

**THE
MACARONI
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**Volume 60
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January, 1979

Macaroni Journal

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JANUARY 1979



A Changing Market — A Changing Industry

NATIONAL MACARONI MANUFACTURERS ASSOCIATION

WINTER MEETING

Doral Hotel and Country Club, Miami, Florida

SUNDAY, FEBRUARY 4

- Convention Registration Desk opens Lobby (House Phone area)
- 2:00 p.m. Executive Committee Meeting—Aragon
- 2:00 p.m. Standards Committee Meeting—Seville
- 4:00 p.m. Durum Relations Committee Meeting—Vizcaya
- 4:00 p.m. Membership Committee Meeting—Navarre
- 7:00 p.m. Welcoming Reception—Poolside
No planned dinner function

MONDAY, FEBRUARY 5

- 7:30 a.m. Continental Breakfast—Lobby Lounge
Business Session—Monte Carlo
- 8:30 a.m. Greetings from the President
Paul A. Vermeylen
- 8:50 a.m. Standards Committee Report
- 9:10 a.m. Durum Relations Committee Report
- 9:30 a.m. Membership Committee Report
- 9:50 a.m. Counselor Harold T. Halfpenny
- 10:20 a.m. Foodservice Report—Jo David
- 1:00 p.m. Golf Tournament—Shot Gun Start—White Course
- 7:00 p.m. Suppliers' Social—Hall of Conquerors
- 8:00 p.m. Italian Dinner Party—Ballroom South and Center

TUESDAY, FEBRUARY 6

- 7:30 a.m. Continental Breakfast—Lobby Lounge
Business Session—Monte Carlo
- 8:30 a.m. Product Promotion Report—Elinor Ehrman, Burson Marsteller
- 9:00 a.m. "Creating a Positive Organizational Climate"—
Dr. Jim Tunney, President, the Institute for the Study of Motivation and Achievement
- 10:00 a.m. "How to Train and Motivate a Sales Force"—
Robert L. Siler, Executive Vice President, Sales Force Companies, Inc.
- 1:00 p.m. Tennis Mixer at the Tennis Courts
- 7:00 p.m. Suppliers' Social—Poolside
No planned dinner function

WEDNESDAY, FEBRUARY 7

- 7:30 a.m. Continental Breakfast—Lobby Lounge
Business Session—Monte Carlo
- 8:30 a.m. "Competition Among Carbohydrates"
SAMI Report by Julius Perozzi
- 9:30 a.m. "Hypermarche to the Box Stores"
Ronald D. Peterson, Executive Vice President and General Manager—Jewel Food Stores, Chicago
- 10:30 a.m. "The Need for Creative Selling"
Glenn Mealman, Executive Vice President
Fleming Foods Company
Questions and Answers
- 12 noon National Macaroni Institute
Committee Luncheon—Sandpiper East
- 7:00 p.m. Suppliers' Social—Lobby Terrace
- 8:00 p.m. Dinner-Dance—Ballroom Center and South

THURSDAY, FEBRUARY 8

- 9:00 a.m. Board Meeting—Vizcaya
Adjournment by Noon

The Place

The National Macaroni Manufacturers Association holds its Winter Meeting February 4-8, 1979 at the Doral Country Club & Hotel, Miami, Florida 33166.

Doral's convention center is one of the nation's most lavish meeting complexes and certainly one of the most handsome. The Country Club boasts one of the three most challenging golf courses on the PGA tour. And just about any recreational activity you can think of is available on-site where on Doral's 2,400 acre resort there are five golf courses, 19 tennis courts, fishing, pool and ocean swimming, cycling, spa, game rooms, and evening entertainment.

Rates are \$78 daily single occupancy, \$80 double occupancy, without meals.

The Speakers



Dr. Jim Tunney

Motivator Dr. James Tunney
As the man-in-charge, #32 works where the action is, making split-second decisions in front of thousands of fans in the stands and millions of television viewers watching National League football. Dr. Jim Tunney travels over 100,000 miles a year to head a crew of game officials who are true professionals in their field. He has been officiating since 1960 and holds the distinction of being the only referee to work two consecutive super bowls.

He has earned a Doctorate and has been in education more than a quarter of a century. He is president of the Institute for the Study of Motivation and Achievement. Recommended as a speaker by macaroni members of Grocery Manufacturers of America, Dr. Tunney will speak on "Creating a Positive Organizational Climate" at the NMA Winter Meeting and then will serve as master of ceremonies for a day session featuring two outstanding operators in the grocery field. When #32 on television and then hear him give you valuable pointers on better management practices.

Sales Trainer Bob Siler

Robert Leonard Siler is executive vice president of Sales Force Companies, Inc., Schiller Park, Illinois, a large food brokerage organization in America with some 400 people in branch offices from Indianapolis to El Paso.

Bob Siler is a highly respected executive in the food industry, having spent 23 years with Ralston-Purina where he held a number of positions including national sales manager and

vice president and director of administrative services.

He has been an instructor of music, a principal of a high school, and taught at the college level. He is a member of the AMA Marketing committee.

He was the recipient of the Central Methodist College Distinguished Alumni Award.

He is married and the father of two sons.



Ronald D. Peterson

Chicagoland Grocer

Ron Peterson received a Bachelor of Arts Degree from Wheaton College in 1961 and a Masters Degree in Business Administration from the University of Chicago in 1970.

Mr. Peterson joined the Jewel Food Stores in 1961 and was promoted to Produce Department Manager in 1962. His job progression included assignments as Sales Promotion Specialist, Buyer Merchandiser, Assistant



Robert L. Siler

Sales Manager, Sales Manager, Division Manager, Director of Marketing, and Vice President of Marketing. He was promoted to Group Vice President, Sales and Marketing in 1971 and also held the positions of Executive President, Midwest, and Executive Vice President, Marketing. In 1977 he was named Executive Vice President and General Manager, Chicagoland.



Glenn Mealman

Kansas Grocer

Glenn Mealman grew up in Kansas City and attended school in the Kansas City, Kansas area. He then graduated from Emporia State University and attended Harvard Business School. He has held various jobs within the Fleming Company. He is currently Executive Vice President-Marketing, and a Corporate Vice President of Fleming Companies, Inc. In this capacity, Glenn is the senior operating officer at the Topeka Staff Office and has responsibility for all marketing activities of Fleming Foods. This includes planning and marketing research functions, as well as merchandising activities and retailer services.

Also Speaking

Julius A. Perozzi, Marketing Specialist, Selling Areas-Marketing, Inc. (SAMI), Chicago was raised in the shadow of D'Amico Macaroni Company in Steger. He graduated from the University of Notre Dame with a B.S. degree in Marketing.

He was formerly with Perk Foods Division of the Liggett Group. He has been with SAMI for five years.

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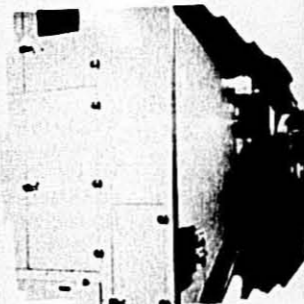
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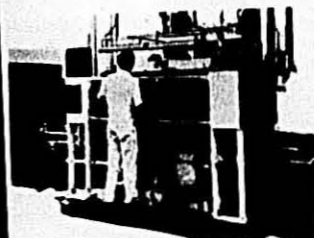
Range of Exchange Rates
for One American Dollar
September 19 - 26, 1978

	HIGH	LOW
STERLING	1.9835	1.9585
CANADIAN DOLLAR	.8558	.8485
GERMAN MARK	1.9355	1.9795
SWISS FRANC	1.4600	1.5800
FRENCH FRANC	4.3650	4.4050
ITALIAN LIRA	823.50	831.50
BELGIAN FRANC C.	30.50	31.20
DUTCH GUILDER	2.1045	2.1500
JAPANESE YEN	187.60	190.65

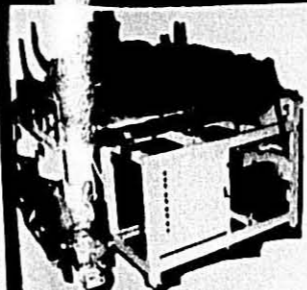
Automatic Long Goods
Continuous Line



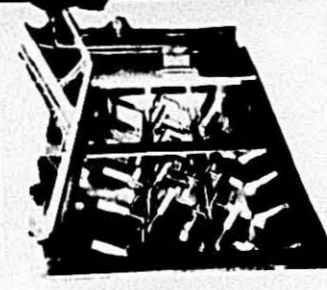
Short Cut Dryers



Automatic Spaghetti
Canning Machine



2-Headed, Single Screw
Short Cut Press



Pre-mixer and Mixer



Directly Extruded Noodles Being
Cut Using Rectangular Die

Eating Habits Force Marketing Changes

by Leo J. Shapiro and Dwight Bohmbach in Advertising Age

It seems hard to believe today, but as recently as 1940, the average American family ate at least two meals a day as a group, around the same table. Mother spent four to six hours a day getting ready to feed them.

Until World War II, we were still essentially a food producing society, one which spent a major part of its effort and time in feeding itself. Just one generation later, that's all been changed. Instead of the traditional three square meals, we have as many as 20 "food contacts" a day—and spend as little as 20 minutes eating together.

Cultural Revolution

What's happening to food in America is a cultural revolution, with profound reverberations in marketing and advertising.

Back when we were a nation of food producers, cooking was largely done at home from "scratch." People ate breakfast. Some workers and school children still came home for lunch. And dinner time was family together time. Mother did the cooking. And advertising was heavily service oriented. A recipe in the ad guaranteed high readership.

The 1950s were years of innovation. An expanding economy encouraged change in the family kitchen. We saw a proliferation of new time-saving food products and appliances. Advertising taught us what they could do for us.

The 1960s saw America transformed from a nation of food producers to one of food buyers. Supermarkets sprang up like dandelions. The family food emphasis was on food shopping. And advertising helped us choose between brands, featuring "point of difference."

The 1970s has been another decade of innovation and change. We've gone through violent economic stress and the abrupt shakeout of some major supermarkets and chains; but the biggest mover and shaker of all has been the revolution in woman's role.

In 1960, only about four in ten women in the 25-to-54 age group were working; by 1978, six in ten.

Since the majority of women in that age group had children at home, the impact on American eating habits has been historic.

Advertising Shift

Food advertising has shifted from traditional support of established brands to heavy emphasis on finished foods and eating places. Food advertising expenditures almost doubled in the decade with the highest increase coming in advertising for away-from-home eating. The No. 7 food advertiser is now McDonald's.

In one generation, we have gone from a traditional food producing society to a food grazing society—one where we eat wherever we happen to be. We spend about 35¢ of each food dollar away from home. Most of this is spent in restaurants and cafeterias (60%) or fast-food places (25%), but the sheer multiplicity of eating places Americans find today is amazing.

Increased family income is one factor. The more income, the more people are apt to eat out. Highest income families spend over one-third of their total food budget on away-from-home eating. Lowest income families spend only about one-sixth.

Smaller, younger households: Post-war babies, brought up among convenience foods and fast foods, now head 7,500,000 of the nation's 75,000,000 households. This group tends to buy with more regard to what it wants than to cost, and buys its food the day it's eaten. It's also a group that doesn't want to spend more than half an hour on the average in preparing a meal. Not surprisingly, this is the segment of the population most inclined to eat out.

Teen agers: Seven out of ten teens reported having had one or more soft drinks in the prior 24 hours, with roughly one in four of those drinks taken away from home. Only one in six teen agers reported drinking coffee in the prior 24 hours, but half the cups they drank were taken away from home.

Family mobility: Father goes to work. Chances are mother also goes to work. (And where the wife works, families average 7.4 meals out a week, versus 6.6 when the wife is

not working.) Children go to school or work. Little wonder that we now eat about one in five of our meals away from home. Meal by meal, the old family table "togetherness" has been nibbled away.

The disappearing breakfast: Even back in the "Walton Family" days of the 1930s, there were early signs of impatience with the traditional family breakfast. First came ready-to-eat cereals, pancake and biscuit mixes. Later came refrigerator biscuits, pancakes, waffles and breakfast rolls. And most recently, breakfast bars, breakfast drinks, toaster breakfasts and instant eggs.

Even this didn't keep us together at breakfast. About three out of four families no longer eat breakfast together. Those who do spend only five to 20 minutes in preparation. Advertising for fast-food outlets turned to breakfast and even 7-Eleven stores now invite you in for coffee and hot rolls.

The lonely lunch: Adults who go out to work are expected to eat lunch away from home. But children are also eating lunch out with increasing frequency. Even preschoolers go off to day school somewhere and eat out.

Government food assistance programs, which feed 2,800,000 children breakfast, and 29,700,000 at school lunch, have helped to accelerate this. Older children eat in a surprising number of places, including convenience stores which carry sandwich and other prepared ready-to-eat foods.

Convenience stores: As they multiply and substantial portions of the population find two or more stores easy to get to, some of the ex volume needed to support these ex stores comes from increased utilization by teen agers which, in turn, depends on use of snacks, beverages and other ready-to-eat foods.

The extended family dinner: Dinner at home happens as seldom as three times a week in families today, and is apt to be over in 20 minutes. Even the traditional picture of aproned Mom feeding her tired and hungry crew around the dinner table is rapidly becoming a tintype. Nowadays

3% of the husbands shop for groceries, and 24% cook. That aproned figure may be Dad's.

In fact, a 1978 survey of who does the chores at home in households with working and nonworking wives found that 15% of the meals where the wife works are prepared by someone else in the family. As for "sharing" during this period of family togetherness, a 1976 Roper Poll found that 32% of Americans usually watch television during the evening meal.

Even on weekends, with no school or work to take people away from home, Foote, Cone & Belding surveys find the family meal on its way to extinction. In two separate surveys taken in summer and fall, 1977, it was found that families only got together for half of their meals on weekends.

The most obvious gainers from all this are restaurants and fast-food outlets. During 1978, consumers have spent at the annual rate of \$53 billion in eating out; \$17 billion in fast-food places. Growing at a compound annual rate of over 10%, fast foods look to have an eventual 50% to 60% share of the entire purchased meal industry.

Advertising plays an essential role in the burgeoning growth. Both fast-food advertisers and their agencies are aware of the deep-seated need for "togetherness" that remains, though families are eating less and less at home.

Ten or 20 years ago, the average McDonald's outlet gave you hamburgers and malts and sent you quick on your way to eat elsewhere. Today most McDonald's outlets have waiting for at least 100 diners. Advertising for fast-food outlets has concentrated hundreds of millions of dollars on selling the idea of family dining at the local fast-food outlet.

Fast Food Influence

Nutritionists call fast-food restaurants the single most important influence on the American diet today. It's claim hard to deny. During years of their greatest growth, foods featured in fast eateries have had an enormous increase in consumption. Consider these national per capita increases between 1950 and 1976:

- Ice milk grew from 1.2 lbs. per capita nationally in 1950 to 7.4 lbs. in 1976.
- Frozen potatoes (the kind used

in french fries) grew from 6.6 lbs. per capita to 36.8.

- Chicken soared from 27.8 lbs. per capita to 43.3.

- Beef went from 64.3 lbs. per capita to 95.4.

- Hard cheese (pizza-style) went from 8.3 lbs. per capita to 15.9.

- Pickles went from 4.5 lbs per capita to 8.4 lbs.

- Soft drink consumption went from 152 8-oz. servings in 1960 to an astonishing 493 per capita in 1976.

Reverberations

But there are reverberations from America's changing eating habits that go even deeper. The giving, preparation and sharing of food is one of the most basic human relationships.

We are changing human family patterns which may have existed among our individual forefathers for centuries. A nation of many ethnic origins, with an immense residue of ethnic and religious attitudes about food, is being nutritionally homogenized by burger, fry, chip, bucket and bun, in a single generation.

Take the tradition of the mother, for example: While some nutritionists consider fast-food restaurants the greatest influence on American food habits, the 1977 edition of one basic text on human nutrition puts it this way: "No influence upon food habits is greater than that existing within the home. The mother especially sets the pattern for the food habits that will be developed by the children, for she is the one who plans the meals, purchases the food, prepares it and serves it." Also in her role, she serves as a "role model," showing how to nourish future families.

Some of these old food sharing relationships are still showing up in altered forms. Even the three-martini lunch, celebrated between business men or bureaucrats on a business day, is a latter-day version of good old-fashioned "breaking of bread" and sharing of food. And there are others:

Ceremonial cooking: Millions of Americans are now into gourmet cooking, wine tasting and the accumulation of sophisticated (and expensive) implements for creating elegant meals at home.

