

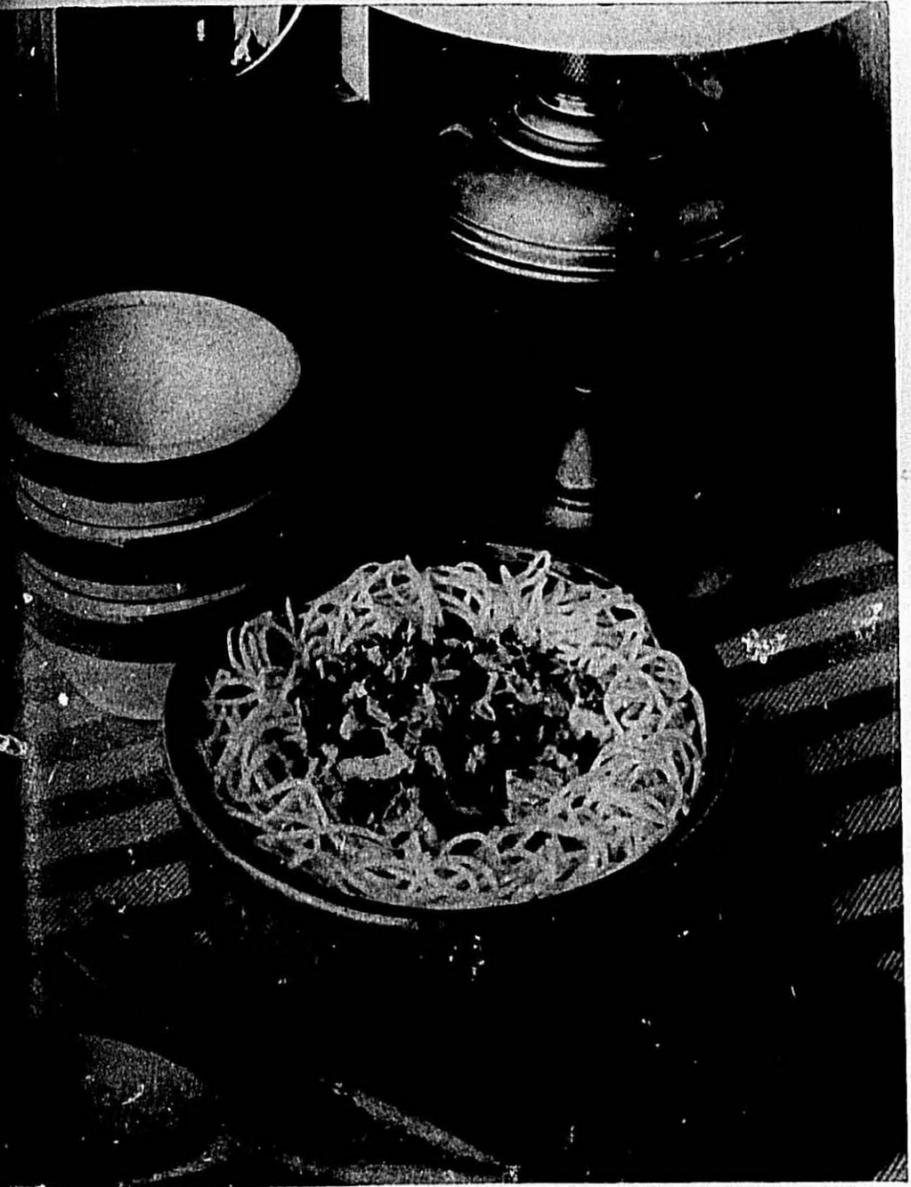
**THE  
MACARONI  
JOURNAL**

**Volume 58  
No. 9**

**January, 1977**

*Macaroni Journal*

JANUARY, 1977



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## Macaroni Journal

January  
1977  
Volume 58  
Number 9

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### In This Issue:

	Page
Winter Meeting Program .....	6
Back to Basics with Spaghetti .....	7
The Wheat Situation—Quarterly Durum Report .....	10
Quality of U.S. Southwestern Grown Durum Wheat .....	11
Rossotti Joins Garber Co.—British Developments .....	18
Canadian Food Industry Conversion to Metric .....	20
Private Label Versus National Brands .....	24
Meeting Changing Conditions .....	24
Market References .....	27
Complexities of "Food Standards" .....	30
Noodles Galore—Effective Advertising .....	34
Campbell Achieves Records .....	36
Scientist Criticizes Verbal Hogwash .....	37
Cereal Chemists Meet .....	40
Index to Advertisers—A. J. Ravarino Dead .....	42

### Most Businesses Die with the Owner—Will Yours?

This is the title of a Special Family Business Report released by the Independent Business Institute. It presents, in detail, two true case histories which show how simple errors or omissions in estate planning can not only foil a business owner's intentions but destroy his family as well.

