951 and Mr. Bradley in 1952.

Joe Bradley was assistant plant manager in the Los Angeles Division from 1954 to 1966. He was transferred to Libertyville as plant manager at that time.

Stan Wilde was plant manager at Los Angeles from 1952 to 1954 when he was transferred to Libertyville. There he went up the ladder from plant manager to general manager to vice president.

Under the new corporate set-up, Mr. Strom will be president, Mr. Wilde and Mr. Bradley, vice presidents. All are enthusiastic on the outlook for macaroni products and the potential of Fould's in the Midwest market.

Icy Summer Salad

A related promotion featuring joint advertising and coupon offers is based on the following recipe:

Icy Summer Salad

- 7 oz. package or 2 cups Creamettes Macaroni
- 7 oz. can 3 Diamonds Fancy White Tuna
- 4 oz. package Sargento Brand Natural Cheddar Cheese
- 2 hard cooked eggs, diced
- 1 cup celery, diced
- 1/4 cup onion, diced
- 2 Tbsp. chopped pimientos
- 1 lb. can peas, drained
- 1 cup green pepper, diced
- 1/2 tsp. seasoned salt
- 1/4 tsp. sweet basil
- 1 cup Henri's Tas-Tea Dressing

Prepare Creamettes Macaroni according to package directions for salad use. Drain. Combine macaroni, 3 Diamonds Tuna, Sargento Cheese, eggs, celery, onion, pimento, peas, green pepper, salt and basil. Toss with Henri-Tas-Tea Dressing. Pour into 3-quart salad bowl. Chill. Yield: 9 one-cup servings.

Durkee Sauces

Durkee Foods, division of S.C.M. Corp., Cleveland, is expanding its convenience sauce and gravy mix line. New mixes include Italian meatball seasoning (plain or cheese), enchilada sauce, Spanish Rice seasoning, pork gravy, turkey gravy, Swiss steak gravy and Stroganoff sauce. A chipboard display tray, holding 24 prepriced packets, is included in the shipping carton. The individual packets also fit in standard sauce and gravy display equipment and retail at 25-27¢ each.

Moussaka Romano

"A Slice of Pizza," Vol. 6, No. 2, official publication of the North American Pizza Association, "serving Italian restaurants and pizzerias throughout North America and the world," gives the recipe for Moussaka Romano together with a story of the Pasta Recipe Contest.

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Yes, There's A Paper Shortage . . . And Here's Why

by St. Regis Paper Company, New York City

FOR many months now, demand for paper and all kinds of paper products has been outrunning supply. Paper for magazines and newspapers, folding cartons, corrugated boxes, business stationery, grocery bags, food packages, shipping sacks—all these and more are feeling the pinch.

And things may get worse before getting better.

It's an ironic twist for the U.S., considering that paper-use and prosperity go hand in hand. With the world's highest standard of living, Americans consume more paper products than have any other people in history—over 620 pounds a year for every man, woman and child.

Their needs are served by a \$23-billion industry, several of whose companies span the operating spectrum from forest resource to finished product. For the past year these companies and the industry have been running full tilt—with mills working day and night, seven days a week. Even so, there's a growing paper shortage.

How come?

That's a simple enough question. But, as is the way with many simple questions, the reply can't be equally simple. In fact, to explain why Americans today can't get all the paper they want at anything like the prices they've paid for it in the past, means telling a rather long and complex story. But it's a story that needs telling, because the surest way to get out of the shortage is to have a concerned public that understands how we got into it.

Pollution Abatement Drains Capital

First off, it comes down to supply and demand. The demand for paper products marches in step with this country's growth rate, which has been averaging 4 per cent a year. But in recent years, paper companies haven't been able to expand their productive capacity at a comparable rate. For the four years 1970-73, their expansion averaged 2.8 per cent a year. Their plans for 1974 through 1976 call for a capacity growth averaging 2.6 per cent a year.

It takes around two years to expand an existing paper mill, and three years or more to build a new one from scratch. So today's paper shortage—with mills running at the top pitch of capacity—results from the fact that two and three years ago the paper companies couldn't afford to expand as

much as required. Tomorrow's shortage will similarly result from what they can't afford to do today.

Not that primary producers of pulp, paper, and paperboard haven't been spending plenty on total capital investment: almost \$2.5 billion in the three years 1970-72. But nearly 30 per cent of that money has gone into pollution abatement—a good cause, surely, but one that doesn't really add to the supply.

These producers have been in the front rank of American industry in spending for cleaner air and water. Moreover, during the next several years they'll spend hundreds of millions more. In the case of St. Regis, 31 per cent—or \$30.5 million—of its capital budget for 1974 alone will go for pollution abatement.

Environmental concerns do more than divert money from capacity expansion. They also mean the closing down of older, marginal facilities that can't be brought up to standard at a cost permitting anything like a reasonable return on the investment. Such closings in 1971, for example, came to an annual loss in paper and paperboard capacity of 789 thousand tons. The total loss for five years ending in 1975 is figured at nearly 1.5 million tons.

Industry Earnings Have Lagged

Even with the heavy financial load of pollution control, the paper industry might have invested more in new capacity in recent years—if it were earning enough money. But that hasn't been the case.

On any list of earnings performance by American industries, it ranks near the bottom. In 1971, for example, when the return on investment for manufacturing industries was 9.6 per cent, that for the paper industry was 4.8 per cent—less than you'd get from a U.S. savings bond. Earnings have improved since then, but most paper companies would still do much better if they simply put their money to work in commercial banks.