Consider the rise of the food processor, a precision kitchen counter device that does everything a paring

knife can do quicker and more elegantly, and may cost as much as \$300. In a 1977 national survey, we found 76% of American women were aware of the processor, 6% already owned one and 33% were considering buying one in the coming year.

Cookbooks and homemaking magazines are flourishing. And shops that sell the accoutrements and ingredients for fine home cooking are doing very well indeed: In Chicago, the six Crate & Barrel stores, which sell elegant and functional products for preparing and handling food with style, are known to nearly half (48%) of the households; one in three consumers has actually visited one of the stores.

Ethnic eating: This is probably bigger now than it has ever been in America, with Italian, Chinese, Kosher-style and Mexican foods served in from one-fourth to two-thirds of American homes.

Annual sales of packaged Japanese foods in America are now estimated at over \$80,000,000 a year, and going up. And yogurt (once delivered in leather saddle bags by camel only in the Mid-East) is now eaten by Americans at the rate of 450,000,000 lbs. a year. Major marketers spend nearly \$8,000,000 a year advertising it.

All these adventures with various ethnic foods help to satisfy the desire for really traditional dishes, both at home and in restaurants and fast-food outlets. They also provide a very solid profit base for members of the food industry, since most ethnic food specialties consist of highly processed, low-cost ingredients, delivering high profit.

Health Concerns

Eating as a science: "Changes in eating habits in the last century have resulted in a wave of malnutrition among Americans that has created as critical a public health concern as any now before us," according to the Senate select committee on nutrition and human needs. What the Senate discovered in 1977 had already been a widespread concern among consumers for several years.

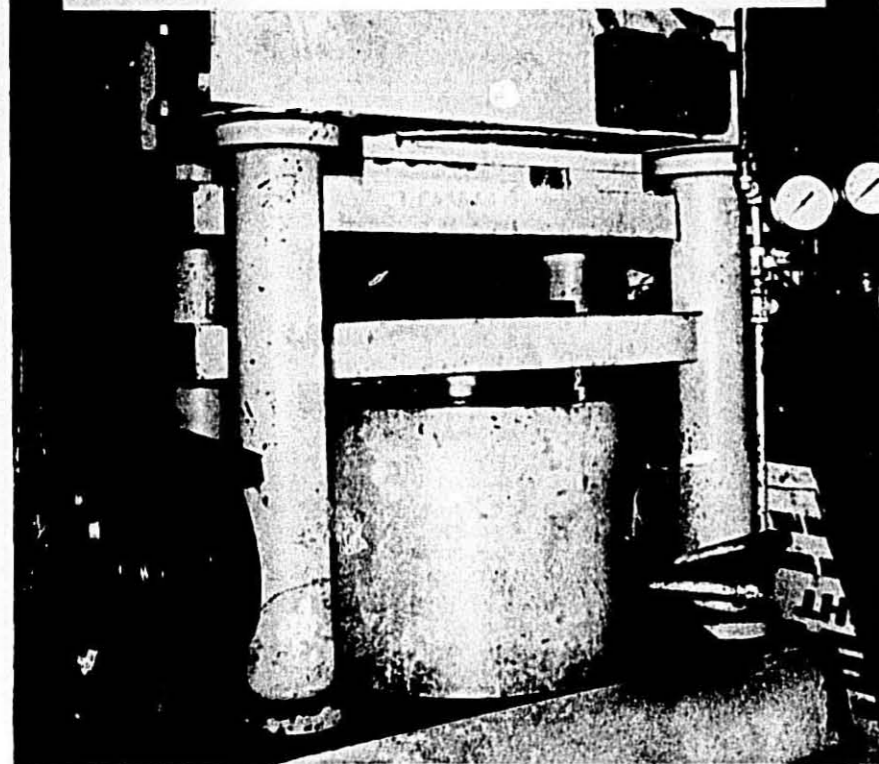
Five years ago, the Gallup Poll found 46% of Americans saying that they were overweight; 40% were either dieting or exercising or both to get their weight down. But consumers' concern goes beyond weight. The farther we get from the original food

(Continued on page 11)

This hydraulic press is used to straighten dies — now dies as well as dies that are returned to us for repair and reconditioning — at intervals of from 3 to 6 months.

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in our daily diet, the less we can control what we eat. The consumers are trying.

In our exploratory survey of the role that consumer concern with health plays in eating, we found over half of the 400 men and women interviewed saying that they are avoiding some foods that they like because they consider them "bad for health." They're avoiding (in order of mention) candy, sweets (generally), cakes, potato chips, meats, ice cream, pastries and sweetened cereals.

About half the people who are avoiding certain foods tell us they "didn't always feel this way." What changed their feelings toward food? The answers we hear most often (in order of frequency) are "gained weight," "illness," "became aware of nutrition" and "doctor recommended."

Not only are people cutting foods out of their diet for health reasons; they are also putting some in—even foods they don't ordinarily like. Twenty per cent report eating some foods they don't really like, simply because they believe the foods are good for them. The foods mentioned most often in this category are fresh vegetables generally, carrots specifically, with liver, yogurt and broccoli also mentioned.

Asked, "Is there anything you do about foods to help maintain health?" 29% of American adults said, "Yes." What are they doing about it? "Boiling instead of frying foods"; "well rounded diet"; "eat no fried foods"; "fresh vegetables"; "cook meals thoroughly."

Microwave Ovens

Microwave ovens may have hit a snag with public concern about whether or not they emit harmful radiation. But the microwave oven is an area whose time has come at exactly the right time. With 60% of women working, the device is perfect for hurried cooks with little time to get dinner.

With sales of carryout foods falling off somewhat, the microwave oven provides a natural tool to revive purchases of oven-ready foods from both restaurants and supermarkets.

One innovative, new fast-food outlet, Caf Casino, is a chain of elegant French cafeterias where you can buy a complete French meal, including wine, and dine; then stop on the way

out to pick up a selection of the same oven-ready foods, frozen and ready for your microwave oven at home.

Microwave ovens are now in over 9% of American kitchens, according to our 1978 national survey. Twenty-six per cent of all women now consider getting one in the next five years. Advertising and innovative marketing of packaged foods for microwave finishing at home can find an immense market in deluxe microwave foods.

Pillsbury is testing such items at gourmet type prices in Florida, and Green Giant has announced a joint effort with Amarna to develop and market microwave-ready foods.

Changing Roles

While consumers are changing their choices and sources of food, great changes have also been taking place within the food industry. Companies that got their start as processors of ingredient foods have increasingly diversified product lines, and are now moving out of foods into other lines that offer more profit with less problems.

Retailers are moving into what used to be the role of brand manufacturers. And producers of food are increasingly taking food directly to consumers.

During the past three decades, there has been a continuing trend toward diversification among leading food processing companies in the country. In 1950, 14 of the top 25 food processors occupied five or fewer grocery product areas; today, 22 of the 25 top companies are into from six to 20 different food product areas.

By 1975, the top 200 U.S. food processors were marketing over 6,000 different consumer products. The more food is changed from the time it leaves the farm, the more processing costs figure in the price. The less food is in the product, the higher the profit potential.

The major problem with marketing products based largely on natural foods has always been nature itself. Crops, weather, transportation—all are volatile, unpredictable elements in the production and pricing of food and food-based products.

Now, the trend among food processing companies is not only toward diversification within food products, but diversification away from food as a commodity. Seeing the diversity of

Procter & Gamble and watching it move massively into the marketing of hospital supplies and pharmaceuticals to support earnings' growth efforts, it is hard to recall that buried deep within P&G's many rings of growth there is a basic fats and oils business.

General Mills, which started as a flour miller and marketer almost a hundred years ago, now gets about 40% of its net income from restaurants, crafts, games, toys, fashions, furniture and special retail items.

As processors move away from the sale of branded ingredient foods, retailers move in to fill the consumer need, and advertising budgets shift from national brands to national retail chains.

Generic Foods

We've seen a tremendous surge toward generic foods, developed, marketed and advertised by retailers. In only a handful of Midwest supermarkets four years ago, generics spread to well over 1,000 U.S. supermarkets by early this year, and still appeared to be just getting under way.

Our August, 1978, national poll found 61% of American consumers aware of generic foods, with 22% reporting they already have bought some, and almost two in three consumers (64%) saying they will probably buy generic products regularly.

Farmers, who have been getting along for the past 30 years on about 40¢ out of the consumer food dollar, also see an opportunity for getting more. National studies have shown shoppers dissatisfied with quality in fresh fruits and vegetables purchased in food stores.

Farmers and farm organizations have been increasingly aggressive in efforts to market directly to the consumer; during 1977, nearly 60% of American consumers bought fresh produce directly from the farm: Through farm or roadside stands in the country (38%); a stand in town (21%); pick-your-own operations (17%); farmers' or city markets (16%); or off-truck delivery in the consumer's neighborhood (11%).

The farther we move away from traditional eating patterns, the farther we get from the food itself. We can't possibly know the condition, grade, variety or growing conditions of ingredient foods that we eat today. We

(Continued on page 12)

now eat more processed and synthetic foods than we eat of the real thing.

Advertising has replaced "pinching the tomatoes" and hand selecting in our choice of foods. A wood-cut illustration of an old-fashioned kitchen on a meat analog package; "grandfather" smacking his lips over a synthetic lemonade; a tight closeup of ingredients going into a hamburger on tv—these symbols now tell us what to expect from food someone else picked, prepared and packaged for us. As symbols replace reality, consumers ask for control on the symbols themselves.

Consumers now look to the government, retailers, food processors and food producers for reassurance that what they're about to eat is safe, and is an honest value. Fifty-eight per cent of all U.S. heads of household now agree that "government regulation is the best way to insure safe products."

The government has responded to what it sees as consumer needs, and will continue to do so in many ways, including detailed regulation of what is printed on the label.

And for every change on the label, there will be many changes in the advertising of the product. The fact that foods labeled "low calorie" may no longer contain more than 40 calories per serving (for example) doesn't just mean a change on the label—it may involve completely repositioning the product and finding a whole new market.

Consumer Reassurance

How far will the consumers' need for reassurance take us toward total control of all food products? Secretary of Agriculture Bob Bergland, and assistant secretary for consumer affairs Carol Foreman, want to take government control all the way to the point where farm programs are "gradually adjusted to relate them more closely to the nation's food and nutrition needs."

Hearings are now being held across the country asking consumers what they want on their food labels. One question asks, "Should raw commodities as well as all processed foods be required by law to carry full nutrition labels?" We may find ourselves labeling leaf lettuce and watercress with full nutritional information.

In one survey among Illinois consumers, we found 71% read the labels on food as they shop. Thirty-five per cent read labels on most or all foods. Forty-three per cent say labeling information helps them decide what brand to buy.

Consumers also want food retailers to help them. Although some 29% called the job retailers are doing "very good," they'd like to see them carry a "better quality of merchandise," "offer more organic foods" and "have their own meat inspection to check after government inspection checks."

The Mix Will Change

In the midst of all this change, consumers go on eating. And the food industry will go on providing their needs, while looking for the highest possible profit. That won't change. But the mix will certainly continue to change in years ahead.

Advertising of basic ingredient foods for the home will continue its shift away from food processors to the retailer and grower. Advertising of food ready-to-eat will continue to shift to restaurants, fast-food outlets and food processors who package it in individual and small household servings.

The kind of products we'll be promoting will certainly include a growing amount of retailer promoted basic ingredient foods; but will also include highly processed, premium-priced brand name foods for microwave and conventional finishing at home, special diet foods and new products.

A parallel challenge for packaged food manufacturers and their agencies is to market foods that rival restaurant cuisine in flavor, quality, appeal and convenience.

And, as the major food advertisers of today turn increasingly toward the marketing of processed and fabricated food products sold as meals, snacks and ready-to-serve dishes, the chain retailers and food growers will pick up the challenge of advertising staple, ingredient foods and fresh, minimally processed foods.

The appeals and promises of future food advertising will certainly go as far as possible toward promising consumers nutrition and quality.

In a world where even mother's milk is apt to be highly contaminated, everything will be suspect. The job

of advertising the food products of the future will be enormous, and of enormous value, both to advertisers and to consumers.

A Changing Industry:

Pasta Competition Grows

Larry Edwards writes in Advertising Age that the nature of the pasta business is going to change with the agreement of Borden, Inc. to acquire the Creamette Co., Hershey to acquire Skinner, the acquisition of American Beauty Macaroni Co. by Pillsbury, and the C. F. Mueller Co. by Foremost-McKesson. Mueller has since taken over D'Amico Macaroni Co. and is entering the Midwestern market.

This move is being supported by a heavy t.v. schedule. Mueller has said it will spend at the national rate of \$11 million in the key Chicago market alone. Coupon-bearing newspaper ads and free-standing Sunday newspaper inserts, cross couponing, and tie-in radio spots will also be used.

Out of Needham, Harper & Steers, New York, Mueller's t.v. commercials feature Eileen Ford (of the modeling agency bearing her name) and talk about the product as part of a balanced diet, as a source of caloric energy and stress that Mueller's spaghetti has "fewer calories than steak . . . ounce for ounce."

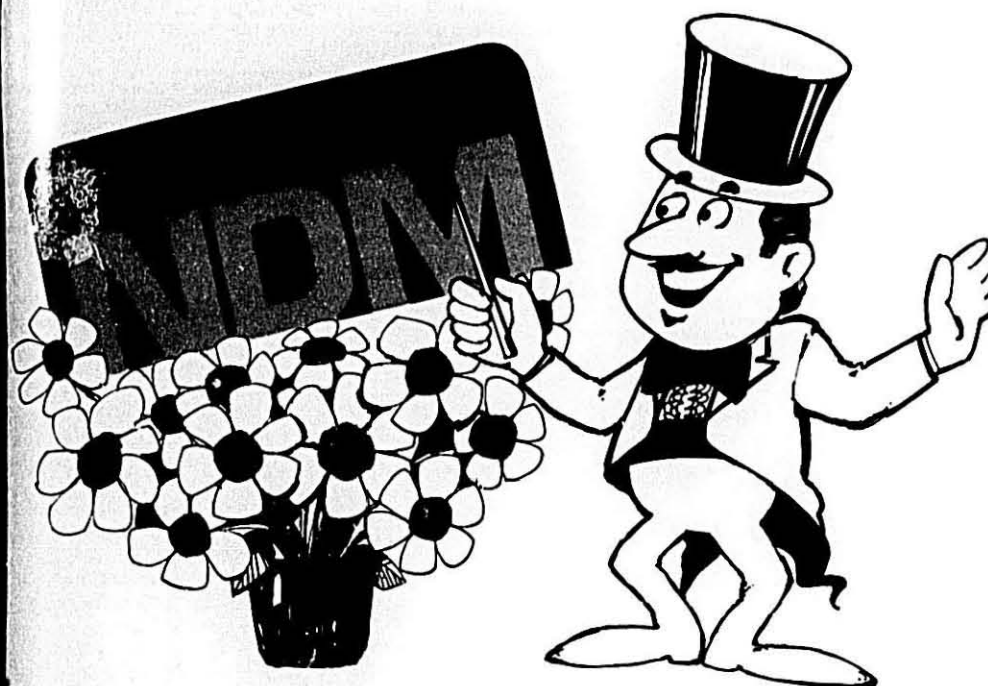
Mueller's has gone so far as to say it will spread 73 percent of all advertising dollars in the pasta category in 1978 and 1979. Other marketers may not agree with that claim, but behind it lies the fact that the category gets relatively little consumer advertising. Traditionally, spending is up front—trade support, promotion.

Ticket Margin Business

Joseph A. Urda, vice president for marketing for Mueller's says, "It's a tight margin business, and it's difficult to justify such expenditures. But we've devoted our energies toward a consumer franchise, more so than most."

John Westerberg, vice president marketing and sales at Creamette, notes that his company has "spent a good chunk of dough" in t.v. and national magazines, via Martin-Williams. "Because of our distribution, we do a lot of tie-ins with other manu-

(Continued on page 14)



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

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Competition Grows

(Continued from page 12)

facturers," he said: the tactic has been successful for them. Mr. Westerberg looks forward to the possibilities as a member of the Borden products family.

He agreed that the industry will see increased advertising. "It's (the acquisition) going to be good for advertising," Mr. Westerberg said, because all "will be spending more."

Pillsbury is reported to be preparing a new ad effort for American Beauty. The company initially assigned the account to Leo Burnett USA, but has since shifted its business to W. B. Doner and Co., Southfield, Michigan. Doner, which handles other Pillsbury brands, is noted for its strength in retail advertising (it has a retail division handling many supermarket chains). That agency reassignment could mean Pillsbury is eyeing a mix between the pasta category's historical "push" and consumer advertising "pull."