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In the second case, a seemingly straight-forward will, leaving half of a man's estate to his young widow and the rest to his two daughters by a previous marriage, was completely

upset by one injudicious phrase. Because of this error, 94% of the estate went to the very merry widow and the daughters received next to nothing.

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Production	413	136	2,137
Supply	529	191	2,793
Domestic Use	168	49	820
Exports	160	45	1,100
Use	328	94	1,920
Stocks, 5-31-77	201	97	873



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## NATIONAL MACARONI MANUFACTURERS ASSOCIATION

# WINTER MEETING

February 9-13, 1977 — Boca Raton Hotel & Club

Boca Raton, Florida 33432

### WEDNESDAY, FEBRUARY 9

- 2:00 p.m. Convention Registration Desk Opens in the Main Lobby.
- 3:00 p.m. Executive Committee meets in the Madrid Room.
- 6:30 p.m. Welcoming Reception in Cafe Galeria.
- 7:30 p.m. Dinner in Patio Royale.

### THURSDAY, FEBRUARY 10

- 8:00 a.m. Breakfast in Cathedral/Court.
- 9:00 a.m. Breakfast Session in the Granada Room.  
Greetings from President Lawrence D. Williams.
- 9:15 a.m. N.M.M.A. Sales Index—Joseph P. Viviano.
- 9:30 a.m. Conducting An Energy Audit—Charles J. Niskey.
- 9:45 a.m. Developments on Handbook 67—Val C. Bremer.
- 10:00 a.m. Progress in Canadian Metrification—John F. Ronald.
- 10:15 a.m. Report of the Director of Research—James J. Winston.
- 11:00 a.m. Joint Meeting of the Standards and National Affairs Committees.
- 12:00 noon Adjournment at noon.
- 2:00 p.m. Tennis Mixer at the Tennis Courts—Golf Tourney Sign up in advance.
- 6:30 p.m. Suppliers' Social in Camino Hall.
- 7:30 p.m. Pasta Party in the Great Hall.

### FRIDAY, FEBRUARY 11

- 8:00 a.m. Breakfast in Cathedral/Court.
- 9:00 a.m. Durum Wheat Improvement—Dr. James S. Quick.
- 9:30 a.m. Cereal Technology Projects—Dr. Brendan J. Donnelly.
- 10:00 a.m. Work of the Crop Quality Council—Vance V. Goodfellow.
- 10:20 a.m. Status of Wheat and Wheat Foods Bill—U.S. Durum Show—Lloyd E. Skinner.
- 10:40 a.m. Durum Industry Advisory Committee—Alvin Kenner.
- 11:00 a.m. Joint Meeting of the Durum Relations Committee, Durum Wheat Institute, Durum Advisory Committee.
- 12:00 noon Adjournment at noon.
- Afternoon at leisure—Continuance of committee meetings.
- 6:30 p.m. Suppliers' Social at Garden Pool.
- 7:30 p.m. Dinner on your own—Patio Royale.

### SATURDAY, FEBRUARY 12

- 8:00 a.m. Breakfast in Cathedral/Court.
- 9:00 a.m. National Macaroni Institute Report—Elinor Ehrman.
- 9:30 a.m. Durum Wheat Institute—HRI Report—Robert M. Howard.
- 10:00 a.m. North Dakota State Wheat Commission—Movie Distribution—Spaghetti Safari—Judith / lams.
- 10:30 a.m. Constitutional Audit—Harold T. Halfpenny.
- 10:50 a.m. Meeting of the National Macaroni Institute Committee.
- 12:00 noon Adjournment at noon.
- Afternoon at leisure—Continuance of Committee meetings.
- 6:30 p.m. Suppliers' Social at Garden Pool.
- 7:30 p.m. Banquet in the Great Hall.

### SUNDAY, FEBRUARY 13

- 8:00 a.m. Breakfast in Cathedral/Court.
- 9:00 a.m. Board of Directors Meeting in Madrid Room.  
Adjournment at noon.



Boca Raton Hotel and Club

### Boca Raton Hotel and Club

It all started in 1926 when Addison Mizner opened the massive doors of his exclusive 100 room Cloister Inn. Now, its fifty-first year, this Spanish style is capable of handling a meeting of 1,200 people. The Macaroni Meeting will run about 250, so there will be other groups in the house at the same time we are there.

