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Officers

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Directors

American Invention

The Supermarket was a unique American invention, created to meet consumer needs during the early years of the Great Depression. This photo shows a typical early supermarket.

In 1937 with the invention of the shopping cart (see foreground) the supermarket began to look like the stores of later decades. With self-service and a high sales volume, these stores cut prices by 25% thereby setting a new competition standard for the grocery industry.

SUPERMARKET CELEBRATES 50 YEARS OF SERVICE

After all the difficulties of the '70's –food price inflation, the eating out craze, the stunted growth of the consumer market – the supermarket is still here. It remains America's dominant retail food outlet because it offers customers convenience and choice at relatively low prices.

But there was a time when the supermarket didn't exist. At the turn of the century, your grandmother trudged each day to the butcher, the produce shop and the bakery to buy the bits and pieces of her evening meal. Then she lined up in the grocery store to buy groceries, which a clerk handed her, item by item, over the counter. If she didn't go through this routine each day, her family ate leftovers or didn't eat at all.

The appearance of the supermarket just 50 years ago changed all that. It was a unique American invention, created to meet particular needs during the first years of the Great Depression. Then, through the war, the post war boom and the turbulence of the '60's, it evolved in response to demands of a rapidly changing society.

Today our modern way of life is mirrored in its large, polished windows. the loose and varied lifestyles we all cherish are licensed by the convenience it offers. Wouldn't Granny be amazed?

Where did it come from, America's unique food store? Not out of thin air. Great inventions seldom do, despite the myths. Actually, the first supermarkets were made possible by several innovations in food retailing introduced early in this century.

For instance, around 1912, grocers began experimenting with cash-and-carry policies. The customary charge accounts and deliveries were eliminated. Since the reduction in service meant lower prices, customers responded well to the idea.

Self Service

The next step was to get rid of the counter and the clerk. In 1916, Clarence Saunders, one of the era's most enterprising men, opened a small self-service grocery store in Memphis. Customers entered through a turnstyle, passed down the aisle between shelves selecting their purchases, and came at last to a cashier who took their money. Self-service again meant lower prices, which pleased the crowds.

Meanwhile, grocers all across the country were trying to find profitable ways of bringing all food products under one roof for one-stop shopping. Often that meant no more than knocking a hole in the wall between the grocery store and the butcher's shop. In California, it meant large outdoor markets called food coliseums. More often, it meant a grocery department surrounded by a variety of concessions.

Mass Merchandising

Mike Cullen, the branch manager of a chain store in Herrin, Illinois, was one of the first to conceive of pulling all these innovations together. He also added one last essential ingredient – the mass merchandising principle.

He planned to attract large sales volume by reducing prices as low as possible and compensate for narrow profit margins by maintaining high sales volume.

Cullen wrote up his idea in a long letter which he sent first to one and then to a second large chain. Neither was interested. So in 1930, he opened his own supermarket in an abandoned garage on Long Island.

The floors were bare concrete and the counters, unpainted pine. The merchandise was everywhere – cans and cartons stacked in high columns on shelves or heaped in large wicker baskets on the floor. The advertising was crude, but sensational. Four-page foldouts appeared in the newspapers emphasizing sanitary conditions, parking space, and "the world's lowest prices."

Cullen had found a more efficient way to provide an essential service. In the midst of the Depression, people were strapped for cash. They came from miles around to load up hand baskets with food, and then they

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Supermarkets

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turned the next week. By 1932, Cullen was operating eight markets in the area with an annual sales volume of six million dollars in the grocery department alone.

But in that same year, Robert M. Otis and Ray Dawson leased a vacant automobile plant in Elizabeth, New Jersey, and opened Big Bear, "the price crusher." Their operation was larger than Cullen's, occupying 50 thousand square feet with 11 concessions surrounding the grocery department.

"Come to Big Bear and save as you never saved before," their ads read. There were now two supermarket firms expanding in adjacent areas. Competition between supermarkets was born.

Henceforth, competition would keep prices as low as possible, as competing companies vied to have the lowest prices in a marketing area.

Unable to compete in regard to prices, regular service grocery stores tried to fight back in other ways. Legislation which outlawed selling at or below cost was introduced in the New Jersey Assembly. Newspapers were pressured into refusing Big Bear advertising. Otis and Dawson resorted to delivering handbills to every doorstep within a ten mile radious of their market. The conflict made headlines across the country, publicizing the revolution in food merchandising.

Shrewd businessmen recognized a good thing when they saw it. By 1936, when Cullen died, there were 1200 supermarkets operating in 84 cities. Animal names abounded — Giant Tiger, Bull Market, Great Leopard — and advertising always stressed the beast's power to crush prices.

In 1935, then the nation's largest grocery chain, began experimenting with self-service. Kroger and Safeways began converting stores, too. By 1937, A&P was operating 200 supermarkets.

After trying a variety of formats, the chains finally settled on a toned-down, orderly operation without concessions. Since turnover was up and payroll down, these stores could cut prices by 25 percent, thereby setting a standard for the new industry.

The supermarket was being refined.

Shopping Carts

Stores began to look something like one built in later decades — except one feature, the shopping cart, was missing. Customers were still trying to fit their orders into arm baskets, which grew increasingly burdensome as they moved from shelf to shelf.

Syl Goldman, who was developing a supermarket chain in Oklahoma, was concerned about the limitation arm basket placed on sales. Inspired by the sight of a folding chair, he sent for his maintenance man and laid out plans for a cart with a folding back which could nest into other carts.

The first model was so fragile it couldn't pass over an obstacle as small as a matchstick, but Goldman persevered and finally produced a usable cart. The shopping cart, with "babyseat" added, soon became an essential feature in every supermarket. By 1940, the supermarket accounted for 25 percent of grocery sales. It was poised for a phenomenal growth which World War II could only delay.

Despite the war-time economy — or perhaps because of the challenge it presented—supermarket owners actually perfected their operations in the early '40's. Shortages meant empty shelves. Health and beauty aids were added to fill the gaps. The new lines did well, and later other non-food items like housewares, records and greeting cards would also be added.

Thousands of men left supermarket jobs to join the armed forces, and thousands of women took their places. By 1945, half the personnel in food retailing were women, and they became a permanent part of the supermarket operation.

Self-service was extended to include pre-packaged meats. Initial resistance disappeared as soon as customers perceived the time-saving involved.

The war brought price controls, rationing, allocations of scarce merchandise and endless paper work. Supermarkets promoted war bonds and sponsored scrap drives. When the war ended, the abounding energy of the new industry was freed for the incredible expansion of the '50's.

Two Decades of Boom Bring Maturity

The social and economic revolution which followed the war created a new America. The suburban-centered consumer society would dominate the scene for the next 20 years, and the supermarket rapidly adjusted to its new clientele.

The birthrate soared, and the population grew from 152 million in 1950 to 205 million in 1970. An expanding market meant more stores. Supermarkets sprang up everywhere. During 1950, it was estimated, three new markets opened every day.

Tract housing expanded into the suburbs, and where people lived the supermarket flourished. Shopping centers were going up in wooded lots next to the highway, and the giant food stores were their main draw.

Often independent grocers took the lead in this period of expansion. Many of the smaller operators had affiliated with cooperatives, which control their own wholesaling facility, or with voluntaries, which are serviced by a single wholesaler.

These arrangements allowed the small operator to achieve the efficiency of the chains and compete effectively. Many one-store operations grew rapidly into local chains.

The typical supermarket outlet itself was expanding. In the '50's, stores averaged 20 thousand square feet and carried 5900 items. In the '60's, 3[illegible] thousand square feet with 78[illegible] items was the average.

Stores acquired automatic doors and air conditioning, and food was conveyed across checkout counters on electric belts. Wide aisles, wall covering and imaginative layouts became essential.

New packaging materials permitted the introduction of self-service to the produce and dairy departments. New open freezers furthered the growth of the frozen food section. The bread shelf became a bakery department, and by the late '60's, often an on-site bakery. Then the service deli appeared.

Even before the boom ended, however, problems began to arise. With so many new supermarkets operating, people began to talk about saturation of the market, and competion grew increasingly intense.

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Searching for differentiating appeal, a few firms decided to promote trading stamps. Customers liked the idea. By 1965, two-thirds of all supermarkets were offering stamps of some sort.

When consumer interest slackened, firms looked for other promotions. It was the age of games and contests. "The quiz show was the favorite TV program. Supermarkets introduced a variety of games, ranging from "Supermarket Bingo" to "Let's go to the Races."

By the end of the decade, interest declined in this fad, too, and many firms switched back to lower prices as their primary appeal. And the supermarket did appeal. As the '70's approached, there were 38 thousand supermarkets accounting for 75 percent of retail grocery sales. This large, attractive food store offering quality, abundance and competitive prices had become the nation's dominant food outlet.

Meeting the Challenge of the '70's

"Each of the five decades presented its challenges," says Bob Aders, President of Food Marketing Institute, a trade association representing 1,175 supermarket firms. "The industry grew as it met each challenge. But perhaps the '70's was the toughest decade of all."

The supermarket grew up in an age of abundant food, energy and labor. Inflation and social revolution changed all that in the '70's.

Food prices are affected by two factors — supply of food in relation to demand and handling costs. Even when general inflation is driving up handling costs, a plentiful supply of food can moderate prices. That is why food prices often drop while housing, transportation or energy costs are rising.

But when scarcity due to bad harvests or international trading, like the 1972 Russian Wheat Deal, combines with rising handling costs, food prices began to climb. Customers, who saw food bills increasing week by week, often blamed their problems on the most visible segment of the food distribution system, the supermarket.

There had been warnings that trouble lay ahead. In 1966, when a food price first began to climb, activists in Denver called for the first food store boycott. Like other American institutions, the supermarket was subjected to heavy criticism by consumer leaders and disenchanted students.

Supermarket operators, who regarded themselves as "buying agents for the consumer," were shocked. But the debate that ensued proved mutually informative. Many consumer leaders learned what economic factors actually govern food prices, and retailers learned to listen more closely to their customers.

Many firms hired consumer leaders, like the President's consumer advisor, Esther Peterson, to work with top-level management. Open dating on perishables, unit pricing and nutritional labeling were some of the innovations which resulted.

Inflation continued, and people became more conscious of the shrinking dollar. The situation was only aggravated by the mandatory wage and price controls introduced in 1971. Ceilings were placed on retail food prices, but agricultural prices could not be controlled. Some firms were actually selling meat at considerably less than cost rather than turn customers away empty-handed. The traditional supermarket profit of a penny on the sales dollar fell to half a cent.

As controls were lifted, a flood of pent up cost increases flowed through the food system and food prices rose by 29.1 percent in a two year period. Inflation hurt consumers particularly consumers on fixed incomes. But it was also hard on the industry.

Operating costs kept rising. By the end of the decade, labor costs had risen 171 percent, utility costs were up 225 percent and supplies, 166 percent. Sales had risen only 125 percent.

The traditional answer to this kind of problem was increasing sales volume by opening new stores. That wouldn't work any more. The market was no longer growing as rapidly as it had. New lifestyles reduced the birth rate. The working wife's need for convenience contributed to the phenomenal growth of the fast food industry, which further reduced the retailer's market.

Faced by these adverse conditions and already wounded by mandatory price controls, several venerable supermarket companies failed. But others began to rally.

One answer to current problems was technological innovations which could increase the productivity of employees and facilities. Firms introduced energy conservation programs and explored ideas like automated warehouses and central meat cutting or splitting carcasses in central facilities rather than in the store.

The most important innovation was the introduction of computer technology to the supermarket. Scanners, which could read the Universal Product Code on food products, began replacing the old-fashioned cash register. By the end of the '70's, 1500 stores were scanning.

Scanning increases productivity by speeding up checkout and reducing errors. It also offers savings through its capacity to track the movement of products, thus provide inventory control never possible before.

The attempt to respond to adverse conditions also led to innovations in store format. Firms attempted to increase volume by redesigning stores to appeal to specific elements of what had become a fragmented marketplace.

They opened warehouse stores which attempted to cut costs on overhead and labor. Rough and unfinished, these markets sell a full line of products often from cut cartons or packing cases. The idea is to reduce service and costs, and pass savings on to customers.

Other companies experimented with limited assortment stores, which eliminate service and also reduce the number of items offered for sale. Instead of the 10,000 products usual in the '70's a limited assortment store carries around 500 non-perishables.

Other companies attempted to increase volume by offering greater convenience. They opened "super stores" of up to 50,000 square feet which offer a wider variety of foods, beverages and general merchandise. The object is to draw customers from a much broader area than the conventional store.

Combination stores, which combine a supermarket and a pharmacy, work on the same principle. Both the super store and combination store are designed to foster higher sales per transaction.

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Supermarkets

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The majority of companies, however, stuck with the traditional supermarket of 30,000 square feet and 10,000 items. But with the market areas taking on their own individuality, retailers began to tailor stores to specific communities. Even the conventional supermarket has responded to diversification of life-styles.

If the warehouse store is reminiscent of Mike Cullen's first experiment in mass merchandising, the super store is a reminder of how much America and the supermarket has changed during the last five decades.