Oriental Noodle Market Heats Up

From Advertising Age

Oriental-style noodles have opened up a new national market for instant noodle and soup-based products that supermarkets are beginning to look at as a way to recover some of the business they've been losing to the fast-food chains.

In less than six years the category

Durum Mill Grind

from U.S. Department of Commerce

	Semolina	% Up-Down	Bushels of Durum	% Up-Down
1978				
Jan.	1,506	2.6	3,454	4.3
Feb.	1,460	-3.4	3,285	-7.5
Mar.	1,476	-9.6	3,326	-10.9
Apr.	993	-12.3	2,237	-16.5
May	1,127	0	2,591	-2.5
June	1,028	-17.5	2,362	-15.1
July	961	-16.3	2,225	-14.5
Aug.	1,483	2.8	3,352	0
1977				
Jan.	1,466	12.2	3,278	7.0
Feb.	1,511	4.0	3,548	6.9
Mar.	1,632	15.8	3,730	14.8
Apr.	1,131	6.4	2,679	10.2
May	1,125	5.9	2,657	4.4
June	1,245	8.9	2,781	7.7
July	1,147	9.9	2,601	6.6
Aug.	1,442	8.5	3,347	5.0
Sept.	1,453	-3.0	3,406	3.4
Oct.	1,431	-3.7	3,314	9.7
Nov.	1,349	-1.1	3,174	4.6
Dec.	1,427	9.4	3,214	10.1

Macaroni Dollar Volume Up in 1977

THE 31st ANNUAL CONSUMER EXPENDITURES STUDY OF GROCERY PRODUCTS

From the September, 1978 issue of Supermarketing Magazine
The Following Statistics Are Given for Macaroni Products: (Dollars in Thousands)

	Value of Total Domestic Consumption	Amount Spent in Grocery Stores	% of Total Store	% Grocery to Total Consumption	Total Change From Last Year
1977					
Spaghetti	\$345,550	\$272,680	.18	79	8.1
Macaroni	274,090	190,290	.13	69	7.1
Noodles	202,290	144,630	.10	71	4.9
TOTAL	\$821,930	\$607,600	.41	74	7.0
1976					
Spaghetti	\$331,620	\$261,690	.19	79	7.4
Macaroni	265,850	184,570	.14	69	6.5
Noodles	198,710	142,070	.10	71	4.9
TOTAL	\$796,180	\$588,330	.43	74	6.5
1975					
Spaghetti	\$308,770	\$242,080	.19	78	8.4
Macaroni	249,620	172,330	.13	69	7.2
Noodles	199,430	135,430	.11	68	5.3
TOTAL	\$747,820	\$549,840	.43	74	5.8
1974					
Spaghetti	\$284,840	\$223,320	.19	78	11.2
Macaroni	232,850	161,210	.14	69	8.6
Noodles	189,390	128,860	.11	68	8.7
TOTAL	\$526,480	\$382,120	.41	73	8.5
1973					
Spaghetti	\$256,150	\$197,630	.19	77	18.4
Macaroni	214,410	147,900	.14	69	24.2
Noodles	174,230	117,900	.11	68	26.7
TOTAL	\$707,080	\$513,390	.44	73	9.7
1977					
RICE	\$332,010	\$276,090	.19	83	-6.1
1976					
RICE	\$352,450	\$293,090	.21	83	-5.7
1975					
RICE	\$373,750	\$312,130	.24	84	-1.4

has gone from zero to an estimated \$200,000,000 plus in sales.

What started as a simple instant noodle dish with mild spice flavoring has grown and branched out so rapidly that marketers are no longer quite sure how to identify the competition. Is it limited to other add-hot-water-and-eat-items? Or is it everything in the soup aisle?

Recent moves by major food makers indicate the arena won't be limited to quick-cooking noodles but will include any single-serving soup or pasta-based convenience dish that can be heated and ready-to-eat in three to five minutes.

General Mills is out with a Mug-O-Lunch line of noodles and spaghetti under its Betty Crocker label, and Nestle is testing a quick-lunch item.

Campbell has to be counted with its single-strength (no water required) soups in 6-oz. cans. Lipton has a Lite

(Continued on page 15)

National Macaroni Manufacturers Association Sales Index Study

from Ernst & Ernst (1972-77)

	1978	Govt.	Indust.	Grocery	All Trade	Sales
Jan.	65.0	126.3	137.5	139.9	136.6	136.6
Feb.	55.5	133.6	139.9	136.6	136.4	136.4
Mar.	62.9	124.6	136.2	136.2	132.0	132.0
Apr.	63.7	108.5	113.5	113.5	114.4	114.4
May	63.2	104.4	112.2	112.2	109.4	109.4
June	66.6	90.9	121.9	121.9	118.8	118.8
July	60.5	89.4	111.4	111.4	111.4	111.4
Aug.	117.9	146.0	122.5	122.5	122.5	122.5
Sept.	103.4	121.3	129.1	129.1	129.1	129.1
1977						
Jan.	58.4	107.5	141.9	141.9	141.9	141.9
Feb.	65.4	137.0	145.7	145.7	145.7	145.7
Mar.	48.0	135.6	129.4	129.4	129.4	129.4
Apr.	83.5	115.9	111.7	111.7	111.7	111.7
May	63.1	104.4	103.2	103.2	103.2	103.2
June	47.4	92.3	119.7	119.7	119.7	119.7
July	49.0	90.3	96.7	96.7	96.7	96.7
Aug.	74.6	134.0	117.6	117.6	117.6	117.6
Sept.	46.8	126.4	136.1	136.1	136.1	136.1
Oct.	73.4	137.3	128.4	128.4	128.4	128.4
Nov.	66.2	145.4	116.7	116.7	116.7	116.7
Dec.	69.7	122.1	113.3	113.3	113.3	113.3

Oriental Noodle Market

Continued from page 14

Lunch ntry, and sources in the field believe Kraft and others are at work on similar items.

The Oriental originators of the category aren't standing still. Nissin Foods, Gardena, CA, estimated to have 60 percent of the market for cups and "roll" packs, has nearly doubled its ad expenditure to \$9 million this year and has just started its first network tv campaign—for Cup O'Noodles via Dentsu, Los Angeles.

No. 2 Maruchan has tentative plans to begin tv use for its Instant Lunch line, handled by Daily & Associates. Co-ahead for increased advertising which now include women's magazines and outdoors in major markets, awaits arrival of new management being assigned by Maruchan in Japan.

Sanwa's main plant in Los Angeles was seriously damaged by a fire recently, but it expects to have its lines of Ramen Pride, Suddenly Spaghetti, and Spaghetti-to-Go back in full production by the end of the year when its ad budget is expected to be boosted to \$3 million from \$2 million this year.

The company now uses newspapers and magazines and is examining other media, but has no plans for heavy tv use. L. Norman Howe & Associates has been Sanwa's agency.

Added to the spiced up activities of these competitors is the expected arrival here within the next few months of Japan's Sanyo Sapporo Co., which has an estimated 70 percent of the pillow-pack ramen market in Japan.

Supermarket Acceptance

Step-d-up brand competition is no problem to supermarkets who know their biggest competitor is fast food served by the eat-out chains.

From the supermarket industry's point view, anything that can be prepared quickly and painlessly and still taste good is a way to fight back. As a result, the instant lunch-type products are getting special attention and more positioning.

You're starting instant foods sections in its West Coast stores, and A&P is said to be considering chain-wide special instant sections following a tryout in New York City.

The category began with introduction of quick-cooking flavored "ramen" noodle products by Nissin

Foods in Southern California in the early 1970's. The Japanese company brought out the products in its homeland in the 1950's.

The first Japanese food producer to seriously market a product line in the U.S. made an immediate hit on the West Coast with its Top Ramen instant noodles line and began expanding toward national distribution. By 1975, it had completed that rollout and was introducing Cup O'Noodles nationally.

It later added Oodles of Noodles, handled by Hall & Levine and a subject of increased support planning.

Nissin was followed into the field by Maruchan of Japan and Sanwa (formed by Japanese and Vietnamese refugee business men). Both are also based in the Los Angeles area. Legend Packing and Smack Foods are two other locally based Oriental-backed companies that followed with ramen and other instant noodle entries.

Majors Take Note

Major food companies began to take note early but are just now rolling into the market, which analysts are saying has just had its surface scratched.

The Oriental instant noodle people view the larger soup market including Lipton's Cup-A-Soup and Nestle's Souptime, as competition in a broad sense.

One explained that there are important differences—primarily that these items have to be taken home or put in a pot to cook while the Oriental-style dishes require only hot water and a three-minute wait while they cook in their own container.

Hy Freedman, Sanwa's marketing director, said the field will continue to grow because of a continuing trend toward convenience foods and also the increased number of women in the work force. "With our products you can have lunch in a short time, inexpensively (most of the products are in the 79¢ range) and have time to go shopping on your lunch hour."

Lipton Ads

Three Lipton products are boosted in four-color ads in Family Circle magazine: Lite-Lunch—noodles cooked in seven different seasoned sauces; "souped up vegetables" using Lipton's dehydrated soups; and Cup-

a-Soup to which boiling water is added. A 15¢ coupon is part of the ad.

Maruchan Advertising Drive

Maruchan, Inc. is launching a major consumer ad effort in the fall and winter period, to include national magazines, outdoor advertising in key markets and national television I.D. commercials.

Maruchan products to be featured include Instant Lunch, Ramen Supreme, and a new product—Soup N' Noodles.

These products are not "noodles" as defined by the Food & Drug Act standards of identity but are "Oriental noodles" and should be labeled so.

The new product, Soup N' Noodles, is described by Maruchan as more of a soup than the noodle-packed Instant Lunch, containing more broth and smaller noodles—the perfect companion for a sandwich. It does not contain the 5.5% egg solids required for egg noodles in the Standards of Identity.

Mug-O-Lunch

General Mills is nationally introducing Betty Crocker Mug-O-Lunch—"Hearty hot dishes you make in a mug."

The new product is aimed at solving the "lunch crunch" caused by today's busy life styles, where family members often just can't take the time to sit down and eat a full meal. Mug-O-Lunch offers favorites that "practically make themselves right before your eyes."

An introductory full-page, full-color ad in December 15 Family Circle shows how Mug-O-Lunch can make a quick favorite lunchtime dish in three easy steps. The ad will be accompanied by a 7¢ "pop-up coupon."

All three varieties of Mug-O-Lunch—Spaghetti, Macaroni & Cheese, and Beef Flavored Noodles & Gravy—are made in a mug in just five minutes by adding boiling water to the mix. One package makes two individual 7-oz. servings. The product will be found in the instant soup section of the grocery store.

Prime time, daytime and fringe television commercials, as well as magazine and newspaper ads, are supporting the national introduction of Mug-O-Lunch.

This Is Soup?

The cover of Consumer Reports magazine for November, 1978, pictures a woman drinking a cup of soup with the caption "This is Chicken Soup?" In the publication is an article entitled "Dried Soup Mixes (This is Soup?)" It starts out: "Consider homemade chicken soup. It contains chicken, vegetables, and rice or noodles. As the soup cooks, flavors and nutrients from those ingredients are released into the broth. The soup tastes good. And while it won't cure a cold or anything else, it is an ideal fluid replacement when you are sick."

"Now consider the dehydrated soups tested for this report. Judging by their labels, the soups' vitamin content is practically nil. A principal seasoning is salt which most Americans need less of, not more of. The soup's flavor, which wasn't especially good, was usually helped along with generous doses of monosodium glutamate (MSG), a chemical compound that contains sodium and causes unpleasant symptoms in some people. And there is evidence that some dry soups are manufactured with less than tender, loving care."

The article goes on to disparage the extensive use of additives and to complain about flies in the soup—insect fragments were found in most of the instant soups.

The conclusion: "Dried soup mixes don't have much to recommend them. Even the best of the tested soups didn't taste like homemade soup. Most were high in sodium and MSG, and many of them contained mold and filth. True, most of the tested soups were low in calories. But most were also low in nutrition. Only their protein content is of any significance."

Recommendations: "As an alternative to the dried soups, you might heat up a canned soup . . . canned soups in general should contain more nutrients than dried soups. But, if the three soups analyzed are any yardstick, canned soups (per manufacturers' suggested portion) contain as much sodium as the worst of the dried soups and only a bit less MSG than the run of the dried soups."

"If you want nutritious soup that tastes good, try making your own."

"We calculated each soup's cost per serving using the serving size designated by the manufacturer. Regular

soups were usually cheaper. Most cost from 6¢-10¢ per serving; the instant soups usually cost 14¢-15¢. Maruchan instant soups, at 57¢ per serving, and the Nissin instant soups at 58¢, give you about 2½ times the soup for about three to four times the price of the other instant soups."

This Is Soup!

Homemade soups are appropriate fare for a winter dinner but often, because of the preparation time, cooks shy away from such extravaganzas. Not so, with this shortcut recipe for minestrone.

It takes only 30 minutes to make and is billed as a meal in a bowl. The macaroni, plus lima beans and a generous sprinkle of Parmesan cheese are the complementary proteins for this dinner. And for an even cheesier flavor, why not add a slice of Cheddar or Jack cheese atop the steaming broth?

Serve with quick bread or muffins, still warm from the oven, to complete this meatless meal.

Lima Minestrone

- ½ cup onion, chopped
- 1 tablespoon butter or margarine
- 3 cans (13¾ ounces each) chicken broth
- ¾ teaspoon salt
- ½ teaspoon Italian herb seasoning
- ¼ teaspoon basil, crumbled
- 1 package (10 ounces) frozen chopped spinach
- 1 package (10 ounces) frozen baby lima beans
- ¼ cup uncooked macaroni
- 1 can (1 pound) tomatoes
- Parmesan cheese

Saute onion lightly in butter. Add broth, salt, Italian herb seasoning and basil. Heat to boiling. Add spinach and limas, and heat until vegetables can be broken up. Add macaroni, and simmer 10 minutes. Add tomatoes, breaking up larger pieces, and heat through. Sprinkle generously with Parmesan cheese. Serves 5 to 6 or makes 8¾ cups soup.

Delicious Delights

From the United States Durum

Growers Association come to the delicious recipes.

Dakota Spaghetti Beef Sauce

- 1½ lbs. hamburger, browned
- 6 large onions, chopped
- 3 or 4 buds garlic, chopped
- 1 or 2 tsp. tabasco sauce
- 2 cans tomato paste
- 1 1-lb can tomatoes
- 2 cups tomato sauce
- 1 tsp salt
- 1 tsp oregano
- 1 tsp sweet basil
- ½ cup butter

Combine all ingredients, simmer over very low heat 4 hours. Serve over hot, long spaghetti. Serves 8-10.

Icy Dakota Macaroni Salad Dessert

- 4 ounces (uncooked) macaroni rings
- 1 pkg. lemon pudding
- 1 cup whipping cream
- 2 cups miniature marshmallows
- ½ cups crushed pineapple, drained
- Any other fruit desired.

Cook macaroni rings, rinse with cold water, drain, chill. Cook pudding as directed except use the whole egg. Cool. Whip the cream and add to pudding, macaroni rings and fruit. Served chilled. Serves 8-10.

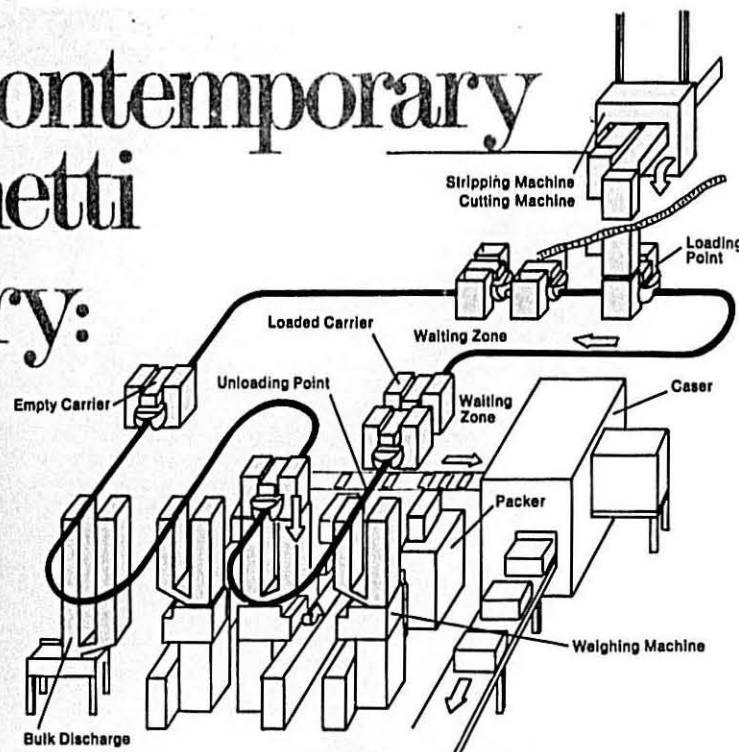
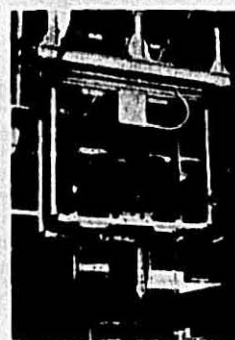
Dakota Wrangler Macaroni Salad

- 8 ounces (uncooked) your favorite macaroni
- ½ cup diced celery
- 3 hard cooked eggs, chopped
- 3 Tbsp. chopped pimento
- ½ cup chopped spiced peaches
- 1 Tbsp. pickle relish
- 1 Tbsp. sugar
- ½ tsp. salt
- 4 tsp. vinegar
- ½ cup mayonnaise

Cook macaroni as directed. Rinse with cold water. Drain, chill. Combine celery, eggs, pimento, peaches and pickle relish. Mix sugar, salt, vinegar and mayonnaise. Blend thoroughly. Serves 4-6.