It takes a lot of capital to run a major paper company—capital to buy and develop forest land, capital to build mills and equip them with huge machines for making pulp, paper and paperboard. When the company isn't earning a fair return, it can't set aside enough to re-invest and it has a hard time attracting funds from outside investors.

Since an adequate and sustained level of earnings is the master key to solving the paper shortage, let's look at the industry's finances more clearly.

The Surge in Capital Costs

The general inflation plaguing America's economy since the latter 1960's has hit paper companies hard.

Consider that even in normal circumstances their capital costs are heavy. They must spend millions on new plant and equipment just to keep pace with the nation's annual growth. They must spend millions on pollution abatement—far more than most industries. And, in the course of technical progress, they are having to spend on mechanizing more of their diverse operations.

Now, multiply all these "normal" capital costs by an abnormally big inflation factor, and you greatly add to the financial burden of expanding productive capacity.

Here's a fairly typical example of what this factor means: St. Regis completed a major linerboard mill in Monticello, Mississippi, in 1968 at the cost of \$116 million (excluding the cost of timberlands); to replace it today would cost \$180 million.

Or take another example, this one having to do with the industry's basic resource, wood. Major paper companies incur big capital costs by investing in timberlands. Here costs have soared, particularly in the South, which produces 60 per cent of the nation's paper.

Land Cost: Southern Pine

Year	Cost per acre
1958	\$ 75
1965	150
1973	340

The overall pattern of higher capital costs helps account for the industry's increasing load of long-term debt. At the start of the 1960's, the average debt-equity ratio for the industry was 25 per cent. Today, after many years of heavy borrowing for capital investment, it has gone up to 50 per cent. This compares with a figure of 44 per cent for all manufacturing industries in the U.S.

More debt for the paper industry has meant that each year it must pay out more in aggregate interest on the borrowed money. And to compound the burden, interest rates have been rising, often to double their levels of a decade ago.

It all adds up to higher fixed costs, exacted in bad years as well as good,

and thus to a weightier drag on the industry's earnings.

Operating Costs Have Mounted

Earnings have been further eroded by the effect of inflation on operating costs, as prices have increased all across the range of what goes into the manufacture of paper products. The following table, based on St. Regis' experience during the five years 1968 to 1973, shows what happened to some major items:

Average Price Increases 1968 to 1973	Increases
Wood fiber:	
Pulp	89%
Wastepaper	195%
Labor	34%
Chemicals	15%
Transportation	32%
Maintenance Materials	35%
Fuel:	
Oil	185%
Natural gas	76%
Coal	60%
Electricity	10%

This does not include the recent rapid escalation in the price of fuel oil, a major industry cost component.

Costs really took off during 1973 for a number of these items, owing to shortages and other special conditions that will be discussed later.

Meanwhile, it should be noted that to its list of operating costs the industry has in recent years added a new and mounting one: the cost of running and maintaining all that pollution-abatement equipment it has been installing. For St. Regis this has risen to almost \$3 million a year in 1973 and the cost is headed upward as pollution abatement requirements continue to climb. As with the capital cost of such equipment, none of the operating cost goes toward increasing paper supply—and both pull down earnings.

Paper Prices Fail to Help

Many industries encountering a long period of higher capital and operating costs will protect their level of earnings by raising prices. But, for a number of reasons, paper companies have not until recently been able to take this avenue of relief. Paper prices during much of 1973 were not significantly higher than in 1969; in fact, when expressed in constant dollars, they had declined over that period by some 31 per cent.

To appreciate the situation, three facts must be borne in mind. The first is that from 1968 to 1970 paper companies enlarged their capacity by some 20 per cent—or more than 10 million tons. The second is that their operating rate—the degree of production when measured against capacity—has to run

over 90 per cent in order for them to earn an adequate return. The third is that the general economy suffered a two-year recession beginning in 1969.

The recession hit paper companies hard because, for one thing, it meant a lowering of their operating rate. In 1970 and 1971, profits plummeted in the industry, and new investments were sharply curtailed.

Now, compared with a number of other American industries, paper is intensely competitive: the 20 largest paper and paperboard producers, for example, have only two-thirds of the market. So, as might be expected, the overcapacity circumstances of 1970-71 were marked by rampant price-cutting—and shrinking profit margins—throughout the industry.

Enter price controls, in August of 1971. The effect of this national policy, then and all through its subsequent phases, was to congeal industry prices and earnings at abnormally low levels. Interestingly enough, the inflationary impact of, say, a five per cent increase in the price of paper would be slight: a government study indicates that this would raise the consumer price index by five one-hundredths of one per cent.

That would mean about \$2 to \$3 a year in the average family's budget.

Without going into details, suffice to say that controls clouded the industry's prospects and discouraged still further the idea of investing large sums to build future capacity. Thus, as the economy picked up speed in 1972, the stage was set for today's paper shortage.