By the beginning of 1980, there are 33,600 supermarkets in the country doing $154 billion in sales, which account for 77 percent of retail food sales. The figures speak for themselves. Evidently, technological innovations and experiments with format is paying off.

"We have survived," says Food Marketing Institute's Bob Aders, "because for five decades we never lost the ability to change with the times and adapt to the needs of our customers."

Impact of Inflation

The deep impact of inflation on consumer food selection, preparation and consumption was cited in a major market research study released at the 43rd annual convention and exposition of Food Marketing Institute in Dallas.

"Family Food Study of Woman's Day magazine and F.M.I. reported on changes in food consumption caused by inflation. Included was the finding that consumers most affected by inflation are eating more bread, spaghetti, noodles, macaroni and sandwiches.

While the text of the 200-page Woman's Day/F.M.I. study on American eating habits is sprinkled with comments at times prejudicial to the nutritional importance of wheat foods, the findings in the report nevertheless are of importance to the industry.

As an example, an overview of the study comments, "While budget concerns are encouraging people to cut back on sweets, snacks and soft drinks, they are also having a negative impact – especially among those most impacted by inflation. Unlike other consumers, those most hurt by inflation are increasing their consumption of starch products, such as macaroni, spaghetti, noodles and bread."

The study, conducted in the winter of 1979 by Yankelovich, Skelly & White, Inc., was entitled "Nutrition vs. Inflation: The Battle of the Eighties," reflecting the growing impact of inflation on food shopping, preparation, meal serving and food consumption habits. The report is based on the responses of 1,221 men and women 18 years of age and over, sampled on a natiionwide basis.

"The survey suggests that the battle of the Eighties – nutrition vs. inflation – is really just beginning," the report states. "Interest in nutrition continues – but inflation is already having a negative impact. In the period ahead, people anticipate that it will have a far more dominant influence on how they shop, prepare and eat food."

Major Findings

Major findings in the study include the following:

- Inflation is now affecting more than half of the consumers (53%) with either a high (23%) or a moderate (30%) impact.
- Almost all consumers (86%) now expect high prices and inflation to have either a lot (57%) or some (29%) impact in their own household's food purchasing, preparation and consumption in the next year or two.
- The sharpest impact of inflation today is felt by most sectors of the American public – the middle class as well as the poor, younger as well as older men and women – and especially parents.

"Over the past year or so, a dramatic shift has occurred in the mood and outlook of the country," the report says. "In the face of rising inflation, seven out of 10 Americans now feel that things are going badly in the country compared to a minority (47%) in 1978. This new bleak national mood is closely tied to one of the realities of life for most Americans – the impact of inflation."

The report notes that 74% of the respondents indicated they had made lifestyle changes as a result of inflation, with one in six consumers indicating they have made 'drastic" changes and 58% making "some" changes. "Compared to two years ago," it adds, "most believe that American consumers are far more concerned about balancing the budget and far less concerned about factors such as nutrients and calories in making their food decisions."

The report includes the following ranking of "most important factors in food decisions:"

	1978	1980	Net Change Percentage Points
Balancing Budget	41%	58%	+17%
Weight	35	27	— 8
Nutrients	17	9	— 8
Not sure	7	6	— 1

Consumers highly impacted by inflation, the report points out, are more likely to report that giving up certain foods because of their cost is a major barrier to good nutrition. "Those who have been less impacted by inflation, on the other hand, are more likely to report counting calories as a barrier to nutrition and less likely to report counting food costs."

In looking at the impact of inflation on food consumption habits, the new study asked consumers if they were eating more, less or about the same amount of different foods. "The inflationary spiral has had a clear effect on food habits,' 'the report says.

"In the past two years consumers indicate they are making more use of lower cost foods such as macaroni, bread and chicken and less use of expensive or discretionary items including red meat, soft drinks and snack foods. The trend toward greater use of lower priced, high starch foods is particularly evident among those who have been highly impacted by inflation."

Freshness of food remained a prime concern among consumers, and 81% wanted manufacturers to date products even if it adds to the cost.

Approximately 66% of those surveyed wanted more nutritional information on labels, despite a possible price hike. However, this was down from 69% in 1978.

Most respondents (67%) were convinced the controversy about product safety is a barrier to good nutrition

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Impact of Inflation

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and 60% were in favor of more government regulations, despite a possible increase in food costs. In 1978, however, 64% had favored more regulations. Fewer consumers last fall were concerned with stopping the use of pesticides — 48%, versus 52%.

A 38% segment, both men and women, agreed they were eating more nutritiously but the high cost of food had resulted in a decline in the rate of improvement. Two years ago, 54% had reported their families were eating more nutritiously.

Fewer people were paying a lot of attention to nutrition labeling (21%, versus 26% in 1978) and the number of people paying no attention at all had increased to 34%, from 28%. The public's perception of its level of knowledge about nutrition had also declined: The study found 28% were not well informed, compared with 13% in 1978.

Respondents felt there should be a limit to how far nutritional labeling should go. They said the most important information on the label includes sugar content (41%), vitamins (35%), protein (35%) and calorie content (37%). Fewer were concerned with content in terms of carbohydrates, minerals, sodium and fat.

Approximately 78% of those surveyed believe, to some extent, people eat better during a period of economic difficulty, because there is a decline in consumption of snack and convenience foods, particularly among groups most effected by inflation. At the same time, however, this g oup is turning increasingly to starches to fill out their diet.

Consumers reported a number of changes in diet. Among the foods they were eating in greater quantity: Chicken, salads and greens, fresh fruit, fruit juice, cheese, raw vegetables, "high fiber foods," margarine, fish, yogurt, rice and coffee.

Conversely, consumption had decreased in red meat, colas and other soft drinks, snack foods, butter, frozen dinners and canned fruit.

The following table shows trends in food consumption for selected food products in 1980, by all consumers and by those with high impact of inflation:

	Total Net Difference	High Inflation Net Difference
	(Eat More/Eat Less)	
Macaroni, spaghetti, noodles	— 4%	+12%
Bread	—10	+ 4
Sandwiches	—11	% 1
Cakes, cookies, sweets	—40	—45

Concern About Content

Another phase of the study addressed the degree of consumer concern about product content, preparation and packaging. "The appearance of food," the report says, "stands out as the major concern of consumers, a concern that is far more widespread than those of the many aspects of nutrition. The single most outstanding nutrition-related concern is the use of pesticides — a concern which is substantially greater than such things as additives, preservatives or coloring in food."

The following table from the research shows degree of concern about product content, preparation and packaging:

	Very Concerned	Fairly Concerned	Not Concerned
Appearance	49%	35%	16%
Pesticides	43	30	27
Cents-off coupons	37	27	36
Nutrition label	35	31	34
Calories	32	30	38
Additives	31	31	38
Preservatives	31	36	33
Time of preparation	27	33	40
Sugar	26	35	39
Cholesterol	26	32	42
Fibers	26	34	40
Natural grains	25	34	41
Ease of preparation	25	33	42
Sodium	23	30	47
Coloring	22	20	58
Fortified foods	20	35	45
Saccharin	17	18	65
Convenience of packaging	15	31	54

According to the report by Woman's Day/F.M.I., the 25% figure cited as "very concerned" over content of natural grains is down one percentage point from the 1978 study, while the 20% figure for fortified foods is up one percentage point.

"Consumers expect the future to be bleaker than the present," the report says, noting that 57% expect inflation and high prices "to make a lot of difference in the way they shop for, prepare or eat food in the next year or two; 29% say some difference and only 14% anticipate no difference.

"While nutrition continues to be a wide spread interest of consumers, the erosion of concern about nutrition is manifested in the fact that one in 10 (11%) consumers indicate their families are eating less nutritionally than they did a few years ago. And more than one in 10 (13%) say they themselves are eating less nutritiously."

Fast Food Market

Overall, the fast food market had not broadened, but the study found that frequency of visits by one particular group had accelerated sharply. Approximately two-thirds had visited a fast food restaurant in the past month, the same figure as in 1978. However, the percentage of adults who had been to a fast food restaurant four or more times in the past month had increased to 26%, from 17% in 1978.

In this group, the major reason for going to fast food restaurants was the saving in time and work. Among frequent visitors to these establishments, only 9% were very concerned about the nutritional content of food. At the same time, nearly 60% said the food was not as good as what was served in their homes.

Only 18% said inflation would have a high impact on the frequency of visits to fast food restaurants. However, the report found inflation may be just beginning to influence that industry, because more than 50% of all consumers surveyed said inflation would have some degree of impact on visits to such restaurants.

Inflation Cuts Profits: FMI

Although key supermarket earnings indicators rose in 1979, inflation and sagging productivity cut deep into real operational profits — a trend that could be exacerbated this year, according to the annual Food Marketing Institute survey, FMI Speaks.

"Overall, it will be difficult for retailers to match 1979 when most operators held their own or made slight profit gains", said Timothy M. Hammonds, FMI senior vice president.

Hammonds, joined by Bryan Allumbaugh, chairman of Ralphs Grocery Co., Compton, Calif., outlined somewhat bleak industry prospects in their presentation of supermarket trends.

Detailing the impact of productivity s. Allumbaugh noted that in 1979 sales per square foot had increased 5.2% to $6.49, from the year earlier. "However, the rapid rate of inflation makes a current dollar figure deceptive," he said.

"Real sales per square foot, adjusted to remove the effect of inflation," the Ralphs chairman added, "is a much more reliable figure. Last year, this figure was $2.83, down 5.7%"

Likewise, sales per transaction — a measure of improving front-end productivity — rose 12.8%, to $11.60, in 1979, Allumbaugh noted. "In terms of keeping pace with inflation, however, real sales per transaction rose barely 1%, to $5.05."

FMI's annual survey found current dollar sales per labor hour increased to $76.77 in 1979, he reported. After inflation, though, real sales per labor hour stood at $33.44, a decline of 3%.

Gross Margins

Looking at another profit indicator — gross margins — Hammonds said the gross margin for companies without their own warehouses had declined 0.5% to 20.5%, in 1979. Companies with their own warehouses saw average margins decline from 22.6% in 1978, to 22.3% last year.

In addition, store-door margin stayed at the 1978 level of 18.9%, while total inventory shrink was measured at 0.6% of sales in 1979.

The net profit margin before taxes averaged 1.9% last year, up from 1.7% in 1978 and 1.4% in 1977.

The reason for declining industry productivity, Hammonds said, were tied partly to overall economic conditions of high inflation and, specifically, spiraling energy costs.

"But in addition to the forces at work in the general economy," Hammonds said, "many supermarkets still have service departments such as bakery and deli counters," which can be relatively less productive than other store operations.

Hammonds said, though, that elimination of service departments offers no panacea for improving productivity. "You could let go of all your (service) personnel and leave your customers without any service, but that wouldn't be an answer.

"Obviously, an operator must look at the impact upon his customers before eliminating anything. The lesson, then," he said, "is that you can't look only at your productivity figures to judge how your store is doing. You must look at sales mix and overall store profit, too."

Hammonds reiterated, however, that retailers must find ways to make productivity gains this year in order to maintain profitability. This "will require the cooperation of food retailers and manufacturers in such areas as standardizing information used in direct-store-delivery invoicing."

He said FMI would give major emphasis to its human relations program, a new initiative designed to improve store personnel management, resulting in an improvement in productivity.

Looking forward to the immediate future, Hammonds said the ongoing recession had made it unclear how profitable supermarkets would be this year. "It is my feeling, though, that the operators who will do well in 1980 are those who get a handle on cost control and energy conservation," and who begin to make progress in productivity.

Food Store Sales Up

Returning to the FMI survey of industry operations in 1979, Allumbaugh said the Commerce Department had reported total food store sales had reached about $195 billion, up 11.7% from $174.5 billion in 1978.

Specifically, by quarters, supermarkets sales increased 12.3% in the first quarter, compared with the first quarter in 1978, and 11.9% in the second quarter, compared with the second-quarter of 1978. Third-and fourth-quarter sales gains were 10.3% and 12.8%, respectively.

By comparison, the restaurant business had a poor year. On a quarter-by-quarter basis, restaurant sales increased 14.1% 8.3%, 4% and 7.5% over corresponding year-earlier levels.

Allumbaugh said the FMI survey of 6,851 stores indicates the "typical retailer had a 1979 sales gain of 15%, compared to 13% in 1978. Removing the effect of inflation, the real sales increase was 6.5%, a great increase from the 3.4%, 1978 level."

However, a comparison of identical stores operated in 1978 and 1979 indicated a sales rise of 11.7%, which translates into a real sales gain of 5%, after inflation.

Hammonds said an industry study by Forbes magazine showed the industry's return on assets had climbed slightly, from 9.5% in 1978 to 9.9% last year.

Forbes reported that industry return on net worth had increased from 13% in 1978 to 14.4% last year. (FMI's annual financial review had not been completed by convention time.)

More specifically, the FMI survey shows average weekly store sales increased 24.5% to $110,000 in 1979, surpassing 1978's 17.8% rise.