Pasta Primer leaflet containing the following: What is Pasta? How is Pasta made? Why is Pasta Nutritious? Can Calorie Counters Enjoy Pasta? How to Shop for Pasta; How to store Pasta; How to Cook Pasta; plus four recipes. These leaflets sell for 5¢ each shipped f.o.b. Palatine, Illinois.

The Contemporary Spaghetti Factory:



Uni-Carrier, the new automatic carts system, has been developed by Fuji Electric Co. to streamline your spaghetti line. It makes conventional bucket conveyor systems obsolete!

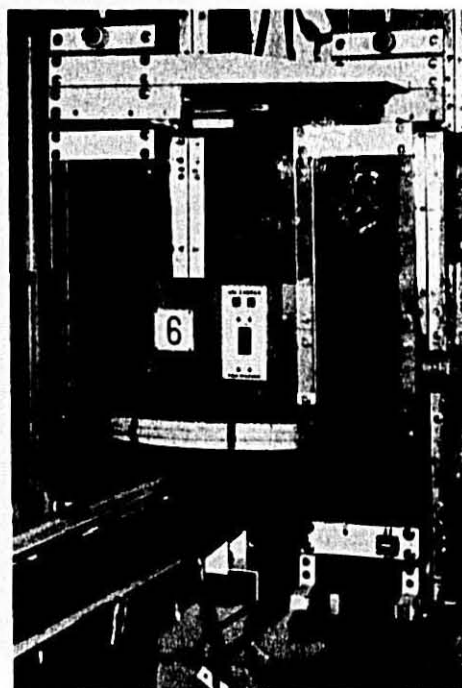
Features:

- Fully automatic, from raw material to packaged spaghetti.
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- Dryer is absolutely tight, yet easy to clean, maintain and supervise.

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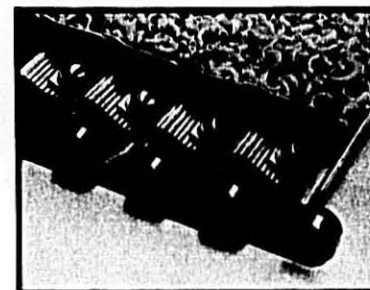
Contact us for information on BUHLER-MIAG Short Goods Lines and other Macaroni Processing Equipment



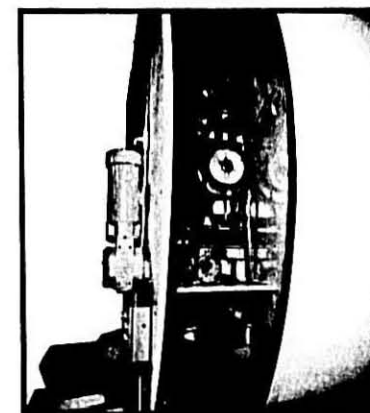
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JANUARY, 1979



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Nutrition and Health: Today's Front Page Story

by J. B. Cordaro, Food Group Manager,
Office of Technology Assessment, U.S. Congress

I am pleased to keynote the 1978 Newspaper Food Editors Conference.

I have longed to share my perspective with you on the forces that are shaping our food, agriculture, and nutrition activities.

No less an authority than *Time* magazine has elevated food to the pinnacle of our daily existence. *Time's* December 19, 1977 issue states, "The sexual revolution is passe. We have gone from Pan to pots. The Great American Love Affair is taking place in the kitchen."

I guess we should now say—Make lasagna, not love! And to prefer Child and Beard to Masters and Johnson.

You must share my excitement. Our area of interest and expertise—food—is so universally revered. Thus I do not feel the need to prove *Time's* point. I assume the burden of this conclusion and move to discuss three items.

First, I have a news item. I will release the results of OTA's assessment "Nutrition Research Alternatives."

Second, I will tell you about the congressional Office of Technology Assessment and its food group activities. OTA exemplifies the evolution of a new decision-making process in our society.

Third, I want you to know that I appreciate and respect the role that food editors play. You communicate information on our food supply, its safety, wholesomeness, and nutritional quality. This helps us to appreciate the effects that diet has on our way and length of life.

OTA's Nutrition Research Alternatives

The principal finding of the OTA report is that the Federal Government has failed to adjust its emphasis of its human nutrition research activities to deal with the changing health problems of the people of the United States.

For the past 50 years, our strategy has tried to ensure an adequate intake of all essential nutrients for

Americans. This has been successful. Few serious nutritional deficiencies are known in the U.S. However, this strategy has been carried out with little concern for or understanding of the changing nature of foods, eating habits, and life-styles.

If the Federal Government continues its present preoccupation with nutritional deficiency diseases, the quality of life present and future generations will be seriously affected into the 21st century. This concerns not just you and me but also our children and their children. We may have inherited the earth. But now we must be sure that we do not rob future generations of the same opportunity.

OTA's report provides Congress with information to make decisions about how to:

1. Define human nutrition research and better appreciate funding needs,
2. Adjust the goals and priorities of human nutrition research, and
3. Determine the personnel resource requirements to do the research.

I believe that our human nutrition research efforts must be reoriented. Research must recognize the changes that have occurred in our food supply and life-styles. It must also anticipate future changes.

We need a comprehensive, well-integrated human nutrition research strategy to meet both existing and projected diet-related problems. OTA's seven elements suggest one alternative for Congress to consider. These elements are:

1. The role of diet in the prevention of chronic disease and obesity,
2. The role of nutrition in the treatment of disease and the support of therapy,
3. Nutrition education and consumer education,
4. Requirements for essential nutrients,
5. Nutritional aspects of food science and food safety,

6. Monitoring nutritional status, and
7. Nutritional policy and management.

In view of public concern over the food we eat, how we live, and their relationships to sickness and death, it is incredible to learn that there may be as little as \$50 million spent by the Federal Government on human nutrition research.

It is equally appalling to find that this small sum is being applied to outdated priorities, that the 14 separate agencies spending these funds lack a consensus on the definition of human nutrition research, and that nowhere in the Federal Government are there overall goals and priorities. This lack of overall focus and poor coordination explain how research duplication, turf battles, and questionable utility of research findings occur.

Nutrition along the lines developed in OTA's seven-element strategy is designed to determine if causal relationships can be established among the American diet, way of life, and way of death. Implementation of research results could improve the health status of many Americans and reduce the burden of our skyrocketing health care costs. Obtaining better knowledge and conveying it to the public could reduce or delay the incidence of a number of major ailments, especially five of the leading causes of death which are believed to be diet-related: heart disease, cancer, stroke, diabetes, and cirrhosis of the liver.

We know that death trends can be modified. It is a fact that deaths from the number one killer—heart disease—have dropped from 5.2 percent of the population in 1968 to 4.6 percent in 1977. Likewise, there has also been a 22 percent drop in mortality from strokes and related illnesses.

How much of this is due to improved medical care facilities and how much is due to life-style changes, especially diet modification, is not known. Thus while we cannot pinpoint the degree of importance of diet and exercise, we do know it is an important factor.

While the scientists argue over the differences between causative and associative relationships, industry has taken extraordinary steps to better ensure the health of its employees. Industry believes the surveys that show healthy people deal better with stress lose less time from the job, and are more productive. Industry, which bears a heavy part of our \$180 billion health care bill, has moved beyond the traditional perks of physicals and country club memberships for top corporate officers. They are making resources available to reduce disease and delay death. Today it is more common for companies to provide employees with access to nutrition and health care clinics, to maintain weight-watching programs, to provide and encourage the use of exercise facilities, to encourage preventive health care, such as cancer and hypertension screening, and to make available information on the caloric content of their cafeteria foods.

If this has become important for industry in order to be more productive, then, too, it should become important for society to appreciate and enjoy a full, high-quality life.

People are concerned about the food they eat, its costs, and the effects their diets have on their life. They are frustrated by the Government's inability to provide the information they want. I believe that this failure stems from the misdirection of our nutrition research efforts. The need to change the focus of our health concerns is reflected in a "piece of new wisdom" by FDA Commissioner Kennedy. He said:

"The more we learn about what variables affect population health, the more we are discovering that the ones we thought were important—number of doctors, amount spent on medical care—are not very important compared with such parameters as how people live, what they eat, and how they take care of themselves."

The U.S. appears backward for failing to develop a national nutrition policy. Norway has a national food/nutrition policy which is grounded in the belief that the dietary pattern of the Norwegian people is closely linked to their country's pattern of health and disease.

Two documents from the now-defunct Senate Select Committee on Nutrition and Human Needs—"Guidelines for a National Nutrition Policy" and "Dietary Goals for the United States" suggest the institutional and consumption framework for a U.S. policy.

I believe that OTA's report may serve as the link between these documents. Although we did not address dietary goals per se, the results from our comprehensive research plan could forge the two into an overall national food/nutrition policy.

Will there be a U.S. effort similar to Norway's to link diet goals with food policy? Or are we convinced that education is better than legislation? How will our political process handle trade-offs among the various agribusiness links of our food system? The answer to these questions will affect future generations.

OTA and Its Food Group

The Office of Technology Assessment (OTA) is a new advisory arm of the U.S. Congress. OTA's basic function is to help legislators anticipate and plan for the long-term consequences of technological applications and to examine the many ways, expected and unexpected, in which technology affects people's lives.

OTA's analyses explore the physical, biological, economic, social, and political impacts that can result from application of scientific knowledge. OTA provides Congress with independent and timely information about the potential beneficial and harmful effects of technological applications. OTA presents evenhanded, authoritative, comprehensive policy analyses and options to Congress, leaving decisions to the elected Members.

OTA consists of a unique bipartisan congressional Board, which formulates and promulgates the policies of the Office, and a Director, who carries out such policies and administers the day-to-day operations. The Board is assisted by an Advisory Council of ten private citizens, the Comptroller General of the United States, and the Director of the Congressional Research Service of the Library of Congress.

OTA's program runs on two tracks—one to serve carefully selected near-term needs of congressional com-

mittees, and the other focuses on longer-term, holistic issues.

Our near-term program is based upon committee requests. The longer-term focus is based upon a mechanism developed by Director Peterson to establish a priority assessment list.

The present priority list of 30 was established with a wide range of inputs from OTA's Board and staff, advisory and congressional committees, and the public. This list is subjected to continuous appraisal and modification to help us allocate our resources on the most significant areas.

Our food program addresses all domestic and international aspects that deal with agriculture production, food marketing, and nutrition and consumption.

Role of Newspaper Food Editors

Is present interest in food/nutrition and diet/health an idea whose name has finally come? Or is this *deja vu* that you food editors have heard ad nauseam over the past few years?

In 1968, the Columbia Broadcasting System prepared an in-depth documentary on hunger in the United States. The facts shocked us and created an "awareness" of hunger among plenty. That same year the Senate Select Committee on Nutrition and Human Needs was established to help the U.S. population that did not consume enough food.

Today's "awareness" has a different perspective.

There is no question but that the public feels nutrition and health must be given a higher place in national priorities. This is clear after the reaction to the Senate Select Committee on nutrition and Human Needs report "Dietary Goals for the United States." This was a visible recognition that the major food/nutrition problem in the U.S. was no longer hunger but the consequences of overconsumption. Today's problem cannot be solved simply by programs and mechanisms that try to get more food to hungry people. We must not forget hunger in America, but now we must also deal with the life-style of affluence and the health consequences of overconsumption. This will not be easily modified. While it affects all societal levels, it is of special concern to the middle and

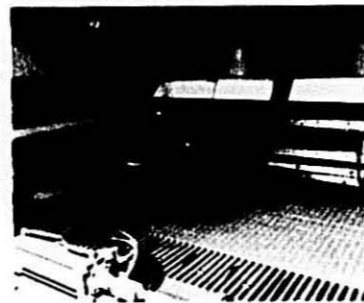
(Continued on page 26)

acb
BASSANO

bassano pasta equipments

long pasta line

Rollinox



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

Cannelux

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

short pasta line

Processing and drying lines for

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

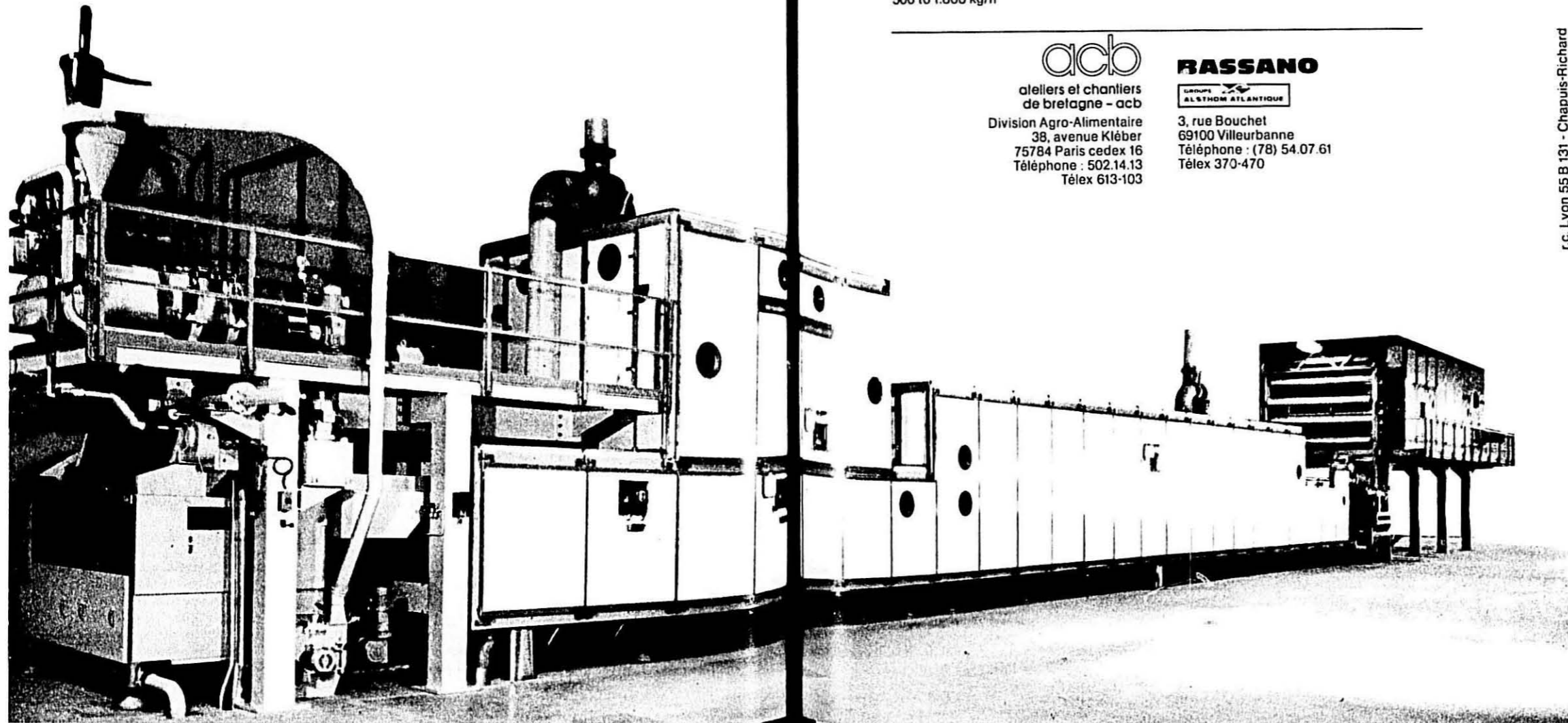


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Télex 613-103

BASSANO



3, rue Bouchet
69100 Villeurbanne
Téléphone : (78) 54.07.61
Télex 370-470



Nutrition and Health

(Continued from page 23)

upper income and well-educated. As the most visible, articulate, and highest taxpayers in our society, they are demanding sophisticated action. Rarely has such a unified call for action been reached on an issue.