Other Factors in the Shortage

Put at its simplest, the shortage—an excess of demand over supply—results because paper companies haven't been able to invest enough in new capacity. But there are other factors that contribute to the present shortage. Some of them—like unusually long spells of wet weather that impeded wood-harvesting in the South, and the Canadian rail strike in 1973 that curtailed U.S. supplies of newsprint—may be given passing mention. Others, however, will repay a closer look—as follows:

• **Fuel.** Well before the Mideast crisis in October 1973, the paper industry had felt the pinch of sporadic fuel shortages, especially in natural gas. Now, of course, the energy situation has worsened for the economy as a whole. This has serious consequences for the paper industry: accounting for about 8 per cent of the industrial energy consumed in the U.S., it ranks fourth among industrial consumers—after chemicals and allied products, primary metals, and petroleum and coal products. Al-

though as we will note later, the paper industry provides a big share of its fuel needs from its own waste products, decisions on whether to build new paper mills are now having to take fuel availability into critical account. In the vital fuel oils area, the paper industry ranks #1, whether measured in value or in barrels, by quite a substantial margin.

• **Wood Pulp.** An essential ingredient in the making of paper, wood pulp has been in increasingly tight supply—not only in the U.S. but worldwide. Reflecting this, world prices have risen from \$162 a ton in 1972 to more than \$270. These higher prices have understandably drawn some domestic U.S. pulp to foreign markets, since earnings on exports do not come under price-control structures. While this development has helped the U.S. balance of payments, it also illustrates how artificial restraints can distort a market. In any event, the pinch in pulp aggravates the paper shortage, particularly for those U.S. companies—more than 100 or 200 in the industry—that must rely wholly on the marketplace for their supplies of pulp.

• **Woods Labor.** As a forest-resource industry, whose basic raw material is the tree, the paper business depends on reliable harvests of wood fiber to keep its mills humming. As noted earlier, unusually bad weather has impaired harvest activity. But so has a chronic shortage of woods labor, particularly in the South—where, to complicate the supply picture, a growing lumber and plywood industry competes vigorously for available timber. Meanwhile, the cost of woods labor has risen sharply, without, however, having done much to invigorate what has been called the work ethic.

• **Transportation.** As a major user of America's railroads, the paper industry is sensitive to any development that reduces the availability of freight cars. For the past three years, railroads have been scrapping older cars at a much faster rate than they've been replacing them. This means, for example, that at the same time the volume of pulpwood and chips is increasing in the South, the fleet to transport these raw materials is declining. Railroads say that to purchase new equipment they need drastic increases in rates—which would cost the Southern paper industry more than \$23 million a year. Be that as it may, the undersupply and underutilization of freight cars throughout the nation is, to say the least, aggravating the paper shortage.

(Continued on page 34)

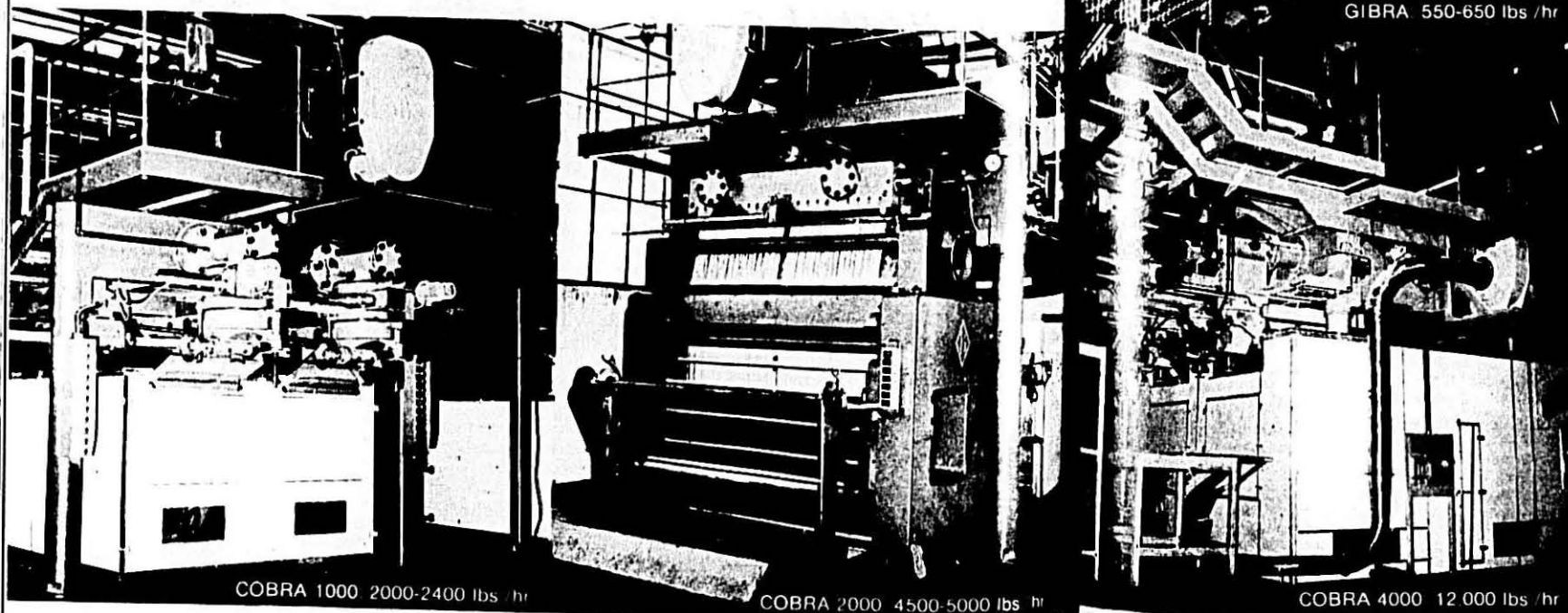
The overachievers.