"With the expansion in store size had come an increase in the average number of items carried, from 11,767 in 1978 to 12,745 in 1979. The average price per item is 94¢," Allumbaugh said. The average price question was not asked in the 1978 survey.

Wholesale Volume Up

Turning to the wholesale side of the industry, Hammonds noted the "average wholesaler had a 16% increase in sales in 1979, similar to 1978," which translates into a 7% increase after inflation.

The wholesale volume distribution is as folows: Independent stores, 68.8%; chains, 15.1%; corporately owned stores, 12.3%; convenience stores, 2.1%; hospitals, 1%; restaurants, 0.4%; other, 0.3%; and schools, 0.1%.

The FMI survey stated that the percentage of all store closings in 1979 was 4.8%, a slight increase from 1978. Last year, of all stores closed, almost 33% had been in operation six to 20 years.

"Poor profit levels and low volume still are major reasons for closing stores. However, for the first time in the history of our report," Allumbaugh said, "the primary reason for closing a store was that it was replaced by another store in the same area."

Conversely, store openings increased from 4.1% in recent years to 5% last year, while the overall store selling area remained at about 20,550 sq. ft.

Allumbaugh said: "There are also several in-store trends in new store development. In specialty departments, there was a sizable increase in the number of stores providing courtesy booths, for just under 40% in 1977 to just over 80% in 1979.

"Taking on an equally growing role is the percentage of stores including wine departments, over 70%. The only departments registering a decrease were floral and plant shops."

For the first time, the FMI annual survey polled store operators about produce departments. "The typical operator," Hammonds said, "carried 126 fresh items in winter and 141 fresh items in summer. In terms of display, 65% of the produce is displayed in bulk, the rest is prepack.

"More produce is weighed at the front end, while 39% of the stores have weighing facilities in the produce department. A substantial majority of stores, 69%, have price look-up at the front end.

"In looking at the overall department," he continued, "the typical retailer devotes 8% of his selling area to produce and produce adds up to about 8% of sales. The typical store has an average number of three employes working in the produce department.

"Bringing this data together, sales per hour in the produce department ring up to $75," Hammonds added.

Retailers Urged to Tell Industry Story

The Food Marketing Institute chairman urged retailers to get out into their communities and tell the positive story of the United States supermarket industry, celebrating its 50th anniversary.

Donald O. Schnuck said in the keynote speech at the FMI convention, member firms will receive a kit containing press releases, a model speech, photographs and ad mats designed to "remind your customers of what our industry has contributed to this country."

Schnuck, who is president of Schnuck Markets, Bridgeton, Mo., pointed out that the industry "has the kind of history which should be told and retold, especially during a period when many people tend to be skeptical about our traditional values."

The supermarket industry has "swept away" the inefficiency that once characterized food retailing, he noted. It thrives because the entire food system recognizes the supermarket as a superior outlet and supports it, and because the industry has continued to respond to the changing needs of its customers.

Although Schnuck said continuing inflation and soaring interest rates had made the past year a difficult period for the industry, he outlined some moves by FMI that were designed to improve operatonal efficiency.

They include the first version of a standardized direct-store-delivery invoice, currently being submitted to retailers and manufacturers for comment; the recently disclosed feasibility study of a data transmission system permitting direct communication between retailers' and manufacturers' computers; a sanitation compliance program, and the continuing Supermarket Management Guides series. The latest, on front-end management training, was previewed at the convention.

In the public affairs areas, Schnuck credited grass-roots action by FMI members with helping stave off the imposition of tariffs on Mexican winter vegetables.

He also noted the success of FMI and other distributors associations in working to obtain legislation which would permit cost-justified backhaul allowances.

Unscannability Problems

The possibility of massive packaging rejects by supermarkets due to unscannability of the Universal Product Code (UPC) symbol, says Dr. Shelley Harrison, could very well become a reality in the near future. This could spell trouble for printers and packagers.

According to Dr. Harrison, chairman and chief executive officer of Symbol Technologies, Inc., UPC symbols on as much as 10 percent of the quantity items sold in supermarkets don't scan properly. With 100 new stores adding scanners monthly, poorly encoded products stand to become a major headache for store managers. Such products are costly in that they disrupt the work flow at front-end operations and invalidate inventory controls.

One supermarket chain in Pennsylvania has already put its manufacturers on notice — if the UPC symbol can't be read by the store's scanner, the product will be discontinued. Dr. Harrison notes that such action could have dire consequences not only for manufacturers, but also for printers and packagers. If a manufacturer is suddenly faced with return shipments of merchandise due to unscannability, the printer or packager responsible for printing the UPC symbol could conceivably suffer financially.

More Pressure

Now that supermarkets are making a commitment to scanning, Dr. Harrison can foresee more and more pressure being exerted on packagers and printers to deliver a coded product that will scan properly. In order to avoid unscannable UPC symbols — symbols that do not conform to UPC specifications, Dr. Harrison recommends nipping the problem at the start of educating package designers, printers, packagers and manufacturers on the intricacies of UPC guidelines. He also stresses the importance of checking the scannability of any encoded product before it is shipped to the supermarket.

"With the Universal Product Code symbol, many things can go wrong at many different stages and the results can be catastrophic," warns Harrison. "To prevent mistakes, an educated chain of command, as well as appropriate diagnostic tools, are mandatory. In particular, better quality-control measurers are needed in the preliminary design of the code and in checking it during and after printing."

Symbol Technologies, Hauppauge, N.Y. 11787, manufactures and markets instruments designed for quality assurance and testing of the domestic Universal Product Code (UPC) and for Europe's European Article Numbering System (EAN).

Meat Supplies Adequate

Meat supplies should remain adequate and retail prices moderate throughout 1980, according to two directors of the National Live Stock and Meat Board who spoke during the FMI convention.

Macaroni in the Press

Newsweek magazine, April 21: Life/Style: "Meatballs Need Not Apply."

Now that **nouvelle cuisine** is a bit old chapeau, food freaks are developing a new taste: up-scale pasta. Not to be confused with the run-of-the-red-sauce spaghetti that neighborhood joints have been ladling out for years, today's trendy pasta is usually seasoned with herb sauces and cooked to **al dente** crispness. It is served in high-tech young restaurants like Joe Rigatoni's in Atlanta (soon to be in Houston, too) and sold in classy carry-out stores like Washington's brand-new Pasta, Inc. It is cranked out on home pasta machines and prescribed in a flock of new cookbooks on **la cucina Italiana**. "It seems that Italian cooking —with pasta leading the way – is the Renaissance food of the '80's," enthuses Fran Diamond, whose Cheese & Pasta emporium is booming in Santa Monica, Calif.

Boon: What set pasta's popularity aboil? Inflation is certainly a key ingredient, since a pound of pasta can be stretched to feed four for less than $2. Pasta is quick and convenient to fix – a boon to two-job families – and it's endlessly variable; without heavy meat sauces, noodles appeal to vegetarians and weight watchers. Despite its diet-busting reputation, nutritionists say, pasta provides protein, carbohydrates and vitamins at a reasonable rate of calories.

Above all, the newly popular northern Italian cuisine offers a refreshing change from the too-tomatoey, too-oily, too-garlicky Neapolitan variety. Like French **cuisine minceur** and Chinese stir-frying, fine Italian cooking can dazzle with color and texture as well as subtle taste. Shaped in farfalle (butterflies), conchiglie (conch shells) or other farinaceous fashions, fancy pasta can be served with a simple sauce of pesto (ground basil leaves marinated in olive oil and garlic) or bejeweled with costly tidbits of white truffles, tender veal or bay scallops. Meatballs need not apply. "Oh, it's such a gentle, pleasant food," rhapsodizes celebrated chef James Beard. "Pasta sits so well; it comforts the body."

'Spaghetti Bar': Pasta restaurants are thriving everywhere. In Boston, Margaret and Franco Romagnoli opened Romagnoli's Table restaurant—named for their popular public-television show—with some trepidation last fall. "I was afraid tha people would expect spaghetti and meatballs, and be disappointed," says Franco. Instead, the Florentine fare has proved so successful that they'll open up a takeout store this month. Joe Rigatoni's (named after the tube-shaped pasta) in Atlanta features an ingenious "spaghetti bar" that offers six types of pasta and 28 sauces in a sleek setting. For as little as $3.95, diners can dish up their own combinations. Moreover, up-scale pasta is reaching ever-loftier precincts. The top spot in Paris this spring for the fashion crowd is not some Michelin-starred citadel of **haute cuisine**, as might be expected. No, it's – ziti alors! – none other than Cecconi, a new Italian restaurant.

Memphis Press Scimatar,
by Bob Phillips, Assistant Sports Editor

A hot plate of spaghetti is just as good for an athlete as a helping of queen bee jelly or a gulp of protein pills.

Even better, in fact.

"A protein pill is just a mess of garbage," says Dr. Daniel F. Hanley. "Those pills are just fish heads, fish tails and some other glop that you don't really need to put into your stomach."

Dr. Hanley served as team physician for the U.S. Olympic team from 1960 to 1976 and is currently a member of the International Olympic Committee's medical commission.

Yesterday, he was in Memphis to address some 300 health care professionals and, by the time he finished, sacred cows lay dead all over the place.

"Protein is not a good substance for energy," he told those gathered at the three-day Nutrition Symposium being held at the Holiday Inn-Rivermont. "Protein is not needed for energy production."

He also took a swipe at the pre-game meal, something treated with utmost reverence by most college coaches.

"The pre-game meal is overrated," he says. "The most important thing about it is time; not content. A pre-game meal should be eaten abou 2½ or three hours before the event."

There are six important foods f an athlete, whether is is an Olympic competitor or a weekend tennis pl yer. The most important element is w ter.

"The normal adult is 70 pe cent water," reports Dr. Hanley. "In dealing with heavy exercise in hot weather, loss of water is the key. Water regulates body temperature. An athlete must have water before, during and after activity – and you can forget the salt tablets, you don't need them."

Commercial liquids which make a special pitch to athletes are nothing special. A soft drink or a can of beer after a tough match is just as good.

"The most important part of Gatorade is water," Hanley said.

The next most important item in the diet is carbohydrates . . . potatoes, bread and – mama mia spaghetti.

"In heavy work, the biggest supplier of energy is carbohydrate," says Dr. Hanley.

After that comes fat, vitamins, minerals and protein. Fat, he said is an important supplier of energy, and vegetable oils should be included in the diet. Vitamins contain no energy, and vitamin pills do nothing fo people who have a normal diet.

Dr. Hanley says if a perso eats enough fresh fruit, vegetabl and meat, trips to the health foo store for supplements are not neede

He claims the number of aletes who take pills is small . . . bu t is a problem. Steroids, the late fad drug, do not make a winn says Hanley. They just cause prob ms.

"It took two million dollars t moni-tor drugs at the Olympics a Montreal," Hanley reported. "Ther is no easy way to make a winner. I takes practice, physical equipmen and work. And the key word is w rk."

Dolly Stays Shapely Thanks to Spaghetti

Diet secrets? Dolly Parton chuckles and says: "I haven't got any."

In fact, the queen of country music – with the fabulous 5 ft. frame – confess "I just like country cookin' and lots spaghetti."

Sh explains: "I'm a sloppy housekeep , especially in the kitchen. I can't ven follow a recipe. So I just cook ne a heapin' plate of noodles, beca e any fool can cook that.

"A d you may not believe it but pasta sn't fattening. It's just what you put on it that puts on weight.

"I eat mine with just a plain tomato sauce."

Dolly was talking between takes at 20th Century-Fox Studios in Hollywood, where she's filming a movie called "9 to 5."

The film is about three secretaries and the wild goings-on in a big office.

Dolly's fellow secretaries are played by Lily Tomlin and Jane Fonda.

Dolly Parton's pasta advice is great, says diet expert Margie Asnes.

"It's actually good for the body, especially if you eat enriched types containing added vitamins and minerals," said Asnes of the Diet Workshop in Brookline, Massachusetts.

Spaghetti in sauce sprinkled with cheese contains only 190 calories a cup. Cooked macaroni has 192.

"A small, half-cup serving of well-cooked pasta supplies only 77 calories," said Asnes.

"This is virtually the same amount found in an apple. And it's fewer calories than you'll find in a baked potato.

"O cup of pasta has only 30 calorie re than a cup of whole milk, and i ss fattening than a four-ounce servi of smoked salmon," she said.

An top nutritionist Dr. Morton Glen f New York City pointed out: "It question of relativity – of amou Virtually any food, including pasta n be added to the diet in small nounts."

Nutr onists Agree on Diet dvice

Th National Nutrition Consortium Board whose member organizations repres t 60,000 trained nutritionists has en orsed the principle of dietary guidel es which emphasize weight control and stress moderation in the use of alcohol, fat, sugar and salt, according to a statement recently published in the journal Nutrition Reviews.

The Consortium statement was approved by the Board prior to the recent release of the USDA-DHEW Dietary Guidelines and does not comment specifically on the diet recommendations of these government agencies. It does, (however, cite the interest, discussion and controversy elicited by the Dietary Goals of the Senate Select Committee on Nutrition and Human Needs and related activities as reason for issuing its current position.