Unfortunately, the interest level has not yet been matched by the same level of knowledge. A nutrition knowledge gap pervades. Surveys show that consumers know little about nutrition; industry is still reacting to the shift from their earlier philosophy that nutrition does not sell food products; and consumer organizations and government policymakers are trying to become technically competent.

Few would doubt that nothing will be done over the next two years. Yet the pressure for some action presents a danger for all of us. Our natural tendency is to look for simple answers to these complex matters. As editors you will be tempted to respond in the present knowledge vacuum with the "latest" information you can get, perhaps without screening, evaluating, or challenging it to the same degree you would a piece on natural security. Thus the risks for sloppy and inaccurate reporting may increase. The results could be serious and may lead to the reinforcement and the exploitation of consumer ignorance, to misguided Government regulation, and to ineffective industry actions.

I should like to speculate about what I expect to happen over the next two years in the food/nutrition area: the attention and output of the 96th Congress, the agenda of the Carter Administration; and the pressures and reactions of the food industry, consumer organizations, and the public.

I see five broad areas as possible agenda items.

1. **National Food and Nutrition Policy.** In November 1977, USDA Assistant Secretary Carol Foreman outlined a six-point policy that would establish nutrition as the focal area. Will USDA try to make this a reality?
2. **President's Reorganization Project for Food/Nutrition.** As a part of his desire to reorganize the Federal Government, President Carter approved the study of the Federal Government's agriculture, nutrition, and food policies

and institutions. I understand that the report to the President will have five of the ten elements related to nutrition. Will those study results be implemented?

3. **Presidential Commission on World Hunger.** After a year of anticipation, President Carter issued an executive order on September 5 to establish a 20-member hunger commission. Will the people of the U.S. be asked to make more sacrifices to help feed the hungry people around the world?
4. **Dietary Goals.** Will efforts be made to legislate a set of dietary goals such as those proposed by the Senate Select Committee on Nutrition and Human Needs, or will they be applied on a selective basis by program administration?
5. **Specific Issues.** Labeling, education, safety, feeding programs, nutrition research, etc.—all possess the ability to influence the amount of food available, food cost, and our health. Which item will get attention and be acted upon?

Where will the action be? Before I make my prediction, keep these three facts in mind:

1. The next two years will be a "political period" as the posturing becomes important for the 1980 elections;
2. The membership of the 96th Congress will be markedly different, at least in the number of new faces, from the present Congress; and
3. Inflation, Proposition 13, etc. will seriously influence both food and nonfood issues.

I believe that the interrelated issues of food safety, nutrition education, and nutrition research focused on diet and health will get the most congressional attention. Further, I believe that you will see the emergence of a new decision-making process that affects the way these issues are treated. I especially call to your attention food safety which I believe will be the number one topic over the next two years. There is a riptide moving through society demanding that the U.S. develop a food safety policy. The Food Safety Council is prepared to help decision-makers develop this

new approach. To the extent that other issues come under the umbrella of food safety, they also will obtain attention.

The role you play in society as writers and editors has gained in importance and stature. I know that you are convinced that food, nutrition, and health stories should not be limited to weekly appearances in the food section of our newspapers. That forum provides a vital service to society. I do not suggest you ignore it; I do urge you to enlarge the perspective of your news managers so that the vital information you deal with gets more up-front coverage. To get this attention you must be aggressive in defining issues and problems.

A year or two from now each of you may reflect on my prophecy. Whether I turn out to be right on my issues list is not that important. For you, you must answer whether you were a spectator or whether you aggressively challenged, reported, and helped to shape any of these events. To those of you who pursue these items, I guarantee your reporting will frequently command the front page and will help influence decision-makers.

The challenge is yours!

Head of Nutrition Consortium

Dr. Kristen W. McNutt has been named executive officer of the National Consortium which comprises eight scientific and professional societies in the fields of dietetics, food science, nutrition and home economics.

She succeeds Dr. O. Lee Klein who retired.

The consortium announced also that it has moved its offices from Bethesda, Md., to Suite 216, 21 "P" Street N.W., Washington, D.C. 20037.

Dr. McNutt earned her B.A. degree in chemistry at Duke University, M.A. in nutrition at Columbia University and Ph.D. in biochemistry at Vanderbilt University.

Prior to joining the consortium, she served as FASEB Congressional Science Fellow with the Senate Agriculture, Nutrition and Forestry Committee for one year and as research associate with the Nutrition Foundation for four years. She also served as a volunteer public health nutritionist with Project HOPE in Brazil.

She and her husband, Dr. David R. McNutt, coauthored a college textbook entitled *Nutrition and Food Choices*.

The National Nutrition Consortium is launching several new programs in nutrition education, public information and public affairs, as well as helping to improve coordination of member organizations' activities. The consortium, founded five years ago, is a source of nutrition information for health professionals and the general public, focusing on topics of interest to consumers and health-science policymakers.

The consortium has established a new fellowship program for graduate students in fields related to nutrition, health and food science. Students whose departments accredit a one-semester work-study experience with the consortium in Washington are eligible. Applications for the winter-spring semester program must be received by December 10, 1978, and for the summer program by April 10, 1979.

Need More Funds

The consortium, funded by grants from its member societies, is launching a campaign for additional funds from individuals in professions related to nutrition and food science, from consumer and civic organizations, foundations, food companies, trade associations, the health delivery system and anyone interested in improving public understanding of nutrition.

Members of the consortium are the American Dietetic Association, American Institute of Nutrition, American Society for Clinical Nutrition, Institute of Food Technologists, Society for Nutrition Education, American Economics Association, American Academy of Pediatric's Committee on Nutrition and the National Academy of Sciences-National Research Council's Food and Nutrition Board.

Senate Label Hearing

Food manufacturers told the Senate Nutrition Subcommittee they recognize the value of informative product labeling but cannot support sweeping changes that have not been proven to be understandable and useful.

"Labeling changes can be a disservice to the consumer in two ways," said W. H. Meyer, associate director, food product development for Procter & Gamble Co. "They add to the cost and can be subject to misunderstanding. We would like to urge that any label change ultimately initiated on the basis of regulatory or nutrition considerations have good documentation that the change is needed, that it will be understood and that it will accomplish the intended objective."

Lack of Consensus

The subcommittee chairman, George McGovern (D., S.D.), said he perceived a desire for better communication of nutrition information but a lack of consensus on how best to accomplish it.

"We must be cognizant of and insure the consumers' right to know what is in the food they select as well as their right to choose what they desire to eat," McGovern said. "To achieve these dual objectives, we should approach nutrition labeling as an information function necessitating flexibility, and not as a regulatory action directed at protecting the public from toxic substances and requiring stringent guidelines. In short, we must differentiate the regulatory function from the information function."

Hand-in-Hand

Howard Bauman, vice president, science and technology for Pillsbury Co., Minneapolis, said his company firmly believes diet and nutrition go hand-in-hand and "that there is no such thing as a single good or bad food." He advocated a concerted effort by industry, the academic community and the Government to "develop a nation of smart eaters, rather than having our choice of food limited by Government action."

Bauman called percentage labeling of ingredients impractical and expensive. He had praise for USDA Handbook No. 8, as did other food industry witnesses who use the data from it for initial reading on nutrients in a mixture of ingredients. There was agreement that the handbook is remarkably accurate when compared with the industry's final analytical results. Accordingly, it was suggested to the Senate subcommittee that Handbook No. 8 data be used as the

data base for all nutrition information.

Speaking for Ocean Spray Cranberries, James E. Tillotson, vice president, technical research and development, told the subcommittee the recently completed FDA-USDA-FTC food labeling hearings "have clearly demonstrated the degree of consumer dissatisfaction with current food labeling. Unfortunately, while these hearings have articulated well the perceived problems with current methods of food labeling, they have not generated any clear solutions to the problems we face with food labeling."

Dr. Irvine Honored

Dr. G. Norman Irvine, director of the Grain Research Laboratory, Canadian Grain Commission, Winnipeg, was the recipient of this year's William F. Geddes Award at the closing plenary luncheon of the Sixth International Cereal and Bread Congress in Winnipeg.

Dr. Irvine was cited for his services to the American Association of Cereal Chemists. He was one of the two co-chairpersons responsible for the program of the Congress.

Other presentations at the luncheon included awards of the Bailey Medal by the International Association of Cereal Chemistry. The Bailey Medal was awarded to Professor Jean Maurice Rene Bure, Ecole Nationale Supérieure des Industries Agricoles and Alimentaires, Massy, France, and Dr. L. A. Trisvjatskij, chairman, Soviet Committee for Cereal Products, All Union Research Institute for Cereal and Cereal Products, Moscow.

The Chemical Facts of Life

Monsanto Company has announced the publication of the second edition of "The Chemical Facts of Life," a 16-page booklet that takes a balanced look at the benefits and risks of chemicals in every day life.

This new edition examines in depth the controversial issues involving chemicals—their history, use and misuse, testing procedures, benefits and risks. This second edition also reflects the comments and opinions of environmentalists, labor unions and other groups.



the Pure, Golden Color of Quality

At Peavey, we make every effort to produce the finest Semolina and Durum Flour money can buy. But that alone wouldn't be enough if we couldn't get King Midas Durum Products to you fast. When you need them.

So we put just as much effort into getting you faster. We've set up wheat handling facilities all through the North-Country's prime Durum areas to get this top quality wheat to us faster.

In milling, we put maximum emphasis on handling efficiency. So King Midas Durum Products can get under way faster.

So you can get the pure, golden color of quality you need faster.

At Peavey, King Midas Semolina and Durum Flour is the most efficient way to get the best quality flour. We've set up our own facilities to get this top quality wheat to us faster.

And in milling, we put maximum emphasis on handling efficiency. So King Midas Durum Products can get under way faster.

King Midas Semolina and Durum Flour Quality with a running start on all the others



Peavey Industrial Foods Group

"High Temperature" Drying of Pasta Products

by Buhler-Miag, Inc.

What is high temperature drying? How does it affect pasta products?

In the macaroni industry, the expression "high temperature drying" is used today for the following condition:

a drying temperature of 140 to 200°F dry bulb (60°C to 90°C) resulting in the following:

- bacteria control during the drying process
- change in cooking quality of final product
- change in color of final product

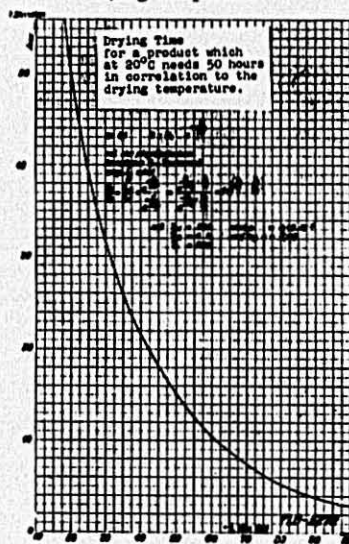
The last two mentioned items can be most important if a lower quality raw material (e.g. soft wheat) is used for the manufacture of pasta products.

A drying temperature of 140°F to 200°F (dry bulb) is not considered a high temperature for all different products to be dried (e.g. cereal). However, this temperature range has only recently been used industrially for pasta products. Macaroni was dried in the past, with very few exceptions, at temperatures not over 140°F (60°C). Higher temperatures were not allowed for these reasons:

- mechanical limits of the existing drying equipment available (motors, heating coils, seals, panels)
- technological problems in the drying process (sticking—lumps in short goods dryers, dropping of product from sticks in long goods dryers)
- unwillingness of plant management and personnel to tackle problems which can arise with a new drying technology.

In the mid-1950's, engineers in the Buhler laboratory conducted drying tests with different products and determined a specific correlation between drying temperature and drying time (see Diagram I). The same tests revealed important facts in regard to checking of final product due to internal stress build up during the drying process. The first "high temperature" drying line was developed as a result of this information, and tested in the plant of a large German pasta manufacturer. However, the industry in general was not ready to accept this new technology.

Diagram I
Drying time for a wheat dough product in correlation to drying temperature.



In the late 1960's, bacteria control during the manufacturing process became more important and the first short goods-drying lines were built, utilizing elevated temperatures, especially in the predrying stage.

Additional benefits of the new drying technique could now be realized: these benefits are short drying times and smaller, compact drying lines for a given capacity, easier supervision and less maintenance.

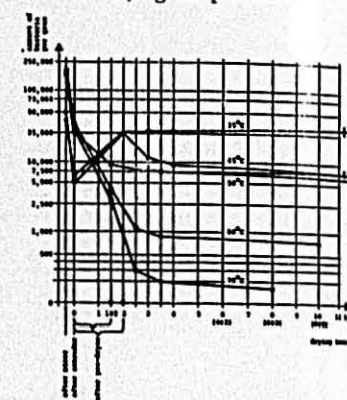
Machine manufacturers, aided by producers, started developing a new drying technology which slowly found acceptance, especially in larger processing plants. New high temperature short and long goods liners were built which have now been in operation for several years. Regarding

TABLE I
Lysine Loss Due to Maillard'sche-Reaction During the Drying Process
(Cubadda, et al., 1968)

Drying Conditions		Lysine Percentage		Loss in Nutri-
Temp. °C	Time (hrs.)	De- stroyed	Blocked	% of Value
45	18	6	16	22
60	10	7	21	28
70	7	7	22	29
80	6	12	35	47

the changes in the final product and their results, many questions still remain and need to be answered.

Diagram II
Tests for total plate count in regards to drying temperatures.



Two features are still points of discussion; improvement or change in (1) color and (2) cooking quality.

Product Color:

Effects of the "Maillard'sche-Reaction" have been known for years. The yellow color of a durum product will turn slightly orange to brown if product is exposed to higher drying temperatures. Such changes, however are only noticeable at temperatures of more than 160°F (~70°C) for "egg-products" and more than 180 to 190°F (~80-88°C) for "water products." However, when mixing different raw materials, a slight change in color might be desirable.

In addition to product discoloration, negative taste effects may also be realized. Products have a tendency toward a bitter taste if discolored, and egg products particularly show this. Another point which must be realized is the slightly reduced digestibility of the protein of pasta dried at high temperatures.

Mr. B. Laignelet, Montpellier/France, pointed out in his speech (Continued on page 32)

PROBLEMS?

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

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

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

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

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

AND . . .

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

Charles C. Rossotti, President

Jack E. Rossotti, Vice President

George Leroy, Vice President and Marketing Director

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Established in 1898

High Temperature Drying

(Continued from page 30)

given at a durum seminar in 1976, the problem of high temperature and the resultant destruction of lysine. The following table illustrates the changes:

Since wheat products contain only small amounts of Lysine (most of which are added to pasta meals with additions such as cheese, meat, etc.), we believe that not too much emphasis should be given to this subject. The exception is egg-pasta products where we already indicated a maximum drying temperature of 155°F.

Cooking Quality:

Equipment manufacturers have long realized that there is a slight change in the cooking characteristics, or quality, of pasta products exposed to high drying temperatures. A higher product quality could result from these higher drying temperatures in the final stage. Both long and short goods benefit from these higher temperatures.

The benefit is a firmer, less slimy product, especially if raw material is mixed with soft wheat or if 100% soft wheat is used. If, however, too firm a product is used in meal preparation, tenderness may be difficult to achieve. Pasta products exposed to high temperature drying conditions have a tendency to "rubberiness."

Why this change in cooking behavior? Dr. R. Cuono/Malland pointed out during the durum seminar in Detmold in 1974, that this change is a result of the genatinization of the starch in the drying process. (see also the publication of Dr. R. Cuono et al., Milano, Italy in "Getreide, Mehl und Brot," 28 pg. 132-136, 1974.) Since gelatinization of starch depends very much on its moisture content, we must assume that the gelatinizing effect has already occurred in the pre-drying stage. The initial increase in cooking quality should be noticeable at this point. B. Laignelet, Montpellier/France found in tests made to prove this point, that the cooking quality of high temperature pre-dried pasta goods is reduced and an increase in sliminess could be observed. This is in agreement with tests in our own laboratory. Final drying at elevated temperatures will improve the characteristics of the products. However, temperatures of up to 90°C (194°F) are too low to gelatinize

starch in a product with a maximum moisture content of 20% (see publication of Derby et al.—GMI—in Cereal Chemistry 52, pg. 703-711C, 1975). Our tests in the laboratory with the microscopic technique indicated no gelatinization in high temperature dried pasta products. Measurements of starch gelatinization lead to the following results:

Time of Heat Drying Period After Predrying at Lower Temperature	Maltose Figure mg/g dm
7 h 60°C	62 mg
12 h 60°C	64 mg
21 h 65°C	66 mg
7 h 75°C	64 mg
12 h 75°C	62 mg

Final Product, Dried on Competitive Equipment at Temperatures up to 85°C

66 mg

Above average figures are well within error limits of determination, however, they clearly indicate no gelatinization.