We call them the overachievers, because they deliver more than we promise. From the smallest to the largest, every Braibanti pasta press is put together with more guts, more durability, more potential for productivity than they really need.

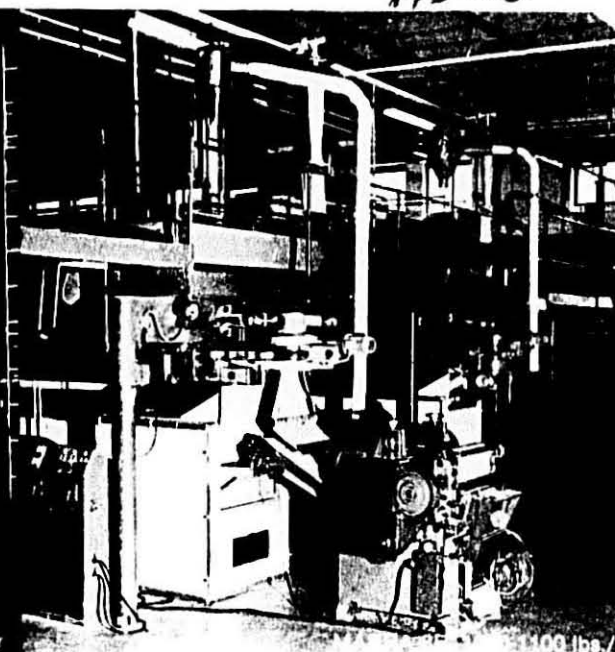
But that's what you've come to expect from the people who have manufactured and installed more pasta-producing equipment than any other company in the world.

Of course the Braibanti presses are just the beginning of a great pasta line. Braibanti also makes flour handling equipment, cutters, spreaders, stampers, pinchers, shakers, pre-dryers, dryers and packaging equipment. In short, everything it takes to make any pasta product on the market.

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Paper Shortage

(Continued from page 31)

• **Chemicals.** To make their diversified products, paper companies use a wide range of chemicals—for instance, caustic soda, chlorine, sodium chlorate, clay, and titanium dioxide—as well as such paper coatings as polyethylene and aluminum foil. All are becoming less and less available—and, by the same token, more and more expensive.

Increasing the Long-Term Supply

In the preceding paragraphs an effort has been made to answer the simple question: Why a paper shortage? We have looked at capacity and investment, earnings, capital costs, operating costs, pricing, and a number of special conditions. And what we have seen certainly justifies concluding that things will get worse before getting better.

But what of the long-term future? Granted that the only way to overcome a shortage is to increase supply—what are the prospects for accomplishing this in the paper industry?

The answer to that hinges on what is done in several policy areas, among which the following are noteworthy:

• **Capital Investment.** Paper companies are recovering from the severe financial illness they suffered in 1970-71. But they're a long way from robust health. To expand capacity at anything like the levels required, they'll have to achieve a far better earnings record than they did in the past decade. Without a marked and sustained improvement in earnings, they simply can't raise the needed capital at reasonable cost. The fact that they've already borrowed heavily makes their financial task ahead all the harder.

Of crucial importance to them in their efforts to increase the supply of paper products is a just tax climate. Thus, for example, continuance of the investment tax credit offers some incentive to expand facilities. And thus, too, fair treatment on capital gains encourages prudent management of timber resources.

• **Environmental Quality.** The industry's commitment to cleaner air and water needs no more emphatic witness than the enormous sums it has spent and will spend to this end. At the same time, it does expect—and believes it has a right to expect—a rule of reason in environmental affairs.

Absolute environmental purity is out of the question in any industrial society, thus, trade-offs between what is desirable and what is feasible must be accommodated, in the public interest. To go from, say, 95 per cent to 97 per cent on a scale of purity can cost as much as achieving 95 per cent in the

first place; but the extra outlay may be much more than anyone can bear. Surely, a wider public understanding of such cost-benefit realities will go far to confirm the future supply of many consumer products.

• **Resource Management.** Unlike such raw materials as petroleum and iron ore, trees, which provide the lumber for construction and the fiber for paper-making, are a uniquely renewable resource. They are a crop and, as such, respond to good husbandry.

Consider the results that forest-resource companies have achieved on the lands they own. Although these lands account for only 13 per cent of the nation's commercial forestland, they produce 50 per cent of the raw material for forest products. Moreover, they grow new wood each year at twice the average realized on public lands—the 27 per cent of commercial forestland owned by government, Federal and State.

Sound forestry practices—which, be it noted, enhance environmental values—could greatly increase the timber yield of public lands. The same is true, of course, for the so-called private lands, which make up 80 per cent of America's commercial forests.

But before forestry know-how can be extensively applied, a sound national program for forestry development is needed. It so happens that an excellent blueprint for progress lies at hand, in the comprehensive study completed a few years ago by the Public Land Law Review Commission. As first steps, any sound program would aim at:

(1) Reconciling the interests of special groups (admittedly, a difficult task in the case of those people who simply want to lock up more forests as wilderness areas);

(2) Setting standards and priorities for land use; and

(3) Providing funds for more productive management of public lands.

• **Foreign Trade.** Largely because of this country's essential need for newsprint, mostly from Canada, the U.S. paper industry had imports in 1973 of an estimated \$2 billion. This was heavily offset, however, by its exports of \$1.4 billion. Actually, its exports, in terms of tonnage, were down from the year before, despite the fact that profits from exports are exempt from the U.S. price-control program.