The Board of the National Nutrition Consortium includes three representatives from each of the five major food and nutrition professional societies in the United States. The Board statement acknowledges areas of disagreement among Board members but cites the following concensus points:

(1) There is a need for dietary guidelines that include – but go beyond – ways to avoid nutritional deficiencies.

(2) Diet plays some role in the development of certain chronic degenerative diseases, particularly in metabolically susceptible individuals.

(3) Absolute proof of the effect of dietary change on a complicated disease process will be difficult to ever obtain.

Agreement on these points represents a major step forward in consensus-gathering among a broadly based group of nutrition experts outside the federal government.

The position of the Board includes several precautions that are critical in efforts to present accurately to the public the status of scientifully sound diet advice:

– Diet modification alone is not a sufficient public health measure for reducing risk of chronic diseases that are affected by many factors.

– Health professionals and educators should be careful not to promise to the American people benefits greater than what can be supported by existing evidence.

– Consumers must realize that the importance of a specific diet modification differs among individuals depending on their family history of disease, what their diet has been previously, and many other factors.

– Widespread public health actions to change some dietary practices should not be taken on the basis of epidemiological data alone.

The Consortium Board cautions health planners that it is shortsighted to consider dietary guidelines alone as the only component of a national nutrition policy. Citing its 1974 statement that was published by the Senate Select Committee, the Board emphasizes that a national policy must address broader issues such as the safety and cost of the food supply and maintenance of emergency food resources. The Board urges continuing research to better understand nutrition factors in chronic disease and the adequacy of the basic diet. Strong public education programs that are scientifically based and forthright about controversy are essential. A national nutrition policy, as well, as specific dietary guidelines, must be periodically reviewed and updated with respect to advances in scientific knowledge and risk-benefit considerations.

Sponsor societies of the National Nutrition Consortium are the American Dietetic Association, American Institute of Nutrition, American Society of Clinical Nutrition, Institute of Food Technologists and Society for Nutrition Education.

A committee of the Consortium chaired by Dr. Ted Van Itallie, is currently reviewing the USDA-DHEW Dietary Guidelines.

At Borden's Annual Meeting

Borden, Inc., posted record first quarter earnings recently, and told shareholders at its annual meeting that the company is building a snack foods plant, expanding pasta production 25% and investing $100 million over five years in its gas exploration program.

First quarter preliminary figures showed a net income at $30,600,000, or primary earnings per share of 98¢. Year ago figures showed net income of $28,921,000, or 94¢ a share. Sales reached $1.07 billion, compared to last year's results of $952,212,000. These results were achieved "despite absorbing costs incurred in the disposition of assets," said Eugene J. Sullivan, chairman and chief executive officer.

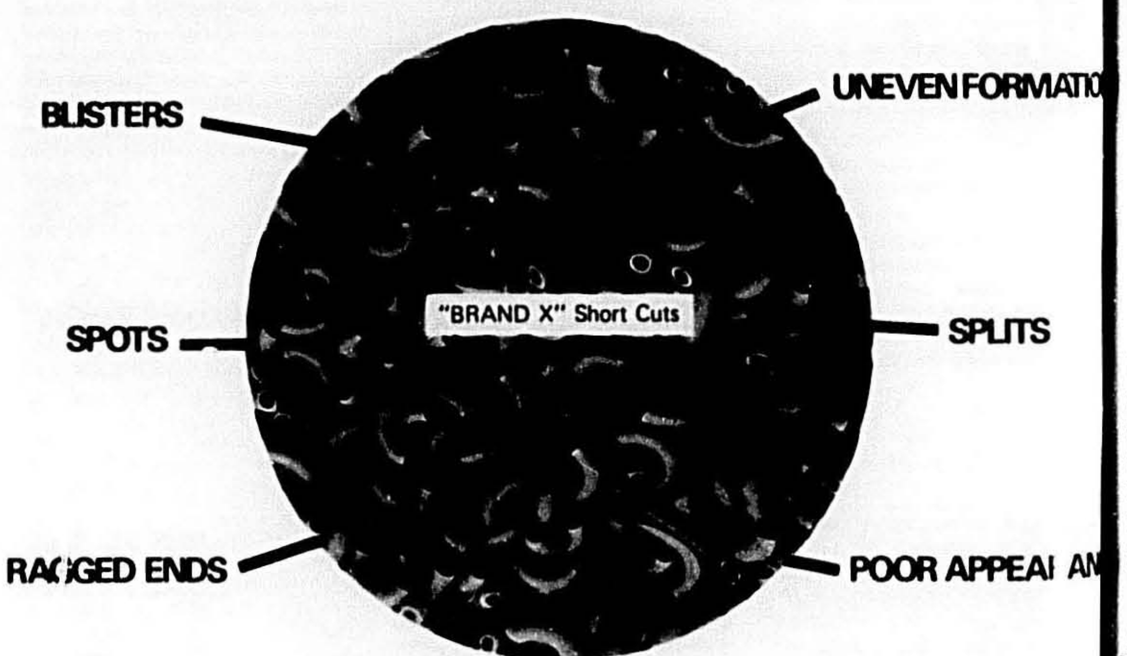
The company will ask the board of directors to approve an increase of 8¢ a share in the annual dividend rate, to $1.90 a share. If approved, a dividend of 47½¢ a share will be paid June 1 to shareholders for record May 9.

(Continued on page 20)

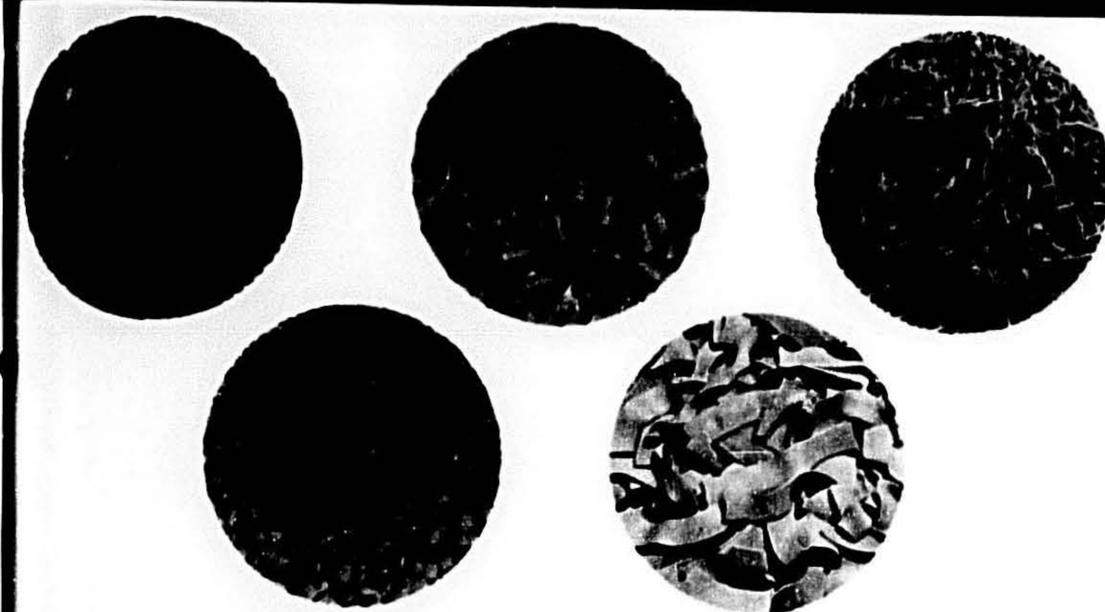
You can't take short cuts if you want Quality.

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

Here are the results:



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



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

✓ Lightness and Fluffiness (curl)

✓ Color and Uniformity

✓ Wholesomeness and Eye-appeal

in every production run!

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

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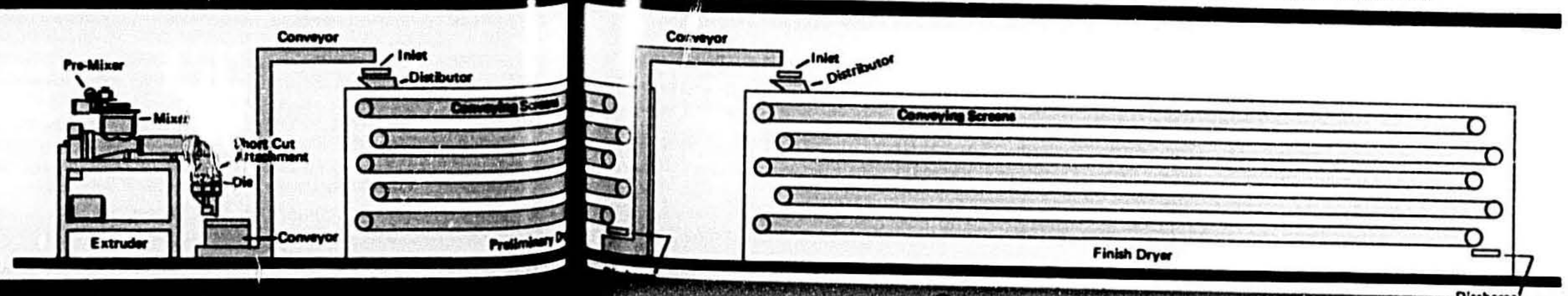
This diagram illustrates the simplicity of design of the Demaco Short Cut Line:

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



Borden's Annual Meeting

(Continued from page 17)

Foods division operating income was about the same for ongoing operations, said Mr. Sullivan, with snacks and pasta "continuing to show healthy gains." The International division and petrochemical and agricultural operations also showed improvement, but some declines were registered in the dairy and services division.

Mr. Sullivan told the shareholders that the company, as part of its strategy for the 1980's, would continue to abandon low-growth areas. For example, he said, the sale of the Sacramento tomato juice operations and brand name, completed April 1, has "freed up over $30 million in cash," which will be partially reinvested in a new potato chip plant being built in Spartanburg, S.C.

Pasta Expansion

The remainder of the proceeds will be used for a 25% expansion of pasta production in Minneapolis, "and other high-return food products," Mr. Sullivan said, while last month's sale of the company's dairy business in Canada has freed $6 million to be reinvested in more profitable Canadian food and chemical businesses.

Mr. Sullivan also told shareholders the company plans to invest about $100 million over the next five years in its gas exploration program in Louisiana, which produces natural gas as a feedstock for the company's petrochemical operations at Geismar, La.

At the annual meeting, shareholders elected John W. Lynn, vice-chairman of F. W. Woolworth Co., to fill the vacancy on the board created by the retirement of William S. Renchard. Nine other directors were re-elected.

Peavey Makes Its Mark in Specialty Retailing

From Dun's Review

For decades, Minneapolis-based Peavey Co. was a conservative, old-line grain merchandiser and flour miller, stolidly run by the descendants of Frank Hutchison Peavey, who founded the company in 1874.

Peavey is still one of the country's leading grain and milling companies. But since going public in 1973, it also has become a major retailer, acquiring and expanding several chains in rural areas of the Midwest and West.

The fast-growing retail business contributed 32% of Peavey's $594.4 million sales and 36% of earnings in fiscal 1979 (ended July 31), and Chairman William G. Stocks expects it to account for up to half the company's business within a few years. Its Northwest Fabrics, a chain of 63 stores stretching from Indiana to Montana, sells a variety of clothing and drapery materials. Its farm stores division – 75 Wheeler and S&S stores in the U.S. and 22 Peavey Marts in Canada– sells thousands of items, from automotive supplies and hardware to work clothing. And its 52 building supply stores serve both the professional builder and do-it-yourself home improver with lumber, plumbing fixtures, kitchen cabinets and the like.

Strategic Planning

Peavey's plunge into retailing is the result of strategic planning that goes back to the late 1960s when Stocks was vice president of finance and part of a planning group setting guidelines for future growth. As he puts it, "The company was not doing too well at the time, and it was apparent that we needed to examine the entire operation." The group correctly foresaw that growing worldwide demand for grain would not only increase Peavey's own potential in the market but improve the economic condition of American farmers generally. To take advantage of that trend, the company embarked on a two-pronged program to improve its grain and milling capability and diversify into new related businesses.

Streamlining and modernizing its grain operations, it went after a bigger share of the export business, building a new $33 million grain elevator in New Orleans that has tripled export capacity. It also modernized and expanded its flour milling operations, which should improve profit margins, say Wall Street analysts, and allow the company to at least maintain its position as the country's Number Two flour miller – just behind Pillsbury – and remain the leading supplier of wheat durum, the principal ingredient of pasta.

In looking around for related businesses, management decided that specialty retailing and consumer food processing were good bets both for growth and for offsetting the cyclicality of the agricultural and milling businesses.

It set up a small consumer foods group (less than 10% of sales and profits) through acquisition of Brownberry Ovens, which makes breads and croutons, and Home Brands, a manufacturer of jams and peanut butter. Because of high costs and operational problems, Stocks admits, the consumer business has been anything but a real success." Now, with the operating problems worked out and new management at Brownberry, he expects earnings to improve. But he has no plans for increasing Peavey's stake in the consumer food business.