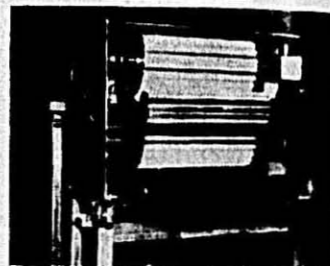
The change of the cooking quality can be explained in a strengthening of the gluten framework due to heat-time influence. Proof of this theory is verified by the results of cooking tests made with denaturalized dough extruded at too high a temperature on an extruder in which the gluten framework was damaged (see publication of Dr. Holliger, Uzwil/Switzerland in Diagram 53, page 21-23, 1972). Despite high temperature drying, the final product was slimy. It is of utmost importance to produce a first quality product on the extruder with a compact gluten framework (see also Scanning Electron Microscopic of Cooked Spaghetti by J. E. Dexter, B. L. Dronzek and R. R. Mathenson et al., Cereal Chemistry 55/1 page 23-30, 1978).

Summary:

High temperature drying has been in use for many years. Regarding bacteria control and smaller sized equipment, we only realize advantages. Changes in color and cooking affect final products positively and negatively. Only the consumer can tell the manufacturer: if the "new" product is acceptable or not. It is, therefore, important for manufacturers to have versatile equipment capable of drying exactly and most efficiently at all desired temperature ranges. This equipment makes it possible to supply the consumer with the best product.

As a general note, we would like to point out that pasta dried at moderate

temperatures (up to 165°F) at a relatively high relative humidity in the final stage will result in an excellent product regarding taste and color and guarantee the safety requirements for bacteria control. Completely tight, modern dryers are designed for this purpose.



New Ravioli Machine

A new continuous motion Ravioli machine that can produce up to 2,000 lbs. of Ravioli per hour is now available from De Francis Machine Corp., Brooklyn, NY.

All necessary ingredients are fed into a 2-shaft mixer to form the dough which is automatically extruded through a 6-orifice concentric die to form a continuous flow of 6 dough tubes.

By means of a continuous flow pump, the tubes are filled with meat, cheese, fruit, etc., and cut into individual Ravioli pillows, each having a crimped fin on all sides.

For Chinese Egg Rolls, the filled tubing is not flattened and there are no crimped-fin edges.

Optional accessories such as the Demaco Short-Cut attachment or special cutting device may be used in line with the Ravioli Machine to produce most standard small macaroni products such as elbows, ziti, littali, O's, extruded noodles, lasagna and mostaccioli.

For complete details, specification and technical information, contact the manufacturer: De Francis Machine Corp., 280 Wallabout St., Brooklyn, NY 11206. Phone: 212-963-6000.

Market Resource

1978 Directory of food processing equipment, machinery and supplies and major manufacturers/suppliers: \$5; product cross reference listing: \$10. Food Processing Machinery and Supplies Association, Suite 700, 1825 L Street, N.W., Washington, DC 20036.



Food processors always give good reviews when the cook serves up good-tasting, wholesome noodle dishes.

The cook with fussy customers has to use her noodle.

Sometimes the people hardest to please are sitting right around the family table. So the smart cook really uses her head...and serves up good-tasting noodle dishes.

But the best noodle dishes begin long before they reach the table. They begin on the farms of the northern plains, where the nation's best durum wheat is grown.

From this durum wheat, Amber Milling mills fine pasta ingredients...Venezia No. 1 Semolina, Imperia Durum Granular, or Crestal Fancy Durum Patent Flour.

At Amber Milling, we're serious about pleasing our customers. We know you're fussy about quality. So we deliver semolina and durum flour that makes it easier for you to please all your "fussy" customers. Specify Amber!



AMBER MILLING DIVISION of THE GRAIN TERMINAL ASSOCIATION
Mills at Rush City, Minn. • General Offices at St. Paul, Minn. 55165/Phone (612) 646-9433



At Pack Expo

Of interest to macaroni manufacturers:

Aseco Corporation, 8857 West Olympic Blvd., Beverly Hills, CA 90211. Full scale operating Aseco system comprised of an accumaveyor surge storage unit and Modu-Tran II distribution line for simultaneous feeding of multiple packaging machines at different rates on demand from a single product stream without starvation or the requirement for product recirculation.

Clybourn Machine Company, a division of Paxall, Inc., 7515 N. Linder Avenue, Skokie, IL 60076. CMC Model C Series high speed vertical cartoning and filling machines for cartoning short cut macaroni and specialty pasta products. Carton range: 1" x 3/4" x 4 1/4" to 8 1/4" x 3 1/4" x 1 1/4". Speed range: 40 to 350 cartons per minute. CMC Standard Continuous Horizontal Cartoners for long cut macaroni products. Carton size range: 1" x 1 1/2" x 1 1/2" to 12" x 6" x 14". Speed range 30 to 300 cartons per minute.

Hayssen Manufacturing Company, P.O. Box 571, Highway 42 North, Sheboygan, WI 53082. Hayssen RT's, rapid transit systems, for speed and flexibility in automatic packaging. A single RT can package hundreds of sizes and shapes. The Compak II and Super Compak are pouch machines with full range of custom feed systems including Digitron Electronic Weight Scales for pouch packaging.

LCM Spaghetti measuring and feeding system has (1) cascading tower from stripper cutter or bucket elevator conveyor; (2) cascading tower vibrator; (3) metering chamber vibrator; (4) coarse volumetric feed adjustment; (5) fine volumetric feed adjustment; (6) product squaring ram in dump hopper; (7) vibrator to product divider (into two metering chambers); (8) low volume cutoff gate; (9) synchro drive adjustment to measuring chamber (optional).

Hi-Speed Checkweigher Co., Inc., 605 West State Street, Ithaca, NY 14850. ST 71 checkweigher with SD 74 control handles cartons and pouches up to 5 pounds; model CM60H-BG checkweigher is a self contained unit that includes infeed

timing belts, scale, discharge conveyor and special rail to fold top flap of polybag over. Sweep-off rejector for bags with too few or too many pouches; Model T59 checkweigher is an intermittent motion checkweigher designed for accurate weighing of pouches and tubes up to two pounds in weight at speeds up to 75 per minute.

Mira-Pak, Inc., 7000 Ardmore, Houston, TX 77021. Offered are machines for bagging, cartoning, filling dry products, imprinting, label dispensing. Featuring the Mira-wrap Model "K" Dual sigmatrol/computerized weighing and the Mira-Cartoner bag and box system.

Packaging Machinery Company, 330 Chestnut Street, East Longmeadow, MA 01028. Net weighing includes weighing systems from Eagle Scale Division to eliminate underweights and closely control overweights to pre-set tolerances; casing off with Dyna-Pak is a complete series of high speed automatic case packaging machines for almost any bagged product. Speeds from 55 to 240 bags per minute; MicroScan control checks the weighing system completely 100 times a second; displays both scale performance and production management data (on command) using integral display panel, CRT display, or hard-copy printout. Built-in trouble shooting through its own diagnostic system.

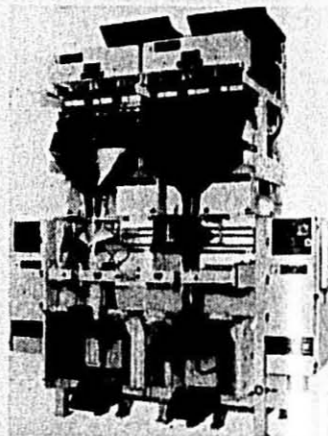
Redington, Inc. 3000 St. Charles Road, Bellwood, IL 60104. Three different Carton-King horizontal cartoners are fully automatic with continuous motion. I has speeds to 120 per minute; II cartons at 240 per minute with an adjustable size range. Full range of optional automatic product transfers, leaflet feeders, glue systems available; III cartons at speeds to 400 per minute and handles a reverse tuck, straight tuck, glue end cartons with proven rotary carton feed, expander, and transfer system. Special attachments are available.

Redington 26K17 high speed spaghetti cartoner has self adjusting article filler buckets handling 1/2, 1, 2 and 3 pounds up to 200 cartons per minute.

Triangle Package Machine Company, 6655 West Diversey Avenue,

Chicago, IL 60635. Advanced solid-state self-monitoring and adjusting systems that need no attention once simple settings are made. Accuracies to 1/1000 oz. Production to 18 bags per minute.

Wright Machinery Company, Inc., P.O. Box 3811, 1600 Mist Lake Drive, Durham, NC 27702. Mon-o-bag filler paces the bakemaker with net weighing system an oscillating hopper; Twinmaster automatically 1/1/s 150 bags per minute with auger feed; 140 per minute with volumetric filler; 100 per minute with net weigher. Rotary Net Weigher is for high speed packaging of a variety of macaroni/noodle products in rigid containers. It allows the packager to maximize speed without compromising accuracy. Available with 12 or 18 scales.



Custom-engineered for packaging ready-to-eat cereals, this twin tube Pulsamatic machine was demonstrated by Triangle Package Machinery Company at AMI's 1978 Pack Expo. It has many unique features for smooth interfacing with conveyors, as well as for handling cereals on-line, filling and sealing bags that tuck into cartons and are easy to open for the consumer.

Triangle Shows Special Systems at Pack Expo

A variety of special packaging systems and support equipment was shown by Triangle Package Machinery Company at PMMI's 1978 Pack Expo, October 30-November 3, at McCormick Place in Chicago.

The packaging systems included a twin tube Pulsamatic bag machine custom engineered for ready-to-eat, with Flexitron scales. It is specifically designed to interface with cartoning equipment.

Also on display were two single tube Pulsamatics with auger feeders for flat bottom and fin seal packages, and another custom designed Pulsamatic with Flexitron scales for packaging hard-to-handle products.

Other equipment demonstrated in Triangle's exhibit included a miniature Flexitron net weighing system with six scales, a CBH hydraulic vibratory conveyor, and the company's Dalapak microcomputer information system for packaging operations.

The special twin tube Pulsamatic bag machine for cereals has a variety of unique features that keep product out of seals, make packages easy to tuck into cartons, increase setting time, control air to distribute and settle contents, create consumer convenience seals, and the like. It also incorporates advanced solid-state circuitry, fully enclosed quick return dual drives, dual controls, sanitary construction and poly sealing jaw systems. Its friction-free solid-state Flexitron scale systems monitor and adjust fine weight, feed, dribble time and checkweigh before discharge.

Three- or four-sided fin seal packages are made on one of the Pulsamatics shown, while flat bottom bags are produced by another machine. The latter unit forms packages so that product cannot interfere with bottom gussets, thus allowing the bags to stand erect for better casing, display graphics, and store shelving.

EDP System

Data demonstrated packaging information never before available, by generating weight trend, scale, cycle and time analyses, plus daily other summaries. This EDP system includes the company's microcomputer, access keyboard, hard copy printer, CRT display and programs specially developed for packagers.

The CBH Conveyor shown features counter-balanced design to keep vibrations out of the base so the units, which include systems that distribute product on demand to multiple packaging stations, can be used where conventional conveyors would

be ruled out. Product flow rates can be dial tuned while the CBH is running. They remain constant despite product surge or density changes. With no mechanical inertia to overcome, action is instantly stopped or started. Vibration can be varied on signal or automatically.

Micro-Processor Controlled Weighing

The new Eagle Micro-Scan (tm) Weighing System from Package Machinery Company's Eagle Scale Division, uses a microprocessor based programmable controller to provide greater package fill accuracy, improve scale up-time, and generate management information.

According to Dave Chenoweth, Vice President of the Eagle Scale Division, "The MicroScan weighing system is a tool which gives management far greater packaging line control than ever before possible. It makes process optimization a practical reality, rather than just a nice thing to talk about."

Exceptional Control and Accuracy

The MicroScan System is not a modified general purpose programmable controller, but one designed and manufactured by the Eagle Scale Division specifically for Eagle net weighing scales. Exceptionally consistent accuracy is maintained because the MicroScan System scans the scale functions 100 times a second and instantly adjusts them whenever necessary.

Basic control functions include: checkweight/underweight refill, bulk and precision setpoint correction, balance setpoint correction, random dump, management data reporting, and built-in diagnostics.

The MicroScan System is set up by a supervisor in minutes by making simple thumbwheel adjustments. The control box is then locked but the digital read-outs are clearly visible on a display panel. Operators are free to oversee a variety of machine functions via panel-mounted digital readouts, but they are not free to make unauthorized changes to the controls. The MicroScan System controls the scales—not the operator. For easy back-office access to read-

outs or management reports, optional remote CRTs or printers are available.

More Up-Time

The MicroScan System improves scale-up time in several ways. First, the System usually detects, corrects and/or signals potentially troublesome conditions before they materialize. Second, the programmable controller has proven itself to be inherently more reliable than electro-mechanical relays. The MicroScan System itself is built to meet stringent specifications. Third, the MicroScan System simplifies trouble shooting with a standard, built-in diagnostic package which checks and analyzes over 40 scale functions.

Finally, an option of the MicroScan System makes it possible to link any scale to a computer at the Eagle Scale Diagnostic Center in Oakland, California, for comprehensive trouble shooting. The modern hook-up is accomplished via a standard long-distance telephone call. The Center is manned 12-hours-a-day by specialists who can give immediate recommendations for corrective action based on the computers diagnosis. In most cases, this eliminates the expense and delay of having to call in a factory service representative.

Data for Greater Efficiency

The MicroScan controller can generate management reports to a remote CRT screen and/or hard copy printer. This information enables management to fine tune its operations to peak efficiency.

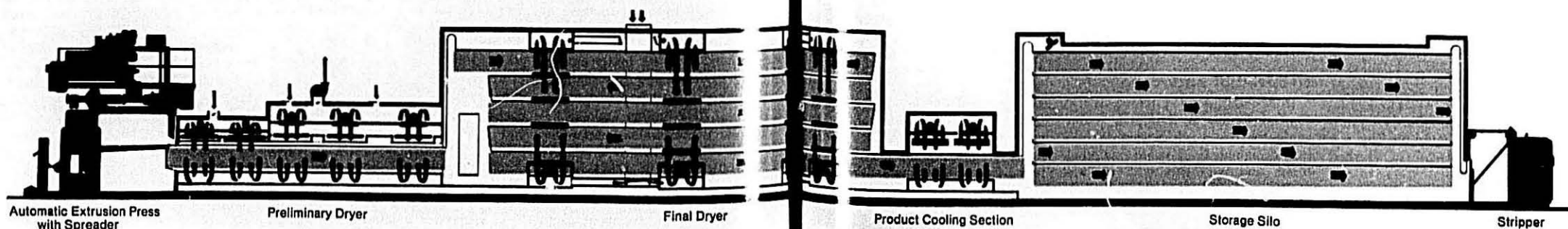
Track Data indicates the current status of the weighing operation, including bulk and precision fill time, weight accuracy per scale, average giveaway net weight, and other data for production and quality control.

Accounting Data documents equipment performance over an extended time, including output, weight comparisons, efficiency and other important longer-term production data. Some examples of management controls made possible by Accounting Data are as follows:

—Product input control. Actual dumps, multiplied by average dump weight gives actual pounds of product through each scale head. Totalling all scale heads

(Continued on page 38)

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The Eagle MicroScan system constantly monitors over 40 scale functions and provides technical scale performance information as well as data for production management control. Here, data is read out on an optional printer.



The master computer at the Eagle Diagnostic Center can communicate directly with the microprocessor in the Eagle MicroScan system, while an Eagle analyst talks to plant personnel to recommend necessary corrective action.

shows exactly how many pounds of product were sent to the scales for packaging—a vital factor for inventory control of bulk product, as well as analysis of the processing department.

—Scale efficiency. Actual dumps divided by possible dumps gives scale speed operating efficiency—useful for determining optimum feed speed, as well as highlighting starved-out-scales.

—Bag machine efficiency. Total actual dumps for all scales divided by bags packed gives the percentage of good bags produced. This can help identify bag seal problems.

—Finished product inventory control. Because the actual efficiency of most bagging machines is very high (usually 95% or more), total actual dumps can be a good indicator of what finished product inventory should be. This can identify "shrinkage" of finished product inventory.