The vigorous foreign trade of America's major paper companies strengthens them in two ways: it improves their finances, and it counteracts the cyclical swings that characterize a purely domestic market. All of which helps pro-

vide a more orderly growth in paper supply.

But if international trade is to continue thriving, it must operate under rules of fair play all around. Discriminatory measures by one nation or group of nations only invite retaliation. To avoid such backward economic steps, major trading nations must stick fast to the principle that consumers everywhere benefit when world commerce moves freely.

• **Wise Use of Materials.** A number of paper-company procedures fit in with the adage, "Waste not, want not." For example:

(1) Nearly 40 per cent of the industry's fuel needs are provided by its own waste processes (spent pulping liquor and bark).

(2) Half the industry's raw material comes from secondary sources, namely, wood residues and wastepaper.

Here it should be specifically noted that, of all fiber used to manufacture paper and paperboard in 1973, more than 22 per cent was accounted for by wastepaper. This figure could be increased in the years ahead if—and it's a big if—there were a broad, sustained and governmentally backed program aimed at achieving wastepaper collection on a massive scale.

The public, more than ever conscious that the world's resources are finite can be expected to support such a program and, indeed, to cooperate generally in stretching out available paper supply. All this would help ease the effects of the current paper shortage.




As for ending the shortage altogether, the key to that lies in letting the free-market mechanism work once more in the industry. Time and again in our society, production miracles have occurred when the complex elements of supply, demand, cost, and price have been permitted to find their true balance in a fair and open marketplace. Given that set of economic circumstances, the paper industry, you can be sure, will work wonders too.

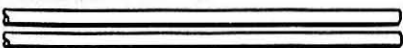











Macaroni Packaging

In macaroni products packaging the trend continues to greater product visibility through increased use of flexible packaging film. But cartons continue to have their proponents, including major pasta makers like C. F. Mueller Co., Jersey City, N.J. (the manufacturer with the largest national share of market in a highly regionalized industry. It is estimated by Chain Store Age that in 1973 it took seven pasta producers to capture 51% of the national market).

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TO INSURE THE QUALITY  IN ANY MACARONI PRODUCT  ALWAYS SPECIFY  AMBERI

WHETHER YOU'RE MANUFACTURING LONG GOODS  OR SHORT , EGG NOODLES  OR OTHER SPECIALTY SHAPES,  YOU'LL FIND  AMBERI IS ALWAYS UNIFORM IN COLOR AND GRANULATION.  BECAUSE OF OUR UNIQUE AFFILIATIONS IN THE DURUM WHEAT GROWING AREA,  WE CAN SUPPLY  THE FINEST DURUM  WHEAT PRODUCTS AVAILABLE. AND WE SHIP EVERY ORDER  AT THE TIME  PROMISED. BE SURE... SPECIFY  AMBERI

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PMMI PACK EXPO 74

PMMI Pack Expo 74 will be the largest and most important exhibit of packaging and packaging-related converting machinery and packaging materials ever staged in the United States.

So claims R. E. Jansing, Jr., of the FMC Corporation, serving this year as PMMI Show Committee chairman. The show, sponsored by the Packaging Machinery Manufacturers Institute, an association of 130 U.S. machinery manufacturers, opens its four-day run October 7 in McCormick Place, Chicago, Illinois.

V.I.P.

The PMMI show has been designated by the U.S. Department of Commerce as a "V.I.P."—Visit, Investigate, Purchase—event in its international trade promotion activities.

Early projections, based on performance at the last several PMMI shows, indicate that well over 1500 machines valued together at over U.S. \$15 million will be exhibited during the show.

"We expect over 325 manufacturers to exhibit their machinery and materials in the 1974 show," Jansing stated. "And we estimate that about 85 to 90 per cent of the machinery there will actually be operating during the show."

An industry survey reveals that, in 1974, a visitor may expect to see about 250 to 300 newly introduced machines. Many others will feature significant modifications on established models.

All types of packaging machinery are exhibited at PMMI shows, ranging from case packers to checkweighers, from form/fill/seal to baggers, from boxers to pouchers, from labelers to coders, from tube fillers to rollers, and many more.

Similarly, every type of packaging material from glass to metals, from paper to plastics, will be represented by both manufacturers and industry trade associations which sponsor "Industry Information Lounges" in the show.

Foreign attendance normally runs in excess of 2,000 people from over 40 countries.

Seminar

A three-day technical and management information seminar is conducted concurrently with the show, Monday through Wednesday. Sponsored by the Packaging Institute/USA, the program is not yet firm for 1974, but always provides a breadth and depth of packaging topics. Interested individuals attending the show may register for and attend the PI/USA program on a topic-by-topic selection basis.

PMMI also sponsors an "International Reception" on Monday evening, the first day of the show. Attendance is restricted to representatives of PMMI member companies and to foreign guests.

Foreign language capabilities are detailed on an exhibitor-by-exhibitor basis in the complimentary show catalog given to each visitor. PMMI also operates an extensive "International Lounge" where foreign visitors may obtain additional assistance.

The PMMI show will be open from 10 a.m. to 6 p.m. each day, Monday, October 7 to Thursday, October 10.

Additional information will be available from PMMI, 2000 K Street, Northwest, Washington, D.C. 20006 USA. Hotel reservations may be made by contacting PMMI Housing Bureau, Suite 2050, 332 South Michigan Avenue, Chicago, Illinois 60604.