Another Story

Retailing, though, is another story. Peavey has added about fifty new stores through internal expansion in the last six years and it plans to spend around $10 million enlarging and adding outlets this year. Stocks is also looking for new acquisitions that will give the retail operation greater geographical spread – perhaps to the Far West or Southwest – while sticking to small and medium-sized communities where it can be a major factor. "We may be making an acquisition announcement before the end of this year," he says. Analysts estimate that Peavey's retailing sales will increase from last year's $188.9 million to around $220 million in fiscal 198[illegible] and that operating earnings could reach $16.5 million, up from $14.2 million.

Stocks also expects the grain business to do well. Despite the current embargo on grain sales to the Soviet Union, he says, increased foreign demand, especially from Third World countries, should keep exports growing. And he expects Peavey's export sales, which are now half of total grain revenues, to expand at a faster rate than domestic sales.

Profit Picture

Peavey's overall profits have not shown a continuous upward curve, but they are less erratic than first glance would indicate. Earnings more than doubled in 1974 because of an extraordinary gain from the sale of its Canadian grain operations and the grain boom induced by the large Soviet wheat purchase the previous year. So 1975's earnings, though highly respectable, suffered in comparison. The only year that Peavey had a major downturn was 1977, when severe weather hindered grain transport.

Profits have been moving steadily upward ever since. Last year, they rose 19% to $16.3 million, or $2.85 a share, and this year analysts expect the company to earn $3.25-to-$3.50 a share on revenues of around $685 million. Stocks says confidently: 'Our sales will exceed $1 billion within the next five years."

Multifoods Boosts Dividends

A 10% increase in the common stock dividend rate of International Multifoods Corp. was approved by the board of directors at a meeting on May 9. The board voted a quarterly dividend of 33¢ a share on the common stock, payable July 15 to stockholders of record June 27, up from the 30¢ rate paid previously.

William G. Phillips, chairman and chief executive officer, said, "This dividend increase reflects management's confidence in our company's strength and continued future performance, despite the many uncertainties of today's economy." For the most recent fiscal year, ended Feb. 29, 1980, Multifoods had net income of $18,779,000, equal to $2.31 per share of common stock and earnings from continuing operations of $25,592,000, or $3.16 per share.

This brings to nine the number of consecutive years that Multifoods has raised its common dividend. In the fiscal year ended Feb. 29, 1980, Multifoods paid total dividends of $1.175 per share, compared with $1.075 in the 1979 fiscal year and 96.25¢ in fiscal 1978. The rate for fiscal 1977 was [illegible]¢, in 1976 it was 69.75¢ and in fiscal 1975 totaled 66⅝¢.

Multifoods also declared the regular quarterly dividend on each series of preferred stock, with the same record and payment dates as for the common.

Durum Markets in May

No. 1 Hard Ambus Durum Range from $4.85 to $5.45 per bushel, Minneapolis with semolina quoted at $13.30 to $14.85, granular 15¢ less.

World Wheat Crop

World wheat production in 1980-81 is expected to fall within a range of 420 to 460 million tons, according to the USDA's first projections for 1980-81 production. Current forecasts indicate larger crops in Western and Eastern Europe, while India's crop may be down by ten percent. For the current crop year, the estimate for total wheat production remains at 420 million metric tons. Eastern Europe is expected to recover from their depressed production level in 1979-80 to near normal levels in 1980-81. Total area planted in the coming crop year is expected to increase by four million hectares; however, yields are projected to remain about equal to this season. The rapidly rising cost of fertilizer and related production expenses, leading to reduced use of fertilizer, may in part account for the stabilized yields projected for next season. For the Soviet Union whose 1979-80 total production of 90 million tons was nearly 30 million tons below the 1978-79 season, the 1980-81 projection indicates an increase of from 5-25 million tons over 1979. Australia's yields per hectare are projected down at approximately 1.2 metric tons per hectare and acreage also down at 11.5 million hectares. Total production could be off as much as four million metric tons compared to the current season. The lower yields and production estimates for Australia are in part based on the long period of drought and erratic rain patterns experienced by that country.

Durum Stocks Down, Acreage Up

Durum stocks on April 1 totaled around 86 million bushels, 13 percent below last year. Reflecting this season's favorable Durum farm prices, most of the 1979 crop that was placed in loan has been redeemed and very little was placed in the farmer-owned reserve. In fact, about 4 million of the 11 million bushels of Durum previously pledged to the reserve program have been liquidated. Also, no Durum was bought during the recent CCC purchase program. This year's reduced supply and probable record exports are the main reasons that June carryover stocks are expected to be down nearly a fifth.

Despite last summer's shut-down of Duluth-Superior, overseas Durum commitments currently top last year by nearly 20 percent and could easily exceed 75 million bushels, or 70 percent of 1979/80 production. Sales to Tunisia have reached nearly 10 million bushels making that country the second largest importer of U.S. Durum after Algeria.

For much of the year, Durum has been priced around $1.00 per bushel over HRS. This would tend to increase blending of hard wheat in pasta flour production. Nevertheless, semolina production continues strong and may exceed last year by nearly 20 percent.

Wheat prices in general have been quite volatile since early January, but Minneapolis Durum markets have been fairly stable at around $5.00 per bushel. This compares with around $3.65 a year ago. Ample supplies and the indicated sizeable increase in 1980 Durum acreage point to chances of some price weakening as the new crop year approaches. Also, Canadian Durum acreage may be up over 10 percent from a year ago.

Favorable prices and no set-aside induced producers to plan a sharp increase in 1980 Durum acreage. Growers intend to seed 1.5 million acres more than the 40 million in 1979. With this expanded acreage and a yield per acre about equal to the latest 5 year average, 1980 Durum production could exceed 1976's record 135 million bushels.

Government Grain Purchase

The Commodity Credit Corp of the U. S. Department of Agriculture can purchase grain economically through existing marketing channels and still have the same effect on prices at the farm level as does the direct buying program, the Minneapolis Grain Exchange said in a letter to Secretary of Agriculture Robert Bergland.

In the letter, Exchange President John P. Case suggested that if the CCC decides to acquire corn under a government program, it should do so through traditional marketing channels.

Country elevators and grain companies were bypassed recently by the

(Continued on page 24)

Pasta Masters.

Super cool summer salads start with pasta made by Peavey experts from our fine Semolina and Durum flours.

Peavey Food Group

Government Grain Purchasers

(Continued from page 21)

CCC when it bought spring wheat "directly" from producers in an attempt to reduce the price impact of the Administration's ban on additional grain sales to the Soviet Union. Bergland had stated that the CCC could buy for less by bypassing the grain trade. But Case said the government could have saved taxpayers money by buying from country elevators. The "inbound charge," of about 7 cents a bushel in North Dakota which the government had to pay, would already have been paid if the CCC had bought the grain from country elevators.

"Country and terminal elevators should be allowed to participate in government grain buying programs. Services of the trade in marketing grain economically and efficiently are well known. Government programs that assume traditional private enterprise roles should not replace the best grain marketing system in the world.

Unwarranted Price Swings

"The program caused wide unwarranted price swings which work hardships on all producers, country elevator operators and other segments of the trade who use the futures market. Wildly fluctuating futures markets are not useful for hedging purposes and are not reliable guides for determining what to plant or when to sell. Producers and other segments of the trade have enough uncertainties in attempting to find markets for grain without the additional burden of trying to ascertain whatthe government's agricultural policy is on a day-to-day basis," Case said.

The Exchange also questioned the exclusion of spring wheat from previous government wheat buying programs. Case pointed out that spring wheat, as well as winter wheat, were affected by the Soviet grain embargo, and that spring wheat now is "the cheapest class of wheat in the United States."

Shell Egg Standards

The U.S. Department of Agriculture is seeking comments until Aug. 25 on changes under consideration in grade standards for shell eggs.

Favorable First Quarter For Corrugated Boxes

Despite a 6.1% drop in March, first quarter shipments of corrugated boxes were 1.0% higher than in the first quarter of 1979, according to Robert F. Rebeck, Vice President of the Fibre Box Association.

Updating the industry's figures at the trade group's Spring Meeting, Rebeck noted that the latest month's results were distorted by a difference in the number of working days. "Calculating an average rate of shipments per day still results in a negative comparison," he said, "but it is much less at minus 2.5%." For the full quarter, he added, "the number of days is exactly the same, so no such distortion is present."

Actual shipment numbers for the month and quarter were 21.5 and 63.9 billion square feet respectively.

"Despite the rather substantial year-to-year decrease in March," Rebeck said, "the real trend in seasonally adjusted shipments in the first three months of this year gives every indication of being favorable."

To evaluate the trend, he compared box shipments to the Federal Reserve Board's monthly Index of Industrial Production (manufacturing only). The ratio, currently about 1:1, suggests that box inventories are probably lean.

Shipment Trends

Rebeck reported that the final census number for 1979 shipments was 250.6 billion square feet, just 100 million, or 0.03% less than the preliminary figure announced in January. The rate of gain over 1978, 2.8%, was unchanged by this small difference.

"The severe recession which occurred in the mid-'Seventies had a pronounced effect on the industry growth rate in the last decade," Rebeck noted. The average annual compound rate of 3.0% was "noticeably slower than the 5.3% that occurred in the decade of the 'Sixties, and only half the rate of growth of 6.0% experienced during the decade of the 'Fifties," he said.

"The initial reaction to this comparison would suggest that the fibre box business is losing momentum, and possibly approaching a point of minimal growth," Rebeck noted. But, he went on, there were almost identical drop-offs in Gross National Product and in manufacturing activity, indicating that "the lower rate of gain of fibre box ships just simply had to occur."

Regional Analysis

Rebeck also analyzed variations in the shipment trends in different parts of the country. "By far and away, the largest gains over the last two decades have been in the Southeastern states," he said. Migration of industries to the Sun Belt has also favorably affected box shipments in the South Central and Western states.

"On the other hand," he went on, "the relocation of industrial plants has had an adverse effect on the older industrialized areas." While they have experienced long-term gains in volume, they have been at a much lower rate. Thus far in 1980, box shipments in the East Central Area, which includes lower Michigan, have clearly shown the depressed state of the automotive industry, he said.

Inventory

Rebeck concluded his review of industry performance by analyzing container-board inventories.

Two years ago, he noted, on January 1, 1980, tonnage on hand totalled 2.4 million. This figure declined steadily throughout 1978 and the first quarter of 1979, he said, when there was a moderate build up. By year end, the total was slightly under million tons. A sharp decline in March of 1980 brought the current level, as of April 1, down to 1.9 million tons.

In terms of usage rates, Rebeck said, total inventories average 5.3 weeks of supply in 1979, and are at that same level now. Linerboard supplies have declined slightly over this year-and-a-quarter period, from 5.5 to 5.4 weeks, while corrugating materials supplies ratios increased from a low of 4.4 to 5.2 weeks.

Egg Products — May Price Range

Central State Nest Run — $9.00 to $11.10.

Southeast Nest Run — $9.90 to $11.10.

Frozen Whole — 38.5¢ — 42¢.

Frozen Whites — 24¢ — 26¢.

Dried Whole — $1.47 — $1.58

Dried Yolks — $1.49 — $1.58.

SOVIET GRAIN EMBARGO GETS REEXAMINATION

by

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

Congress has declared that a sound agricultural sector requires a minimization of restrictions on exports of agricultural commodities and products. However, it has cited three situations in which export controls on commodities can be applied: Reasons of national security, foreign policy and short supply.

Responding to the Soviet invasion of Afghanistan and citing reasons of national security and foreign policy, President Carter directed on Jan. 4, 1980, that United States shipment of wheat and corn to the Soviet Union be limited to eight million tons during the 12-month period ending Sept. 30, 1980. The President also directed that exports of other agricultural commodities to the Soviet Union be suspended.

What has been the impact of his decision? Let me share some information with you provided to me by Clarence Palmby, former assistant secretary of agriculture for international affairs under President Nixon and currently vice president of public affairs for the Continental Grain Company.

I should note that under the terms of a five-year bilateral agreement between the United States and the USSR, we are committed to ship eight million tons of wheat and corn to the Soviets each year. Additional amounts can be shipped after consultations between the two governments. As of Jan. 4, the date of the President's announcement, about five million tons had been shipped, and we had authorized the Soviets to purchase up to 25 million tons of corn and wheat for shipment during the current 12-month period.

That said, let's look at the effectiveness of the embargo. First, no other grain exporting country has agreed to embargo grain exports to the Soviet Union. Some major exporting nations have agreed to *not increase* their exports to that destination. Other major exporting countries have announced that price will determine the destination of their grain and oilseed exports.

Second, according to official and private estimates, the Soviets will import from other origins about 50 percent of the grain not allowed to be shipped from the United States. This availability of other grain will coincide with their shortrun seasonal requirements, and will go far in filling the gap prior to their own new crop harvest. Also the United States will increase its exports of grain to other destinations, and it will be difficult to prevent those countries from then shipping our grain to the Soviets.

Third, the Soviets will likely increase their importation of soybean meal and soybeans as a supplement to grain for livestock rations, thereby improving feeding efficiencies for their livestock and further minimizing the impact of the embargo.