—Shift operating efficiency. Total actual dumps over any given measurement period (shift, day, etc.), when compared with average performance levels, can clearly indicate the efficiency of a packing line operation.

—Scale weight control. Average dump weight reflects the accuracy of an individual scale, and can identify scales with poor feeds, mechanical problems, or any other factor which can lead to poor weighing.

The MicroScan System is an exclusive feature of Eagle Scales, which are among the most advanced and accurate net weighing systems available today. Eagle scales eliminate underweights and control overweights to pre-set points. These scales use a 1:1 ratio balance beam. A counterbalance weight is used on the weigh pin exactly equal to the amount of product to be weighed in the scale bucket.

A cascade feeding system delivers an even, continuous flow of product to the weighing heads. Each scale head operates independently of the other.

Hi-Speed at Pack Expo

Hi-Speed's new Computa-Weigh Control Center is a digital, micro-computer based, checkweigher control designed to provide manufacturers and packagers with reliable, on-line weight protection and information. The Computa-Weigh features easy set-up and operation, reliable under and over weight protection and expandable data gathering and production record keeping capabilities.

The Computa-Weigh is easy to set up and operate. All set-up information is entered via a keyboard and confirmed on large, easy to read digital displays. Keyboard entry simplifies set-up and changeover and maintains the environmental integrity of the control.

The Computa-Weigh is compatible with Hi-Speed's DCDT spring and flexure scale or with Hi-Speed's new strain gage load cell Dynamic Scale. The DCDT scale is best for use in limited live range checkweigher applications where optimum accuracy is required. The Dynamic Scale provides linear weight readings from 0 to a nominal capacity for absolute weight information and maximum weighing versatility. Both scales provide reliable weight protection information which can be used to provide a full range of statistical information.

The Computa-Weigh utilizes a family of functional modules to provide expandable data gathering and production record keeping capabilities. Statistical information is available on package count, accumulated weight, short-term and long-term average weight and standard deviation statistics, and an exclusive histogram feature which prints a weight distribution curve based on actual total production. Production record keeping printouts are available to provide a comprehensive hard copy record of the production weight information. This statistical information when used in conjunction with an in-plant quality control program, allows the user to control and optimize the production line's fill weight performance.

The Computa-Weigh is a culmination of Hi-Speed's 25 years of checkweighing experience and 5 years microcomputer experience. The

(Continued on page 40)

THE MACARONI JOURNAL

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The Versatile Bucket Elevators with Space Age Design-Sani-Plus Buckets (Polypropylene) FDA approved, Sanitary Delrin rollers on chain—reduces friction and wear. Pre-lubricated chain bushings where lubrication is not possible. Sectionalized uni-frame construction permits easy changes in height or horizontal run—allows for ease in cleaning and inspection. Available as standard with conventional frame or sanitary open tubular frame design. Capacities to 4000 cu. ft./hr. Write for Bulletin CAL-50

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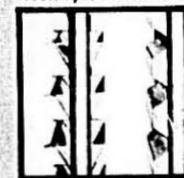


roll on tracks instead of sliding thereby reducing friction and wear.

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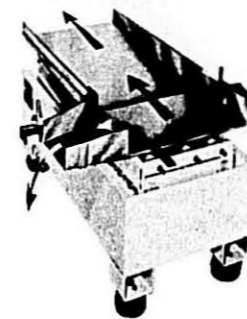


Tubular sanitary open frame model permits easy inspection and cleaning. Also available in complete stainless steel construction.

VIBRATING CONVEYORS



Vibrating Conveyors: Ideal for conveying materials gently without breakage. One piece stainless steel trays which are self cleaning meet the most stringent sanitation requirements. All units utilize corrosion free "Scotch Ply" reactor springs which can be washed down plus simple maintenance free positive eccentric drives. Capacities of up to 2500 cu. ft. hr. with lengths over 60 feet.



The Modu-Tran II Vibrating Conveyor feeds product sideways as well as in the normal forward direction. This unique development by Aseeco Corporation makes it possible to split a stream of product, to any rates of flow desired, with sanitary esthetically designed vibrators. Units can be installed in series to distribute product to multiple packaging machines or to several use points simultaneously on demand.

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Computa-Weigh

(Continued from page 38)

Computa-Weigh is the standard against which future checkweighers will be judged for years to come. It utilizes the latest state-of-the-art technology. To maintain its technical superiority, the Computa-Weigh's modular design has been conceived to accommodate future technical advances. To be of maximum usefulness, its computational and statistical capabilities are based on proven statistical weight control procedures. This comprehensive anticipatory design demonstrates Hi-Speed's continuing commitment to meet customer's package weigh control needs.

Complete information on the Computa-Weigh is available from Hi-Speed Checkweigher Co., Inc., P.O. Box 314, Ithaca, New York 14850.

Solid Progress for General Mills Canada, Ltd.

From the Annual Report for General Mills, Canada, Ltd.

As compared to the previous fiscal year the Grocery Products Division sales are up by 17.0%, the Blue Water Division sales are up by 19.4% and, even in a year in which the pasta market showed intense competitive activity coupled with little growth, the Lancia-Bravo Foods Division sales are up by 7.1%. In the Parker Brothers Division, sales increased by 43.8% over fiscal 1977. Aided by the expansion from a single store to three stores, sales for the Eddie Bauer Division are up by 95.7% over last year. Overall, sales are up 23% to \$125,464,000 from \$101,984,000 a year earlier. Net earnings after taxes were \$2,996,000 as compared to \$906,000 in the previous year. Included in these figures are the sales and net earnings of the Regal Toy Limited subsidiary which became part of General Mills Canada, Ltd. in May, 1977. The financial results for fiscal year 1978 places the Company back into a strong growth pattern.

Instant Pasta

The export activity of the Company was kept growing during the year by Lancia-Bravo sales of its new instant pasta product to General Mills, Inc. in the U.S., continued Blue Water Seafoods plus the Parker Brothers

sales to Kenner in the U.S. and the export of MBP Star Wars Kits to Europe, Japan and Australia.

Although General Mills Canada, Ltd. is extremely well known at the consumer level in terms of its specific products and brand names, it is not nearly so well known on the corporate scene. As a producer of such widely recognized foods as Cheerios Breakfast Cereal and Betty Crocker Cake Mixes, General Mills Canada, Ltd. is usually thought of as only a grocery products company. While the Grocery Products Division of General Mills Canada, Ltd. yet represents a major segment of the Company's business, General Mills Canada, Ltd., is a much more diverse company than is generally perceived. Today, other long-established names such as Lancia Spaghetti, Bravo Food Products, Monopoly Board Game, Lionel Trains, Blue Water Seafoods and many others are as much a part of the General Mills corporate scene as Wheaties Breakfast Cereal and Hamburger Helper Mixes.

Diverse Operations

In 1978, General Mills Canada, Ltd. is a diverse company with operations in consumer foods; crafts, games and toys; specialty retailing; and printing. Organizationally, the Company comprises six divisions and one wholly-owned subsidiary which are inter-related at the corporate level for financial management efficiency yet function as individual operating units, each directing its specialized capabilities towards a distinct market segment. These include the Lancia-Bravo Foods Division which specializes in pasta and other related ethnic foods; the Blue Water Seafoods Division of Lachine, Quebec; the Grocery Products Division; Parker Brothers Division which manufactures and distributes toys and games; Regal Toy Limited; the Eddie Bauer Division which comprises a chain of retail outlets which handle a wide range of outdoor wearing apparel and equipment; and the Impressions Division, which is a large scale commercial printing operation.

Peavey Gains

After a return to "more acceptable" earnings levels during fiscal 1978, Peavey Company looks toward considerable further improvement in the

current year, according to the company's annual report for fiscal year ended July 31, 1978.

"After last year's disappointing results, we are pleased to report significant improvement in operations during the year," William G. Stocks, president and chief executive officer, comments in the report. Mr. Stocks points out that the Agricultural Group returned to profitable operations after recording a loss in the previous year, and the Industrial Foods Group enjoyed another year of increased floor volume.

"While it is gratifying to see a return to more acceptable earnings levels in fiscal 1978, our expectations for the next year call for considerable further improvement," Mr. Stocks states.

Net income of Peavey in the 1978 fiscal year was \$13,918,000, equal to \$2.40 per share on the common stock, up 50% from \$9,310,000, or \$1.60 per share, in fiscal 1977. Earnings of the previous year were off 40% from fiscal 1976 income of \$15,645,000, or \$2.73 per share.

Net sales of Peavey in fiscal 1978 totaled \$522,872,000, up 6% from \$494,306,000 from the previous year. In fiscal 1976, volume of sales was \$505,822,000.

Vanier on A D M Board

John K. Vanier, Brookville, Kas., manager of the Vanier family farms and ranches in Kansas, Wyoming, Colorado and Oklahoma, was elected to the board of directors of the Daniels Midland Co. at the annual shareholders meeting.

Mr. Vanier was elected to replace his father, John J. Vanier, who was elected director emeritus by the board. John J. Vanier has been a member of the ADM board since 1970, when he also became chairman of ADM Milling Co.

Re-elected to the ADM board are Albert M. Andreas, Dwayne O. Andreas, Lowell W. Andreas, Steve M. Archer, Jr., Crowds Baker, John H. Daniels, H.D. (Joe) Hale, Erwin A. Olson, James R. Randall, Ben Schwartz, Purvis F. Tabor and Donald B. Walker.

Directors of ADM declared regular quarterly dividend of 5¢ per share on the common stock, payable Dec. 1 to shareholders of record on Nov. 10.

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very best you can buy. And those products are ready for your products right now, including fresh shell eggs, a frozen line that includes whole eggs, whites and yolks in plain, salted, sugared or colored (full NEPA range) form, and our spray-dried albumen (standard or angel type). Why not find out more about Egg City? We've got good reasons for thinking we can meet your needs — 4.5 million of them!

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Wheat Situation

from U.S. Department of Agriculture

Wheat prices have been bolstered by a strong export market, a 12 percent smaller crop, orderly producer selling, and the large farmer-owned reserve. As of October 1 the harvest was estimated at 1.8 billion bushels, the first crop in three years below the 2-billion-bushel level. The principal cause was a 15 percent reduction in harvested acreage that reflected heavy participation in the 1978 acreage set-aside and graze-out programs.

The winter wheat harvest of 1.2 billion bushels was the smallest since 1972 due to a very short crop in the soft wheat States and a 15 percent reduction in the hard wheat crop. Spring wheat producers also harvested fewer acres, but Durum growers increased plantings a third, resulting in the second largest crop on record.

U.S. wheat exports for the 1978/79 marketing year are expected to exceed 1 billion bushels for the sixth time in seven years, thus maintaining this country's recent share of world wheat trade. Earlier expectations of another good export year continue with shipments during June-October the second heaviest in history. This pace is expected to decline in the second half of the season when the Southern Hemisphere wheat harvest will stiffen competition.

World Crop Up

The world wheat crop is estimated to increase about a tenth over 1977/78 and is expected to exceed the 1976 record. Much of this increase is due to large crops in the USSR, the European Community, India, Argentina, and Australia. The result will be an easing of world trade prospects. Total utilization may be slightly below the crop so world wheat stocks will probably build in 1978/79.

Total 1978/79 wheat disappearance is projected to about match last season's record, and will exceed the 1978 crop. Domestic use may drop because wheat feeding is expected to be cut sharply, but food use should be near last season's record level so stocks at the end of the season will probably decline for the first time since 1973/74. About half of these

stocks may be in the farmer-owned reserve and CCC inventory.

Despite a large supply of old-crop stocks, wheat prices held firm through harvest, and continue to run 70 to 80 cents per bushel higher than the year before. If conditions over the next several months result in a tighter than expected world supply-demand situation, U.S. wheat prices could approach the \$3.29-per-bushel release level of the farmer-owned reserve. Still, the average farm price for the first five months of the marketing year (June-October) will be below the \$3.40 target price and eligible growers will receive deficiency payments of between \$585-\$655 million on 1978 production.

Durum Supply Up For 1978/79: Early Export Very Strong

Durum production in 1978 recovered from the short crop of 1977. Relatively strong Durum prices prevailed during the 1977/78 marketing year, and growers increased 1978 acreage about a third. As of October, the 1978 harvest is forecast at 128 million bushels, up nearly 60 percent from last year, and the second largest crop of record. North Dakota, the leading Durum-producing State, accounted for over three-fourths of the increased production. About 15 million bushels will come from Southwest "desert" durum States (California and Arizona) compared with 8 million in 1977 and 30 million in 1976.

Good Quality

Good overall quality is reported for most of the 1978 Durum crop with only minor sprout damage resulting from prolonged rains late in the harvest. Despite carryover of old-crop being down a fourth to 67 million bushels, this year's bumper harvest will push 1978/79 Durum supplies up about 10 percent to near the 1976/77 record of 190 million bushels. Only about 9 million bushels have been placed in the 3-year farmer-owned reserve program. Prospects for whittling down these huge supplies are not bright since projected total disappearance is only expected to match last year's level. Thus, carryover at

the end of the season should be up nearly a third.

Early season mill grind is running behind last year's brisk pace because Durum and semolina prices were at high premiums over hard wheat and farina. Based on the overall growth of pasta product consumption, the pressure of large supplies, and a narrowing Durum/hard wheat price spread, some increase in 1978/79 domestic demand is likely.

June-September exports were exceptionally strong, 34 million bushels compared to 16 million last year. An additional 12 million bushels of outstanding sales point to 1978/79 Durum

Exports Strong

exports close to last year's record 62 million bushels. Heavy buyers include North Africa, Italy, France, and East Germany. Last year's strong world demand for Durum in the face of the lowest world crop in 11 years found the United States to be the major source of supply. However, this year, major Durum producers (Italy and Canada) have larger production, pointing to reduced import needs from Italy and overall increased market competition.

Despite the large supply, Durum prices at terminal markets were steady at \$3.50 per bushel through the harvest. Export sales and prudent producer marketing may hold prices steady through the first half of the marketing year.

Durum Roundup

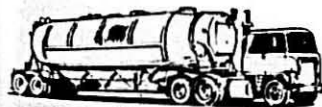
U.S.D.A. Quarterly Report

Production of durum wheat is forecast to be the second largest on record, according to the Crop Reporting Board, October 1. The high yield is 57 percent greater than a year ago but 7 percent less than 1976.

Improved yields in most major producing areas plus an increase of 31 percent in harvested acres are responsible for the production increase. Harvesting conditions were generally favorable during early September. Mid-month rains caused delays in completing harvesting, especially in Montana where 10 percent of the crop was still in the fields on October 1. However, at the same time harvest in

(Continued on page 44)

THE MACARONI JOURNAL



BOARD ALLIED MILLING CORPORATION, P. O. BOX 19148, KANSAS CITY, MO 64141 • (816) 561-9200

Durum Roundup

(Continued from page 42)

North Dakota, where yields are expected to average 30 bushels compared to 24.5 last year, had neared completion.

Stocks up slightly

U.S. durum stocks on October 1 totaled 143 million bushels (3.89 million metric tons), 2 percent more than last year's 140 million bushels (3.80 million metric tons). Farm-held stocks at 113 million bushels (3.07 million metric tons) accounted for 79 percent of the total. Disappearance of durum wheat during June through September was large, totaling 49.7 million metric tons during the same period a year ago. Increased overseas shipments contributed to the 18 million bushel disappearance.

Strong overseas demand

There was a strong overseas demand for durum during the first quarter of the crop year, and the U.S. shipped 34 million bushels, 928.2 million bushels more than a year ago, and an increase of 10.3 million bushels more than the preceding year. Algeria took the bulk of U.S. durum, importing a total of 13.2 million bushels. France, Italy, the Netherlands, Spain, Tunisia, and Venezuela combined took another 15.4 million bushels which accounted for more than half the durum exports.

Since the opening of the shipping season through October, 1978, exports of durum wheat out of Duluth/Superior accounted for a record high of 49.1 million bushels compared to 22.9 million a year ago. Canadian production up also

Canadian statistics released October 6 which are based on yields indicated September 15, show production of durum wheat for 1978 to be an estimated 101.3 million bushels, well above last year's crop of 46.9 million bushels. Yield per acre was 28.1 compared to 26.1 bushels per acre last year. The visible supply of Canadian durum in licensed storage and in transit on October 18, 1978, amounted to 563,000 tons, 24 percent less than a year ago. Canadian exports from June through September were 50 percent less than a year ago. Major importer of Canadian durum was the U.S.S.R.