Corrugated Exhibit

The first major exhibit of corrugated box developments since 1970 will be a feature of Pack Expo '74, October 7-10 in Chicago's McCormick Place.

The Fibre Box Association, representing corrugated and solid fibre manufacturers, will conduct a competition among its members and display all entries at the trade show. Close to 500 items will be included in a single booth, extending more than 300 feet.

Some 20,000 packing buyers, engineers, designers and production executives are expected to view the exhibit.

Surcharges on UPC Printing

American Can Company announced that surcharges, ranging up to 4 per cent, will be effective immediately on all containers and packaging incorporating the Universal Product Code (UPC) symbol, due to the close controls demanded in meeting present code specifications.

The exacting symbols demand extreme accuracy in both graphic preparation and reproduction, with printing tolerances to .004 inch. Cost factors include longer make-ready time, decreased printing speeds and plate life, more spoilage, and additional quality control measures.

As experience is gained with the requirements of commercial installations and present unusual quality control procedures are stabilized, charges will be adjusted accordingly, American Can said.

The company has made analyses of the technical requirements of the new code symbols since their conception five years ago and has prepared both proto-

type and commercial containers and packaging incorporating the symbol on metal, plastics, and paperboard.

Packaging Education Grants

The Packaging Education Foundation has awarded grants totaling \$75,000 to eight schools to advance college level courses and programs in packaging education during the 1974-75 school year. The announcement was made by Fred Schreiber, PEF Grants Committee Chairman.

The eight grants will bring to nearly \$1.3 million the total amount raised by the Foundation since it was created in 1957. PEF financial support comes from industry and individual contributions, and includes earmarked funds as well as equipment gifts made through the PEF.

The grants are designed to provide "seed money" to get college-level educational programs in packaging underway to colleges and universities throughout the country, but do not include earmarked funds or equipment gifts.

Recipients of the 1974-75 grants are Cornell University, University of California at Davis, Dayton-Miami Valley Consortium, Indiana State University, Pratt Institute, Rochester Institute of Technology, Rutgers University, and University of Wisconsin-Stout.

PEF Grants Chairman Schreiber pointed out that a larger number of companies than ever before had given equipment this year in addition to their monetary contributions. He said the foundation is uniquely organized to best advise companies on what kind of equipment packaging schools are in need of because foundation officers and directors work very closely with each school on all aspects of their packaging education programs.

Triangle Sets Record

Triangle Package Machinery Company of Chicago chalked up its nineteenth consecutive year of sales increases for the fiscal year ending April 31. Sales volume was the largest in their 51 years.

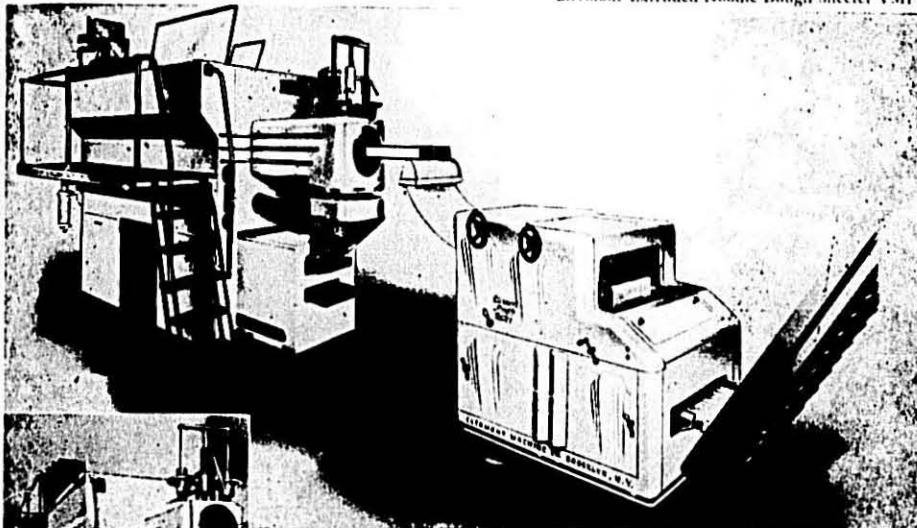
Vice President Walter P. Muskat notes: "Because of our heavy investment in automation—our computer controlled production of equipment and replacement parts and our sophisticated machining center, to name two key areas—we have been able to hold price increases on the average to considerably less than half the rate of the general inflation. This amounts to price decreases in a stable economy."

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Clermont Unique New VMP-3

Extruded Noodle Dough Sheeter - 1600 Pounds Per Hour

Clermont Extruded Noodle Dough Sheeter VMP-3



Clermont Super High Speed Noodle Cutter, Type NA-4 working in conjunction with the VMP-3 for continuous 1600 lbs. per hour operations.

FOR THE SUPERIOR IN NOODLE MACHINES
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Machine can be purchased with attachment for producing short cut macaroni.

TAILOR-MADE FOR THE NOODLE TRADE

Available with or without vacuum process

Capacity range - Two speed motor affords flexibility for 1600 lbs. or 1000 lbs. per hour or any two lesser outputs can be arranged.

Large screw for slow extrusion for better quality.

Engineered for simplicity of operation.

Rugged construction to withstand heavy duty, round-the-clock usage.

Matchless controls. Automatic proportioning of water with flour.