One way to verify these developments is to monitor prices. For example, following the President's decision to embargo exports, a two-tier world market price has developed for corn: One, the United States price which has traditionally been the world price; and two, a higher price for corn of other origins eligible for destination to the Soviet Union.

The Administration estimates the cost to taxpayers of the grain embargo could run as high as $3 billion. That is what the government will have to pay to keep domestic prices from dropping lower than they were before the embargo. Other estimates predict the costs will be much higher than $3 billion. Thus, one must at least question the effectiveness of a decision that, to date, has resulted in lost markets for farmers, higher costs to taxpayers, but apparently little, if any, reduction in the total quantity of grain arriving in the USSR.

Trade relationships offer great possibilities for long term cooperation. They are not easy to establish and maintain, hence they should not be turned on and off to suit current political whim. But it's even worse to penalize the American farmer, and the American taxpayer while accomplishing so little with the Soviets.

POTENTIAL IMPACT OF STRONG GLUTEN CULTIVARS ON THE FUTURE QUALITY OF NORTH DAKOTA DURUM WHEAT

**Dr. B. J. Donnelly, Assoc. Professor, Cereal Chemistry and Technology Department
North Dakota State University, Fargo, North Dakota 58105**[1]

[1] Present address: North American Plant Breeders, 806 2nd Street N.; Berthoud, CO 80513.

Durum wheat production in the U.S.A. takes place in two general areas of the continent, namely the "traditional" and "non-traditional" durum producing states.

The "traditonal" durum producing areas are in the upper Great Plains states of North Dakota, Montana, South Dakota and Minnesota. The "non-traditional" producing states are in the U.S. Southwest, namely Arizona, California and New Mexico.

North Dakota is the major durum wheat producing state, producing between 80 and 90 percent of the annual durum wheat crop in the traditional producing areas. Durum production figures for North Dakota and the U.S. A. for the period 1974 to 1978 are shown in Table 1.

TABLE 1
1978 North Dakota Durum Wheat Survey

Production	North Dakota	USA
	(Million Bushels and Million Metric Tons*)	
1978	102.1 (*2.8)	133.3 (*3.6)
1977	60.5 (*1.7)	80.0 (*2.2)
1976	90.5 (*2.5)	134.9 (*3.7)
1975	104.9 (*2.9)	123.1 (*3.4)
1974	69.0 (*1.9)	81.4 (*2.2)

The distribution of cultivars grown in the state over the past six years is shown in Table 2.

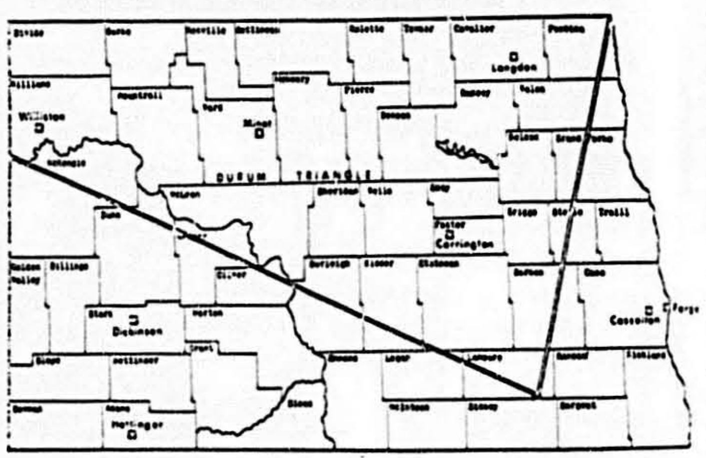


Fig. 1 • North Dakota "Durum Triangle"
□ : NDSU Branch Station Locations

Within the state of North Dakota, durum wheat production is generally concentrated in an area called the Durum Triangle (Figure 1). The high production levels in this area of the state are due primarily to the cultivars seeded, the unique combination of environmental and agronomic growing conditions, and the cultivar development program at NDSU which produces cultivars suitable for the area.

The data illustrates the point that as new cultivars are developed and released, they are soon accepted by the producers and the older cultivars are gradually replaced. An outstanding feature of these cultivars is the bright yellow or amber pasta that can be processed from the durum semolina. For example the color differences between the bright yellow spaghetti processed from North Dakota durum semolina and that produced from Arizona durum wheat of low yellow pigment content is quite apparent.

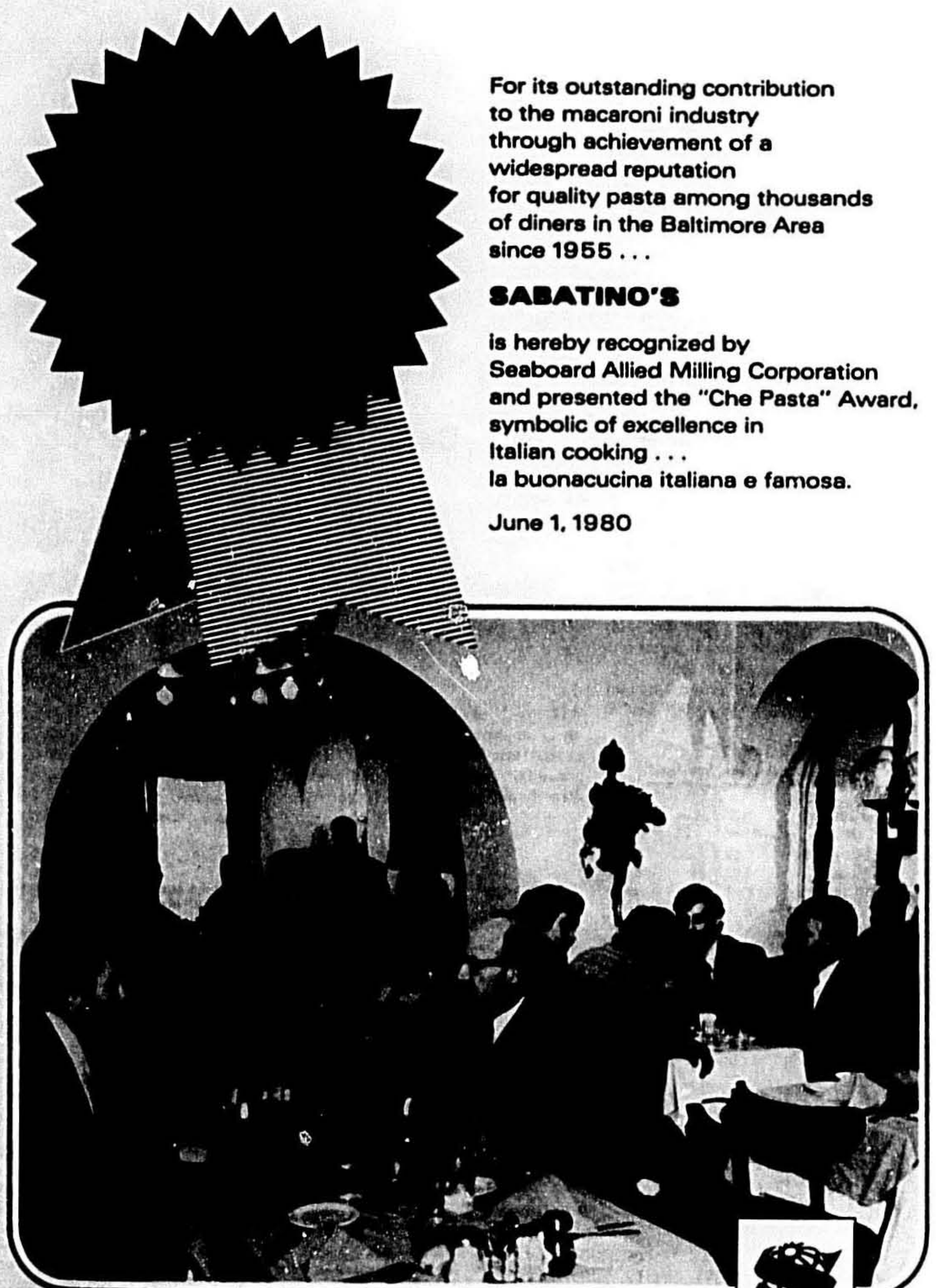
Semolina protein quality is a factor currently being given close attention at NDSU. Protein quality, as indicated by gluten strength and determined either by Farinograph or Mixograph, is now a major quality factor in the NDSU durum wheat cultivar development program. The gluten strength characteristics of durum wheat developed in North Dakota since the 1940's have the characteristically weak mixogram curve shown in Figure 2a.

The curve shows a relatively short mixing time, thin curve and poor mixing tolerance. The bottom curve is typical of the strong gluten durum cultivator Edmore, released in 1978. This cure is significantly stronger with good mixing tolerance. The development of stronger gluten durum wheats is in response to some demands in the export market. Recent studies also indicate that pasta processed from strong gluten semolina have improved

Durum Cultivar Distribution in North Dakota[1]

Cultivar	Released	Percent of Crop 1973	1974	1975	1976[2]	1977[2]	1978
Wells	1960	28	18	10	9	7	3
Leeds	1966	50	28	13	4	4	3
Rolette	1971	14	38	26	18	14	9
Ward	1972	1	13	48	42	39	45
Crosby	1973				9	7	4
Boino	1973				9	9	10
Rugby	1973				8	15	13
Cando	1975					4	9
Others		7	3	3	1	1	4

[1] Statistical Reporting Service, U.S.D.A. [2] Estimates.



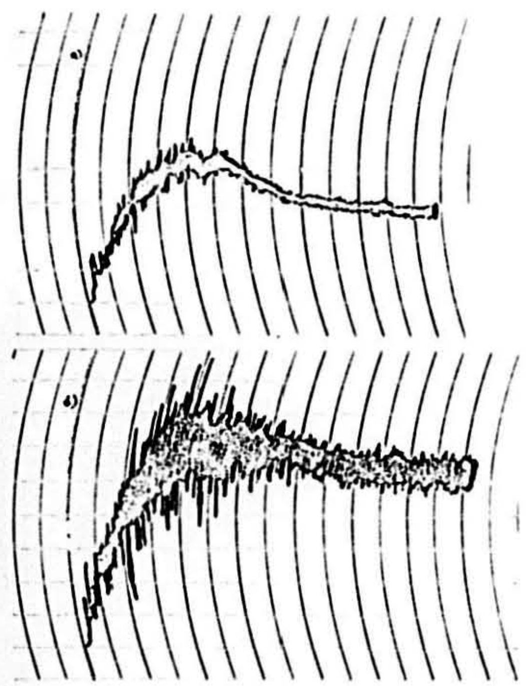


Figure 2 a) Micro-mixogram of representative North Dakota durum semolina
b) Micro-mixogram of Edmore semolina

ooked firmness and better cooking olerance or stability (1)

This emphasis on the strong gluten quality factor has led to the development and release of two new strong gluten, high quality durum wheats, namely Edmore and Vic (2, 3). This latter cultivar was released in January, 1979. The quality characteristics of these two cultivars are listed in the following slide and compared with Rugby and Calvin. Table 3.

TABLE 3
Av rage Grade, Milling and Spaghetti Quality Data for Vic, Edmore, Rugby and Calvin in 15 Tests During 1976-1978

Quality actor	Vic	Edmore	Rugby	Calvin
Test We ht, lbs./bu.	61.7	60.8	61.3	61.8
Vit. Ke ls, %	88	89	88	82
Grade, S.	1 HAD	1 HAD	1 HAD	1 HAD
1000 K Wt., g.	46.4	47.0	42.2	42.1
Wheat tein, %*	15.0	15.2	14.9	14.1
Kernel stribution, %				
Large	56	53	46	42
Medi	42	45	51	56
Small	2	2	3	2
Semolin Yield, %	52.4	51.8	52.9	52.7
Semolin Ash, %*		0.56	0.59	0.57
Semolin Specks/10 sq. in.	21	26	25	25
Semolin Protein, %*	14.0	14.2	13.9	13.2
Spaghett Color**	9.6	9.6	9.4	9.4
Cooked Weight, g.	31.4	31.3	32.4	32.1
Cooking Loss, %	6.8	6.9	7.2	7.1
Cooked Firmness, g. cm.***	6.2	6.6	5.6	5.6

*14 percent moisture basis.
** Higher score indicates more yellowness.
*** Higher value indicates firmer cooked spaghetti.

Some quality factors to note with respect to Edmore and Vic are the generally higher percentages of large kernels, higher kernel weights, wheat and semolina protein, spaghetti color and cooked firmness when compared with Rugy and Calvin.

Weak and Strong Wheat Blends: Although the new strong gluten cultivars Edmore and Vic do not comprise any percentage of the North Dakota durum wheat crop at the present time, it is anticipated that these strong gluten type cultivars will predominate production is seven to ten years. That being the case, a simple experiment was performed to determine the potential impact of these strong gluten type wheats on the future quality of the durum wheat crop coming out of North Dakota. This experiment did not take into account the potential effects of environment or growing conditions on quality.

A series of blends of the strong gluten cultivar Edmore were prepared with the 1978 milling control (blends of durum cultivars grown in the 1978 crop year in North Dakota and in proportion to their percentage of the crop). The strong gluten blends ranged from zero to 5, 10, 15, 20, 25, 50 and 100 percent (Table 4).