MINNEAPOLIS FLOUR AND CASH PRICES

Year Beginning June	Flour		Cash	
	Standard Spring Patent	Semolina 100% Durum	No. 1 Dark Northern Spring	Hard Amber Durum
	Dollars per cwt.		Dollars per bushel	
1975/76	10.22	13.25	3.74	5.16
1976/77	8.05	8.18	2.96	3.30
1977/78	7.48	8.93	2.66	3.37
1978				
June 15	8.30	9.60	3.02	3.70
July 14	8.10	9.40	2.96	3.56
Aug. 15	7.85	9.40	3.03	3.52
Sept. 15	7.65	9.05	3.02	3.46
Oct. 13	7.90	9.55	3.18	3.74

Gloomy Transportation Outlook

Barbara L. Schlei, administrator of USDA's Agricultural marketing service, predicted bluntly that rail car shortages could severely affect grain movements next year. Similarly, spot rail car shortages could hit the fresh fruit and vegetable and fertilizer industries, while truck shortages could plague the meat industry in 1979. The problem, as detailed by Schlei, is that the "40-ft. narrow-door box car, which handled 62% of grain movements in 1970, is gradually becoming extinct." Since 1975, she noted, the number of these boxcars has declined by almost half, to 69,000 in September.

Schlei noted that the number of refrigerated rail cars has dropped by almost half in the past five years. Consequently, the railroads, which carried 24% of the fresh fruit and vegetable traffic in 1973, will haul only a predicted 8% in 1979, Schlei said.

The rail car shortage has stepped up demand for trucks, which has caused truck shortages in some areas. The causes of these shortages are economic ones, according to Schlei and A. Daniel O'Neal, chairman of the Interstate Commerce Commission.

The price of box cars, for one, increased by about one-third, O'Neal said, to \$36,300 a car this year. The ICC chairman noted that many railroads had abandoned lines that were unprofitable.

O'Neal, Schlei and John J. Fearnside, a deputy undersecretary in the Department of Transportation, said their respective agencies were working on numerous "remedies" for these

problems. However, none of the officials said rail car shortages would lessen significantly in 1979.

Freight Increase

Increases of 8% to 13% in freight rates for grain and grain products will be sought by the nation's railroads, effective Jan. 1.

Under the notice of a proposed general freight rate increase, eastern, western and southern railroads will file on Nov. 1 a petition and proposed tariff seeking an effective date of Jan. 1, 1979, for an 8% across-the-board increase with certain percentage and other exceptions in freight rates and charges on interstate traffic to and from and within all territories. A sizable number of exceptions was indicated for grain and grain products, including wheat.

On grain products and related articles, there will be a 10% increase within Eastern or Western Territory and between all territories. The latter includes wheat flour.

North Dakota Mill Expands

North Dakota Mill & Elevator Association has broken ground and began construction of a new 6,000-cwt semolina mill adjacent to its existing two units at Grand Forks, it was announced by Sam Kuhl, general manager.

Work was begun promptly after the board of directors, comprising the governor and attorney general of North Dakota and the state's commissioner of agriculture, issued final approval of the \$9 million program.

In addition to the new semolina mill, the North Dakota Mill project includes enlargement of the "A" mill to 7,500 cwt from 5,000 cwt. This mill is a "swing" unit, grinding durum flour or spring wheat flour at needed. The "B" mill is a 5,000-cwt semolina unit.

On completion of the project, targeted for June, 1980, capacity of North Dakota Mill will be 18,500 cwt, including 11,000 cwt semolina and 7,500 cwt durum flour or spring wheat flour.

The new mill, to be designated the "K" mill, is being constructed on the site of a recently-raised feed plant. Ben Hennessy, assistant general manager, is project manager on the new construction, Mr. Kuhl announced.

Contract for the milling equipment has been awarded Oerim Milling Equipment Distributors Corp., Wichita, Kas., and a representative of Oerim will supervise the machinery installation. The Oerim contract is for \$3.4 million.

Peterson Construction Co., Grand Forks, was awarded the building contract in the amount of \$2.9 million, and the mechanical contract in the amount of \$175,000 went to Gibbs & Sons, Fargo. The electrical contract in the amount of \$610,000 was awarded Como Electric Co., Grand Forks.

North Dakota Mill will continue to supply its customers with semolina, durum flour and wheat flour during the construction process, Mr. Kuhl said.

Egg Review

The nation's laying flocks produced 3.67 billion eggs during October, 1% more than a year ago, according to the Cattle Reporting Board. The number of layers during October averaged 2,000,000, virtually the same as a year earlier. Egg production per 100 layers was 2,008 eggs compared with 1,989 a year ago. Layers in November totaled 284,000,000, about the same as a year ago, but 1% more than the previous month's 280,000,000. Rate of lay on November 1 averaged 64.8 eggs per 100 layers, compared with 64.4 a year earlier and 64.9 on October 1.

Egg-type chicks hatched during October, 1978 totaled 37,600,000, vir-

Egg Products Under Federal Inspection¹

ITEM	PERIOD	
	Oct. 1, 1976-Sept. 30, 1977	Oct. 1, 1977-Sept. 30, 1978
	1,000 Dozen	
Shell Eggs Broken	674,793	688,717
	1,000 Pounds	
Edible Liquid from Shell Eggs Broken:		
Whole	424,933	415,123
White	241,173	257,861
Yolk	168,972	176,712
Total	835,078	849,696
Inedible Liquid from Shell Eggs Broken	45,344	51,330
Liquid Egg Used in Processing: ²		
Whole	487,904	450,240
White	344,964	354,490
Yolk	190,314	192,906
Total	1,023,182	997,636
Ingredients Added in Processing: ³	36,077	34,950
Liquid Product Produced for Immediate Consumption and Processing: ⁴		
Whole Plain	131,994	142,441
Whole Blends	51,572	57,134
White	148,969	140,368
Yolk Plain	25,533	19,246
Yolk Blends	36,150	41,792
Total	394,218	400,981
Frozen Product Produced: ⁴		
Whole Plain	159,814	148,293
Whole Blends	61,596	61,640
White	43,475	37,277
Yolk Plain	12,829	16,061
Yolk Blends	70,362	68,480
Total	348,076	351,751
Dried Product Produced: ³		
Whole Plain	10,371	11,090
Whole Blends	24,521	22,892
White	19,217	19,181
Yolk Plain	13,894	14,639
Yolk Blends	6,746	6,688
Total	74,749	74,490

¹ Data for 1977 include 2 more days than data for 1976.

² Includes frozen eggs used for processing. Excludes ingredients added.

³ Includes all non-egg ingredients added.

⁴ Includes ingredients added.

tually the same as a year ago. Eggs in incubators on November 1 at 33,500,000 were 3% above a year ago.

Marshall Foods Income Up

Net income of Marshall Foods, Inc., in the second quarter ended Sept. 25 totaled \$138,000, or 15¢ per share on the common stock, compared with \$38,000, or 4¢, in the comparable period a year ago. Sales in the quarter totaled \$18,084,000, up from \$17,609,000.

For the six months ended Sept. 25, Marshall had a loss of \$159,000 on net sales of \$35,348,000, compared with net income of \$101,000, or 11¢ per share; on sales of \$32,091,000 a year

ago. The company said improved second quarter results by its food divisions were offset by lower revenues in its service merchandising operations.

Operations of Marshall Foods include the Egg Products Division, supplier of dried egg products, frozen eggs, liquid eggs and shell eggs.

Peavey Strike Settled

Settlement was reached late in October on labor strikes which have shut down two flour mills of the Peavey Company since July. Workers at the Peavey mill in Hastings, Minn., accepted a new two-year contract on Oct. 25, a week after a similar settlement was reached at Superior, Wis.



PROFILE

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How to Acquire Skinner

Hershey Foods Corporation announced plans to acquire Skinner Macaroni Company of Omaha and filed a letter of intent with the Federal Trade Commission in mid-November. Discussions were under way on how to merge Skinner into Hershey as a wholly-owned subsidiary. If acquisition of the midwestern macaroni company is consummated, it will be the fourth pasta company to join Hershey. Earlier acquisitions include Delmonico Foods, Louisville, Ky., now operated as a part of San Giorgio Macaroni, Inc., Lebanon, Pa., a Hershey subsidiary. Last May, Hershey acquired substantially all of the assets of Procino-Rossi Corporation, Auburn, N.Y. The Skinner acquisition would place Hershey among the top three or four U.S. pasta manufacturers.



During the filming of new Golden Grain television spots, Charles Foll of Vantage Advertising (center), is toasted with Rice-A-Roni by actors Leslie Evans and Barbara Brownell. Cullen Houghtalling (right) directed the filming. The spots, featuring two new Rice-A-Roni flavors, were produced by DePatie-Freleng of Hollywood and are currently on the air.

Lloyd E. Skinner is chairman of the board of Skinner Macaroni and W. A. Henry is president. Executive vice-president is C. Mickey Skinner.

The Skinner plant in Omaha has a listed capacity of 250,000 lbs. of pasta production per day, including cut goods, long goods, extruded noodles and nested goods. Brand names are Skinner, Gold Medal and Roma. The plant is one of the nation's most modern and includes a recently-installed micro-wave drier with a 4,000 lb. Buhler press.

Borden to Buy Creamettes

Borden Inc. said it signed a definitive agreement to purchase Creamette Co., a maker of pasta products, in a stock swap valued at about \$32 million.

Borden will exchange 1,171,414 shares of common for the stock of Creamette, a privately held concern based in Minneapolis.

Completion of the transaction, which has been approved by both companies' boards, awaits approval by Creamette shareholders.

Borden's entry into the pasta market, its first, is the latest of several acquisitions of pasta companies by larger, diversified food processors.

Labatt Report

John Labatt is a Canadian corpor-

ation composed of 14 breweries, consumer products under a half a dozen classifications including Catelli which is Canada's largest pasta producer, and an agri-products division which includes Ogilvie Flour.

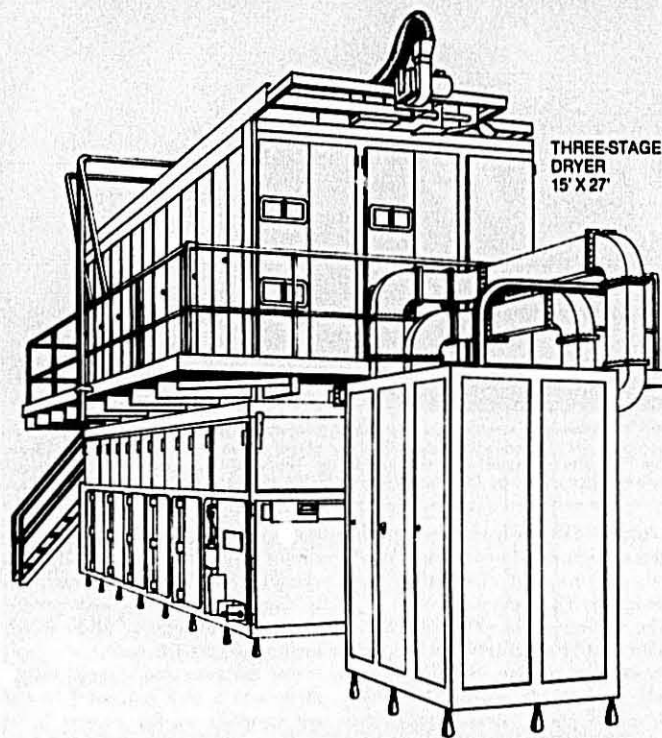
For the year ended April 30, 1978, there was a 20.8 percent increase in net earnings; an 8.1 percent increase in gross sales; improved results in all three groups—brewery, consumer products, and agri-products.

In the consumer products group results improved for the fifth consecutive year with major contributions coming from a significant turn around in wines and continuing profit growth in U.S. foods. Laura Secord contributed to the improvement although still in a loss position after accounting for the adverse effects of foreign exchange of purchases of cocoa and other imported commodities. Catelli profit increased moderately, and Parnell had a slight improvement.

Ogilvie Flour had an excellent recovery from an industry-wide strike in Quebec in the last quarter of 1977 and first quarter of 1978.

Specific examples of internal growth may have a relatively small impact on corporate results, but Catelli was an excellent example of their collective importance. This division's earnings have increased significantly due to market share gains, product development, and increased efficiency.

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- SKINNER, Omaha, Nebraska 1 unit

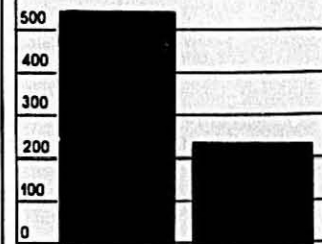
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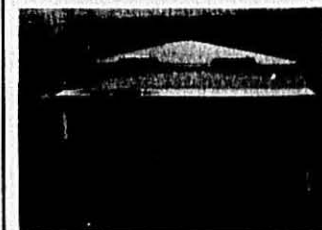
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Microwave dryer compared with conventional dryer



Pasta drying operation from production line comparisons by two major processors



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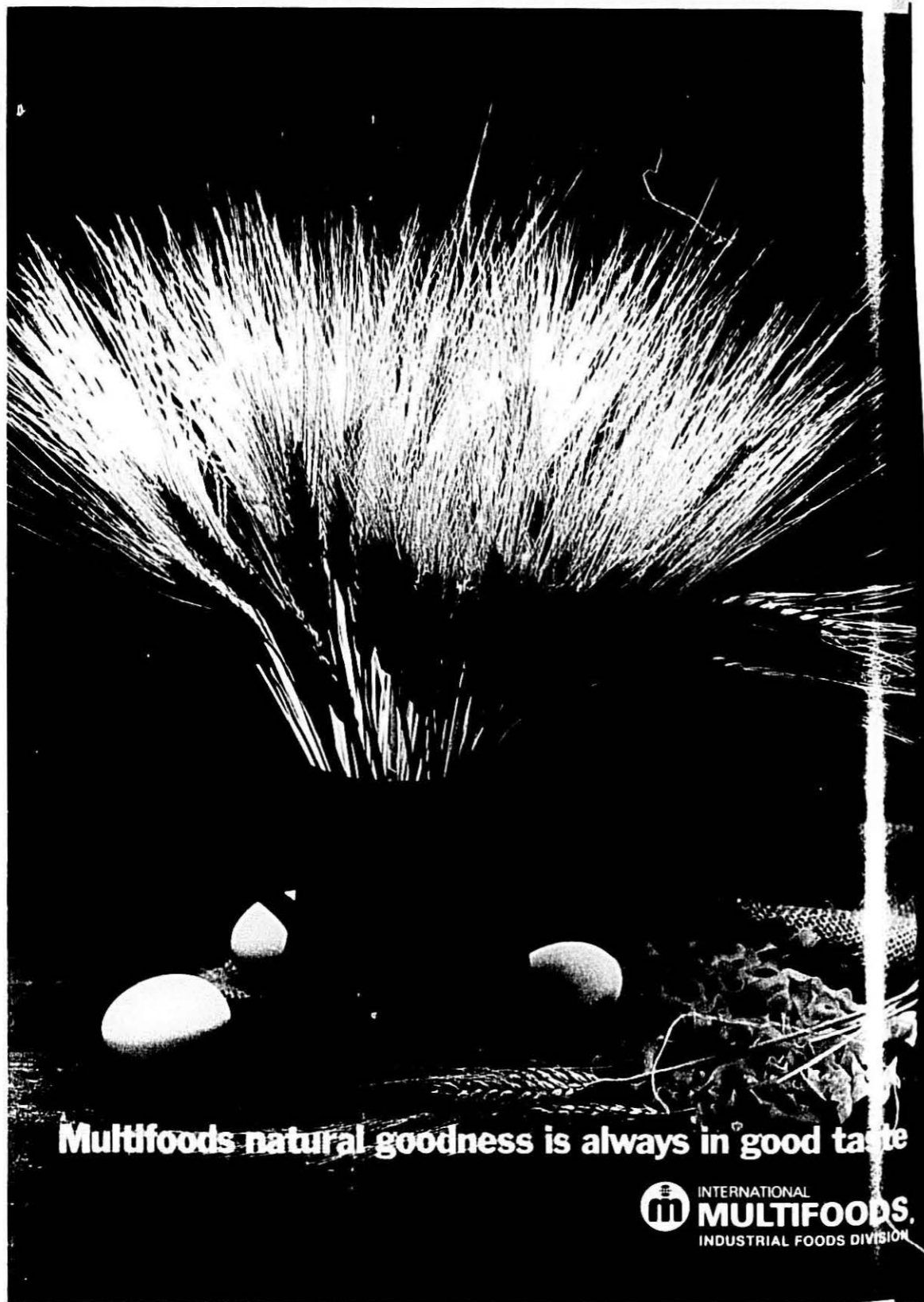
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