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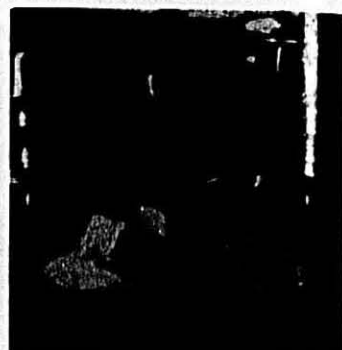


Ravioli pieces flow freely into cans without clumping, permitting precise weight control and easier heat penetration during retorting.

Myvaplex Helps Processed Pasta

Application of a special starch complexing ingredient permits formulation of canned and frozen pasta eliminating the overcooked, oversoft appearance that once characterized processed macaroni dishes. The ingredient, a glyceryl monostearate, is added into the pasta dough before extruding. By complexing with the free amylose found in the flour ingredient of the dough, gel formation of this starch fraction is reduced.

The effect of starch complexing is to prevent the continued softening of the pasta piece after initial cooking, and to increase the tolerance to continued heating. Stickiness is greatly reduced, permitting easier filling into cans or frozen food containers.



Cooked, cooled elbow macaroni retains texture without stickiness when made with the monostearate ingredient. Regular elbows form into a sticky semi-solid mass.

Prevent Clumping

A frequent problem to makers of pasta-containing foods is clumping—tight knots of precooked pasta—that made filling with any degree of precision difficult, and also interfered with temperature penetration. Because the surface stickiness is controlled, this problem is alleviated when the special pastas are used. Surface slime is eliminated and foaming is greatly retarded.

When processed, sauced pastas have better sauce "cling" without excessive sauce absorption into the pasta piece. Spaghetti canned with sauce, macaroni and cheese, ravioli—all taste and look much like freshly cooked products. Macaroni-type products containing the additive also have better freeze-thaw characteristics—even after precooking, freezing, and reheating, individual pieces remain discrete and firm in texture.

Both retail and institutional products may find the improved pasta advantageous. Spaghetti and macaroni for steam-table holding is easier to serve and tastes better when it is not sticky, clumped, and water-logged.

Booklet

Information about the use of Myvaplex 600 (glyceryl monostearate) in pasta products is offered by Eastman Chemical Products Inc., DPI Div., Kingsport, Tenn. 37662. A 12-page booklet titled "Non-Stick Means Profits" describes the various advantages of the monostearate containing products.

as cost manager. Prior to joining the company he was assistant manager of Magie Brothers Oil Compound, following several years as cost accountant for the Richardson Company.

Stella Winston

Stella Winston, devoted wife of James J. Winston, Director of Research for the National Macaroni Manufacturers Association, and mother of Harold and Marvin, died July 26 at the age of 57 from cancer.

Born in New York City as Stella Drusin, she had four sisters and two brothers. She graduated from the City College of New York where her major was English.

She married James Winston on September 8, 1940 and was closely associated with him in the Jacobs-Winston Laboratories. She had attended macaroni conventions over a long period of time and had many friends in the industry.

Sincere sympathies go to the family.

Golden Grain Divestiture

Golden Grain Macaroni Co., San Leandro, Calif., filed an application with the Federal Trade Commission seeking prior commission approval of proposed sale of its minority stock interest in Porter-Scarpelli Macaroni Co. for \$10,000 in cash to Porter-Scarpelli.

F.T.C. approval is required under terms of a modified order issued against Golden Grain by the F.T.C. on June 28, 1973, which requires divestiture of respondent's interests in Porter-Scarpelli. The latter, based in Portland, Ore., is a privately held corporation engaged in the manufacture of macaroni and other pasta products. Its officers and directors are all members of the Scarpelli family.

Food Trade Meetings

Oct. 20-23—National Association of Food Chains, Annual Convention, Las Vegas.

Oct. 7-10—PMMI Pack Expo 74, McCormick Place, Chicago.