TABLE 4
Weak and Strong Gluten Blends

Control* %	Edmore %	T.Wt. Lbs./Bu.	Kernel Distribution %L	%M	%S
100	—	62.0	54	43	3
95	5	62.0	54	44	2
90	10	61.9	53	46	1
80	20	61.6	52	47	1
75	25	61.6	48	50	2
50	50	61.4	49	49	2
—	100	60.8	47	51	2

* 1978 Milling Control.

The effect of blending at the levels shown provided samples with test

TABLE 5
Weak and Strong Gluten Blends

Control %	Edmore %	Wht. Protein* %	Wheat Ash* %
100	—	14.7	1.61
95	5	14.3	1.59
90	10	14.1	1.61
80	20	14.4	1.61
75	25	14.3	1.64
50	50	13.9	1.58
—	100	13.8	1.62

* 14% Moisture Basis.

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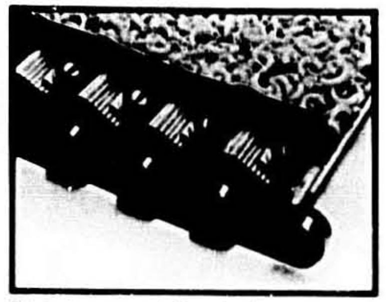

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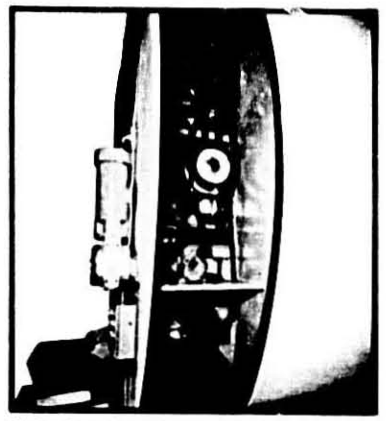

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weights and kernel distributions intermediate between 100 percent control and 100 percent Edmore. The same was also true for the wheat protein and ash (Table 5).

Semolina extraction and speck counts showed slight improvement as the percent strong gluten in the blend approached 50 percent and higher (Table 6). Semolina protein and ash were all at acceptable levels. The effect of blending on Semolina mixograph score is indicated in Figure 3.

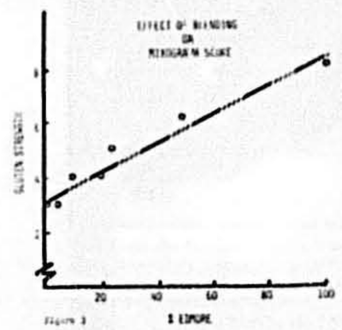
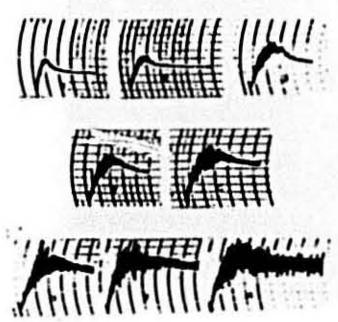


Figure 3

Blending did not change the weak mixing characteristics of the semolina dough until the strong gluten replacement approached 50 percent. At 50 percent and higher blends of Edmore, the mixing characteristics rated in the stronger categories of 6, 7, and 8 (Figure 4).



Spaghetti color, as exemplified by a bright amber product, is an important quality characteristic with the American consumer but not necessarily so outside the U.S. Color can be readily determined with a reflectance meter which measures the L% and b% values or brightness and yellowness, respectively, of the product. At NDSU, a color score map is used which assigns a single color score to a pasta product based on the combination of L and b values (4).

TABLE 6
Weak and Strong Gluten Blends

Control %	Edmore %	Sem. Extn. %	Sem. Prot. %	Sem. Ash %	Specks Per 10 In.²
100	—	50.0	13.8	0.59	2
95	5	51.0	13.8	0.58	2
90	10	50.0	13.6	0.59	2
80	20	50.0	13.6	0.57	1
75	25	51.0	13.5	0.58	1
50	50	52.0	13.4	0.58	1
—	100	52.0	13.2	0.57	1

With such measurements, scores of 8.5 or higher reflect a bright amber product. Scores lower than 8.5 can indicate either a dull amber, brown, grey or white product (Figure 5).

In this study, spaghetti color was not significantly affected by blending until the percent Edmore in the blend reached 50 percent or higher (Table 7).

TABLE 7
Weak and Strong Blends

Control	Edmore	Spaghetti Color
100	—	9.5
95	5	9.5
90	10	9.5
80	20	9.5
75	25	9.5
50	50	10.0
100	100	10.0

A color score of 10.0 reflects a pasta product of excellent bright amber appearance.

Cooking quality is a measure of the cooked weight, cooking loss and cooked firmness of the product after cooking under standard conditions. The standard conditions used at NDSU are 10 g of spaghetti (av. diameter 1.52 mm) boiled in 300 ml of distilled water for 15 min. Cooked weight is a measure of the water absorption characteristics. Ideally it should be between 3 and 3.5 times the dry weight. Cooking loss is the percent solids lost to the cooking water and should not be more than 8 percent. Cooked firmness determines the chewing characteristics of the pasta. Instrumental methods are available for measuring cooked firmness. The method used at NDSU consists of an Instron Universal Test Instrument modified with a plastic tooth to simulate the biting action of a tooth (5). The force required

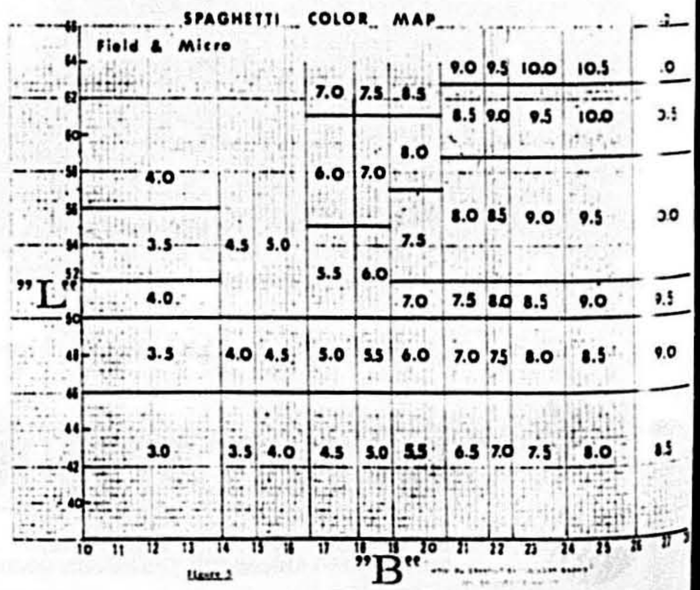
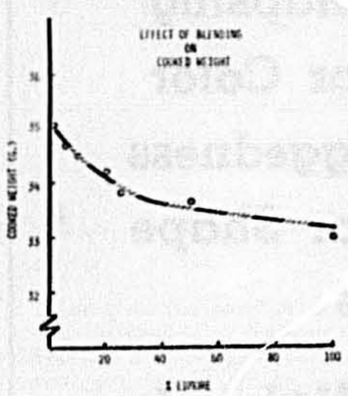


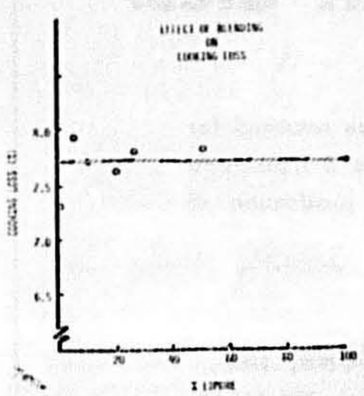
Figure 5

for the tooth to cut through the cooked pasta is a measure of cooked firmness. Good quality pasta will have cooked firmness values between 6 and 7 g. cm. on this instrument.

The effect on cooked weight of blending the strong gluten Edmore with the weak gluten control was such that as the level of Edmore in the blend increased to 25 percent cooked weight decreased slightly and then essentially reached a plateau of approximately 33.5 percent at higher blend levels. All cooked weight val[illegible] were in the desirable range indica[illegible] previously (Figure 6).



It is apparent from the following figure that blending had no real impact on cooking loss (Figure 7).



Cooked firmness showed a desirable upward trend as the percent strong gluten Edmore increased (Figure 8).

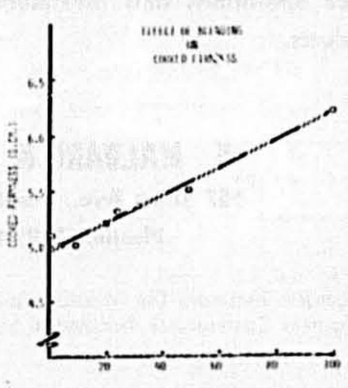
As was indicated earlier with respect to spaghetti color and semolina mixograph scores, the strong gluten blends of 50 percent or higher also produced spaghetti having cooked firmness values of 5.5 g. cm. and higher. These values are in the more desirable "al dente" range for good cooked firmness and better cooking tolerance.

Summary

The durum wheat cultivar development program at NDSU has included strong gluten as an additonal quality factor for inclusion in new cultivators. Two new culitvators, Edmore and Vic, exemplify the continued development of high quality durum wheats for production in North Dakota with the added advantage of having strong gluten characteristics. Since it is anticipated that strong gluten type durum wheats will predominate the North Dakota crop in seven to ten years, an experiment was run to assess the potential impact of the strong gluten wheats on the quality of future North Dakota durum crops.

Blends were prepared of Edmore and typical weak gluten North Dakota durum wheat. No adverse effects were noted on wheat quality. Milling performance showed a slight increase in semolina yield and slight decrease in speck count as the percent of Edmore in the blend reached 50 percent or higher. A 50 percent or higher blend of Edmore was also required to produce gluten strength (mixograph) scores in the strong range.

No particular problems were encountered in processing the blends into spaghetti. Blends of 50 percent or higher of Edmore were required to provide spaghetti with improved color scores and cooked firmness values. Blending had no significant effect on cooked weight or cooking loss.



The results reported have indicated that future durum wheat crops emanating from North Dakota will probably have to contain 50 percent or higher strong gluten cultivars in the wheat mix before significant effects are noted in milling characteristics and, in particular, on spaghetti color and cooking quality.

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Acknowledgement

The author wishes to thank Mr. S. Vasiljevic for his technical assistance in this work.

Reprinted from Proceedings of the International Conference on Semolina and Alimentary Pasta. May 30, 1979. Rome, Italy. Editors: G. Fabriani and C. Lintas.

Research Fellowship

Janice M. Nelson, graduate student from Douglas, Arizona, was the recipient of a $5,000 research assistantship in cereal chemistry and technology covering basic research of durum wheat and pasta products from funds provided by the National Macaroni Manufacturers Association, at Honors Day, May 5, at North Dakota State University at Fargo.

USDA Invites Consumer Groups to Participate In Wheat Council

Assistant Secretary of Agriculture P. R. Smith called on consumer groups to request the certification needed to nominate individuals for appointment to a new wheat industry council.

In addition to consumers, any organization with membership primarily composed of wheat producers, processors or end-product manufacturers may ask Bergland for certification.

Letter to the Editor

I have just received the May 1980 copy of the Macaroni Journal (Vol. 62, No. 1) and would like to address myself to a rather serious error pertaining to my Company, as depicted on page 5 of that edition.

To briefly quote sections of the error will help to clarify and correct the error made. I quote the mistake: Joseph Volpi, marketing manager of Volpi and Son, representatives of Giacomo Toresani equipment for Chinese noodle processing . . . ."

The correction is that Volpi and Son does all the manufacturing of Chinese noodle processing machinery at its Long Island facilities and markets same from there. Volpi and Son is personally affiliated, at this point of time, with Giacomo Toresani. This relationship far transcends that of a representative. The relationship here being that Toresani/Volpi manufacture Pasta related machinery from Italy. Volpi manufacture all Chinese noodle equipment and markets same from L.I. We are a manufacturing facility — not manufacturers' reps.

Since my own Company has initiated (and still is initiating) newer and more modern lines in the noodle industry on its own, I feel it my place to clarify any misconceptions your error inadvertantly impressed upon people.

One further point — I am Executive Vice President of my Company — directly in control of marketing.

I thank you for this opportunity to air my views,

Very truly yours,

Joseph P. Volpi
Vice President

Volpi & Son and Oriental Products

Joseph P. Volpi, vice president for marketing and sales of Volpi & Son Machine Corporation, East Farmingdale, NY, gave a paper a the Macaroni School conducted by Buhler-Miag in Zurich differentiating Italian noodles from Chinese noodles.

Volpi is third generation of a family-run machinery, manufacturing business which specializes in the design and manufacture of Chinese noodle machinery and peripheral equipment as well as a textile line of equipment. They are affiliated with Giacomo Toresani of Milano offering specialized machinery for the production of ravioli, tortellini, gnochi, manicotti, canelloni and related lines. Their primary market is the USA and Canada where they specialize in plant setups and equipment and manufacture of the same.