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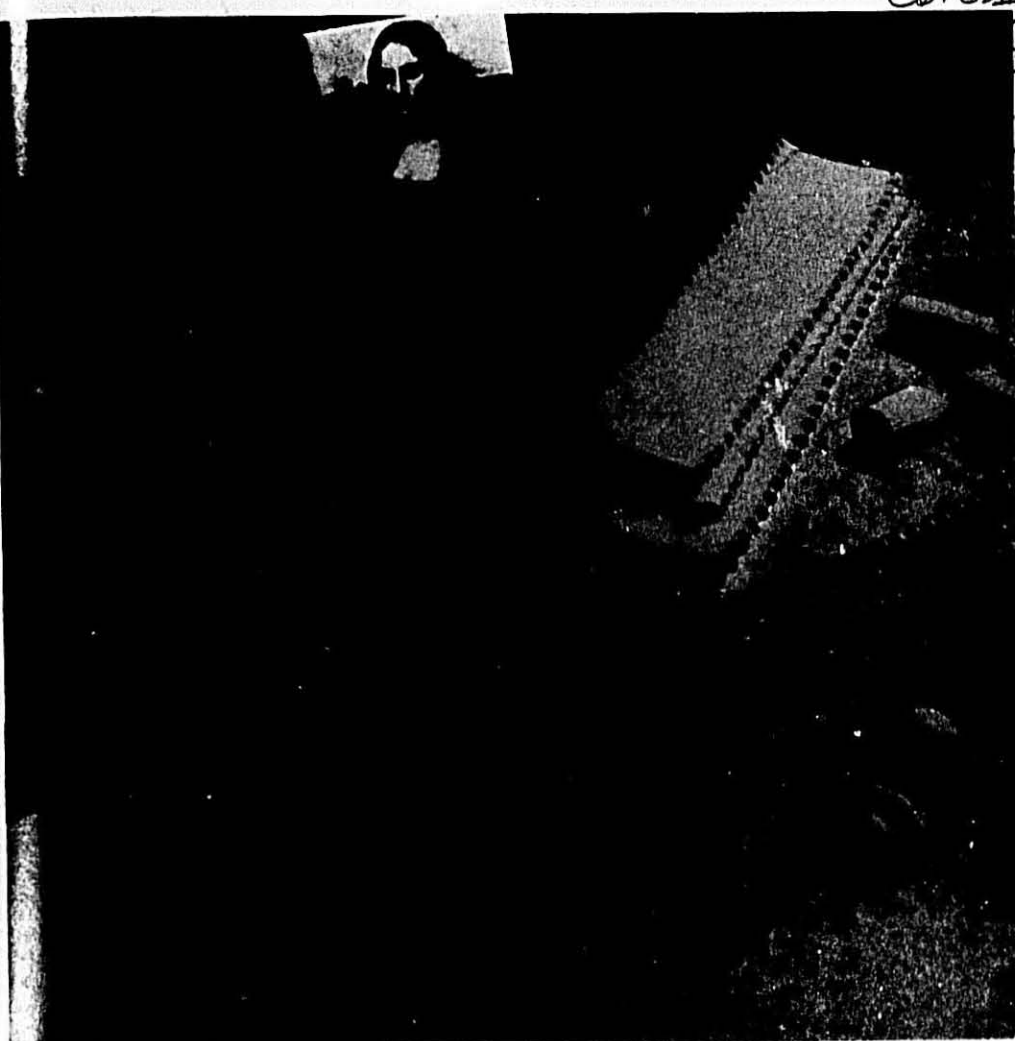
FOR SALE—83 page book on Macaroni, Noodles, Pasta Products by James J. Winston, \$5.00 postpaid if check is sent with order. P.O. Box 336, Palatine, Ill. 60067.

Accounting Manager

Gerry Doll has been appointed accounting manager for Mrs. Grass, Division of Hygrade Food Products Corporation, Bellwood, Illinois.

Doll started with Mrs. Grass, a major processor of soups and noodles, in 1973

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Diamond employs its own brand of artistry in developing a frame for these

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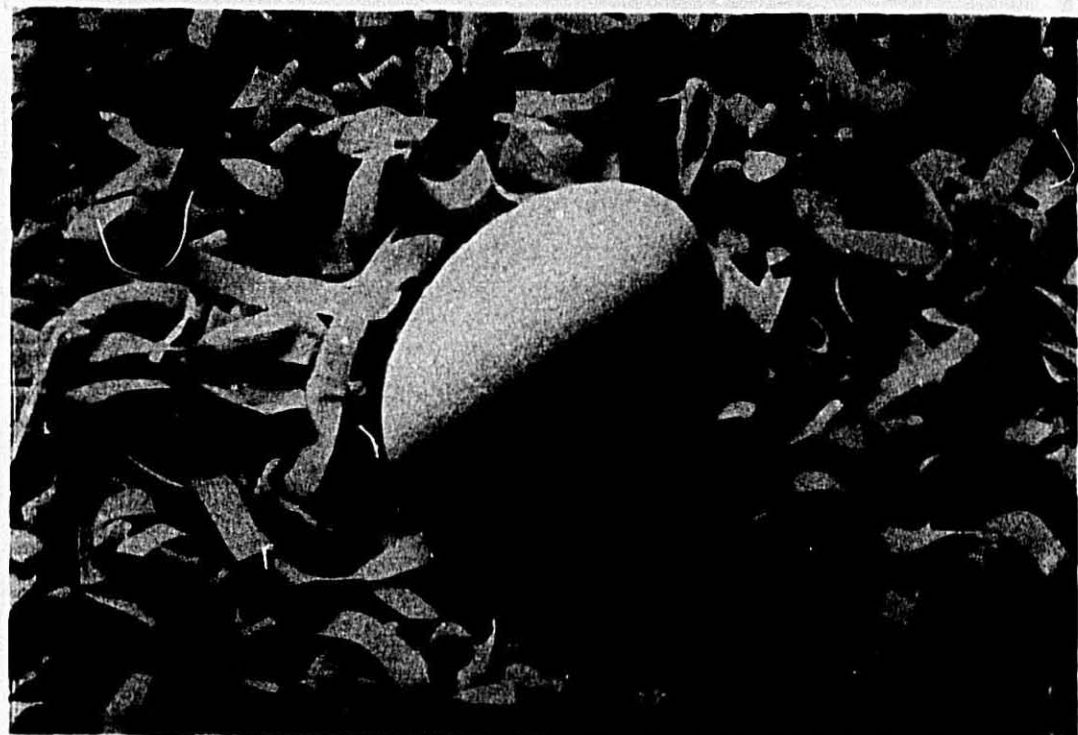
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We've gone ahead and added the egg solids to Multifoods' top-quality durum flour.

A number of our customers have already ordered "Duregg" in hefty lots.

Here are a few reasons why you should:

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 - Duregg assures a consistent blend.
 - Duregg eliminates the necessity to inventory two ingredients. Storage and record keeping is reduced.
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 - Duregg lowers your manpower requirements.
- Enough said. Order your Duregg with a phone call.

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