History

In giving the history of Pasta Mr. Volpi noted noodles appeared in China during the Shang Dynasty, 1700 B.C.-1100 B.C. Cicero of Greece spoke and wrote of laganon — the precursor of lasagne — 3100 years ago. The Etruscans were voracious eaters of noodles long before Marco Polo was born.

Actually both Italian and Chinese cultures nurtured the noodle before either had heard of the other. In the northern provinces of China wheat was eaten more than rice as a staple. It was eaten either dry or in the form of steam-raised buns — in the form of mien, unraised noodles. In the central and southern provinces of China the wheat or rice noodle was the staple of the meal.

Chinese Noodles

The oriental noodle — more specifically the Chinese noodle — can be either hand swung (an extremely difficult art really not much in use today because of complexities of the operation); or machine-cut, regular dried, or fine dried.

The hand-swung noodle process takes a batch of dough and swings it out by manually stretching the dough like putty to a five or six-foot length. Then it requires a doubling over of the stretched dough and precisely in the middle a reapplication of the stretching principle is applied. It doubles the two extended branches into four and then repeats the process geometrically. It is a long and tedious task, but hand swung noodles have a texture that cut noodles do not have. Chinese noodle manufacturers utilize durum flour primarily. Most of them do not use egg solids and are ignorant of the federal specifications set forth for egg noodle products.

The basic difference between Italian noodles and Chinese noodles is that the first is extruded and the second is laminated. In the old days producers of Italian noodles utilized a production system called the batch method which is today's equivalent of the conventional system being utilized by Chinese noodle producers. This calls for mixing the flour and water into a stiff dough and then kneading it before working it back and forth into rolls for cutting into laminations.

The products may be dried in the conventional manner in trays or in drying rooms, or they may be sold fresh, sprinkled with corn flour to keep them moist, or deep fried in oil.

Obviously batch method production cannot turn out the volume that a continuous press system can do.

Austin Starts Construction Of Japanese Noodle Plant In Ohio

Myojo Foods of America Inc., a subsidiary of a multinational corporation based in Tokyo, has broken ground in Sidney, Ohio, for its first manufacturing plant in the United States . The $7 million facility is scheduled to be completed in early 1981.

The Austin Company, international engineering and construction company based in Cleveland, designed and is building the Myojo plant through its Eastern District office in Roselle, New Jersey. Austin also provided facility location services, studying some 33 sites before recommending Sidney.

The Sidney plant will manufacture two types of dehydrated soluble instant oriental noodles under the trade name "O My Goodness." One product can be served as a side dish or main entree; the other becomes a complete meal when water is added.

Takashi Nishiyama, president of Myojo of America, said initial employment would be about 30, with an additional 50 persons to be added during the peak winter months. Sixty full-time employees will be working for the company by the end of the third year when the plant is expected to turn out about 50 million packages of noodles annually.

The company's marketing area is now limited to upstate New York and Pennsylvania. When manufacturing starts in Sidney later this year, Myojo will cease importing its "O My Goodness" products from Japan.

Mr. Nishiyama said that when the Sidney plant was completed, the company would expand its market to include the entire East and Midwest of the United States.

Mr. Nishiyama noted that the plant was being built on a ten-acre site, with plenty of land for expansion as the company's market developed.

In addition to producing food products to satisfy American tastes, Mr. Nishiyama said Myojo is interested in introducing American foods to the Japanese people.

Myojo Foods Ltd. was founded in 1950 in Tokyo by Kiyosumi Okui. The company began distribtuion in the United States in 1978. Myojo Foods of America has its U.S. headquarters in New York City.

Working Women Keep Restaurants Thriving

Despite talk of a recession and other economic ills, food service industry specialists believe the appetite of the American public for restaurant food is as healthy as ever.

The National Restaurant Assn. is projecting record sales of $112.2 billion in 1980. In 1979, the restaurant industry reported sales of approximately $102 billion.

First quarter figures for eating and drinking establishments, which constitute about 60 percent of the industry, were $18.5 billion — up 10 percent over 1979 statistics, according to the association. The other 40 percent are mostly businesses whose main trade is not food.

The trade group is expecting real growth in 1980 of 0.2 percent. A spokesman says some of the gross increase in sales figures will be caused by higher prices.

There is no current sign of an impending downturn in sales, the association says.

Among the factors cited by the association for its prediction of a strong performance this year are better weather and working women.

"More and more women are working outside the home and that's going to keep us healthy," said an association spokesman. The extra income earned by working wives is believed to increase the willingness of couples to spend dollars outside the home.

And then too, there's an unwillingness to slave over a stove at the end of the work day.

"She's not going to come home after working all day and prepare a five-star meal for her spouse," remarks Shelley Feldman, president of the food service equipment division of the McGraw-Edison Co., one of the nation's leading equipment makers.

Feldman predicts that the socalled "white tablecloth" restaurants will maintain a consistent trade and weather any changes in the economic climate better than most sectors of the industry.

"The ones that cater to the expense accounts and the affluent will do well no matter what happens," Feldman says.

The restaurant association reports that the greatest growth in recent years has been in the fast food chains. That trend is expected to continue this year, bolstered by the appeal of ever-expanding menus at many chains.

Of course, not all the news in the restaurant world is so hopeful. Feldman reports that there have been some drops in orders for some lines of equipment.

In addition, he said, restaurant owners are feeling more and more the effects of skyrocketing energy costs on their cooking, heating and air conditioning bills. "Energy expenses have increased from 7 years ago from 3 or 4 percent to 15 percent of gross sales," Feldman says.

Franchise Restaurant Sales Top $20 Billion in 1978

The National Restaurant Association reports:

- Franchise restaurant sales in 1978 were up 16.1 percent and totaled $21.1 billion, reflecting strong sales growth by sandwich, pizza and Mexican franchises, as well as the entry of many new companies into the restaurant franchising field.
- Sixty-eight companies began franchising in 1978, with the majority of the new entrants engaging in hamburger, steak and sandwich franchising.
- Franchise restaurant establishments boosted their share of eating place sales to 34.6 percent in 1978 from 331.1 percent in 1977 and 22.8 percent in 1972.
- Three franchising firms broke into the 1,001 + unit category in 1978, bringing the total number of such franchisors to eleven.
- Restaurant franchise operators predict sales will rise 16.5 percent in 1979 and 17.9 percent in 1980.
- The number of hamburger, frank and roast beef franchise firms, which account for more than half of all franchise restaurant sales, increased from 109 in 1977 to 117 in 1978.
- "Sandwich and other" firms experienced the greatest sales growth of 35.1 percent. Pizza franchise restaurants, with a sales increase of 25.5 percent, ranked second.
- Sales for two franchise restaurand categories, chicken and seafood, posted declines in 1978, the first such in the history of these franchising statistics.

Michigan's Food and Beverage Magazine

Michigan's Food & Beverage magazine is serializing the N.M.M.A. Pasta Foodservice Manual in a ten-part series.

Part one was pasta as a sales tool. Pasta's built-in profits lie in low basic cost and menu flexibility.

In Foodservice Marketing

The National Macaroni Manufacturers Association has designed and produced "A Pasta Foodservice Manual", a new in-depth pasta guide. The three-ring binder contains 56 pages divided into various indexed sections including topics like pasta as a sales tool; packaging, storage and cooking directions; nutrition and calorie counts; merchandising and more. Additional space at the end of each chapter allows for personal notes and yearly updates. Illustrations and charts for portion control, cost and yields permit easy and organized reference. A guide to food service equipment used for pasta preparation is included. The manual is available at a nominal charge.

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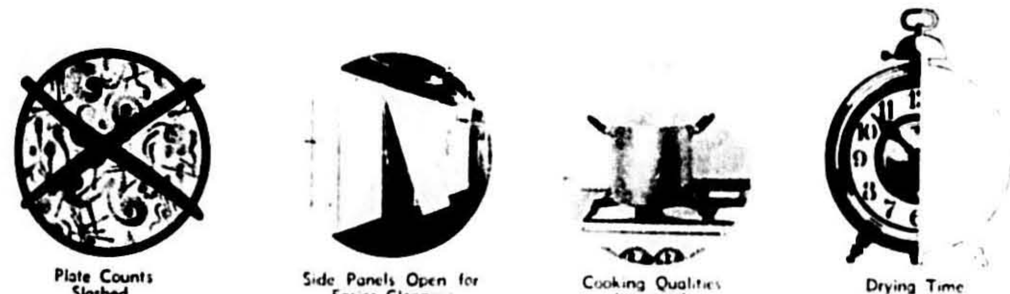

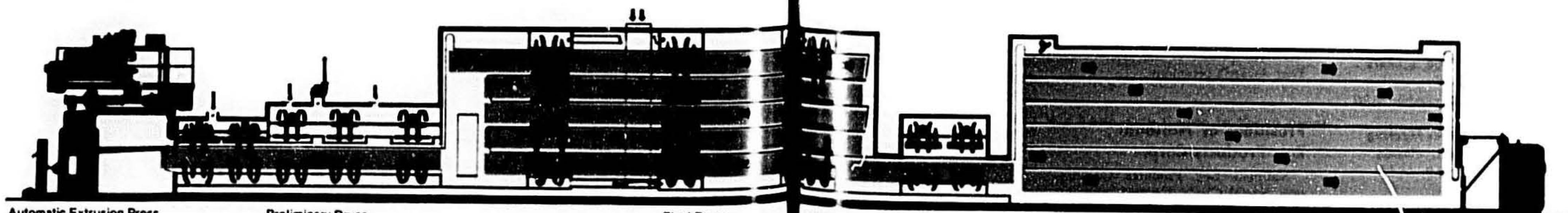

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Coming Events:

N.M.M.A. Washington Meeting
Mayflower Hotel, Washington, D.C.
September 18

National Macaroni Week
October 9-18

International Durum Forum
Ramada Inn, Minot, North Dakota
November 11-12

National Food Brokers
Association Convention
Las Vegas, December 5-10

N.M.M.A. Winter Meeting
Boca Raton, Florida
February 4-8, 1981

Plant Tour

When the Institute of Food Technologists met in New Orleans in June a visit to the pasta plant of National Food Products was one of the four field trips arranged.

Lloyd Skinner Honored

Lloyd E. Skinner, chairman of the board of San Giorgio-Skinner, Inc.,

Lloyd E. Skinner

received an honorary Doctor of Laws from Creighton University May 17.

A 1936 graduate of Creighton, Skinner is active in numerous civic and charitable organizations. He is a member of the Creighton President's Council and is a former president of the executive committee of the Creighton Alumni Chapter of Alpha Sigma Nu, Jesuit Honorary Society.

Skinner received Creighton's Alumni Merit Award for the College of Arts and Sciences in 1975.

Skinner and his wife, Kay, recently donated $1 million to Creighton in appreciation for "the fine education I received from the University," Skinner said at the time of the gift.

The previous evening, Skinner received another honor, the Notre Dame Club of Omaha's Man of the Year Award. Father Edmund P. Joyce, CSC, executive vice president of the University of Notre Dame, was tre featured speaker at the Man of the Year Award's ceremony.

President of National Egg Products Corp.

National Egg Products Corporation, Social Circle, Georgia, announces the appointment of Edward D. Mock to President and General Manager of the company, effective April 28, 1980. Formerly Vice President in charge of Corporate Development, Mr. Mock has been with National Egg Products Corporation since March, 1974.

National Egg Products Corporation also announces the appointment of Robert M. Ginnane as Executive Vice President, effective April 28, 1980. Ginnane has been Vice President - Marketing for the past seven years with twenty-six years in the egg products industry. Mr. Ginnane will formulate and maintain all of NEPCO's marketing functions.

NEPCO is a chief processor of eggs into liquid and dried form for use in cakes, cookies, candy, sauces, mayonnaise, spreads and other quality food items.

Marshall Foods Addition

Marshall Foods, Inc. said that construction is underway on a contract dry blending and pouch packaging facility that will be available to processors of milk, cheese, egg and other products.

The plant, scheduled for completion by early this summer, will be USDA-3A approved, and will utilize ribbon blenders and Bartelt pouch packaging equipment.

The installation will be capable of processing "in excess of four million pounds of dried product annually," and will include microbiology and chemical quality control facilities, the company reported.

Campbell Earnings, Sales Rise

Campbell Soup Company sales and earnings rose in the third quarter and nine periods ended April 27, Harold A. Shaub, President reported.

Campbell's earnings for the prior year have been calculated on a pro forma basis because of the company's decision to adopt the last-in, first-out (LIFO) method of accounting for principally all domestic inventories retroactive to the 1978-79 fiscal year. This change, with IRS permission, is also retroactive for tax purposes.

Consolidated sales in the third quarter amounted to $626,396,000 or an increase of 8% over third quarter sales last year of $580,761,000.

Net earnings for the quarter totaled $33,942,000, up from the pro forma $29,848,000 in the quarter last year. Earnings per share increased by 14% to $1.03 from the pro forma $0.90 per share in last year's third quarter.

Sales for the nine-month period were $1,940,655,000, an increase of 14% over sales of $1,709,395,000 in the same period last year.

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