A recently completed tower has 250 guest rooms. Nestled among the fairways are sixty new Golf Course Villas. The majority of our group will be housed in the Main Building and the business meetings will be in the convention center.

Currently under construction is a multi-purpose building located north of the main section. When completed, it will contain a coffee shop, meeting room for 100 persons, game room and computer center. Accommodations alone are not enough. The key word at Boca Hotel and Club is "service". They were recently recipients of the Mobil Travel Guide Five Star Award for the seventh consecutive year.

### Getting Jack To Basics With Spaghetti

Getting back to basics, doing more home cooking can mean valuable savings in time and money . . . very important points for today's menu planner. Spaghetti dinners are dependable suggestions.

How about spaghetti with a mixed seafood sauce of tuna and clams colorfully laced with chopped parsley and pimiento? The appetizing dish can be

put together in about fifteen minutes at an approximate cost of two dollars for four servings!

With a spaghetti selection like this, you have the guarantee of a nutritious meal. Spaghetti contains a good distribution of essential amino acids and when combined with the seafood or other complete protein foods is a fine protein source. You enjoy the benefits of B vitamins - thiamine, niacin and riboflavin - in addition to iron. You get energy from the carbohydrate content. And remember, spaghetti is classified as a low fat, low sodium food.

### Spaghetti with Seafood Sauce (Makes 4 servings)

- 8 ounces spaghetti
- 1 tablespoon salt
- 3 quarts boiling water
- ¼ cup margarine or butter
- ¼ cup chopped onion
- 1 can (6½ or 7 ounces) tuna, drained and flaked
- 1 can (8 ounces) minced clams, undrained
- ½ cup chopped parsley
- ¼ cup diced canned pimiento
- Grated Parmesan cheese (about ½ cup)

Gradually add spaghetti and salt to rapidly boiling water so that water continues to boil. Cook uncovered, stirring occasionally, until tender. Drain in colander.

While spaghetti is cooking, in medium saucepan melt margarine. Add onion and saute until tender. Stir in tuna, clams, parsley and pimiento and cook until heated through. To serve,



Spaghetti with Seafood Sauce

toss spaghetti with seafood sauce. Sprinkle on Parmesan cheese.

Preparation time: about 15 minutes.  
Cost per serving: approximately 50 cents (based on New York City prices).

### Push Pasta

National Macaroni Institute advertising in Supermarket News to grocers says:

### Related Sales Idea No. 5

Push Pasta and Seafood in February  
Americans annually spend:  
\$747 Million for Pasta Products  
\$3 Billion for Seafood  
Get your share by pushing pasta and seafood for profit!

### Prima Salsa 15c Coupon

Hunt's Prima Salsa ran a national "Buy One Get One Free Plus 15¢ Coupon" promotion in early December, adding an additional 35 million coupons to the 70 million already distributed since advertising started in late September.

The December promotion will give consumers a 15¢-off coupon on their first purchase of any size of Hunt's Prima Salsa. Consumers can then send away for a coupon for a free 15½-oz. jar of any flavor. The two-part promotion will be delivered in newspaper ads in over 450 newspapers nationwide.

The "Buy One Get One Free plus 15¢ Coupon" is Hunt's Prima Salsa's third major coupon event since the brand was introduced nationally this summer.

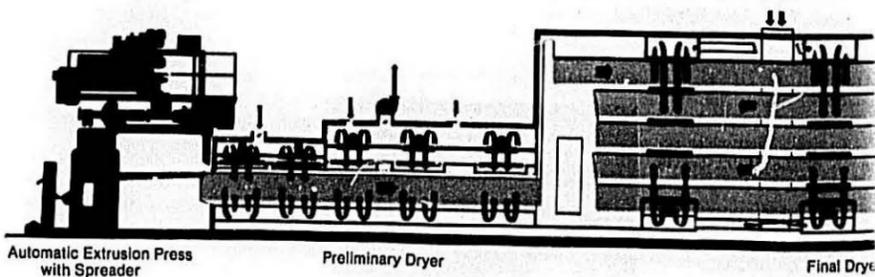
The first round of couponing, in early October, consisted of 25¢ coupons delivered via a national newspaper effort with a circulation exceeding 40 million.

The second round employed national magazines—Family Circle, Reader's Digest, Good Housekeeping—to deliver 10¢ coupons to over 30 million.

A spokesman for Hunt-Wesson Foods, the California-based firm that introduced the brand, said that consumer trial from the massive early coupon efforts appeared to be high, although it was too early to have any firm indications.

New and different spaghetti sauce—Ragu' Extra Thick and Zesty—is available in plain, meat flavored, and mushroom flavors. As with traditional Ragu', it is made just like homemade sauce.

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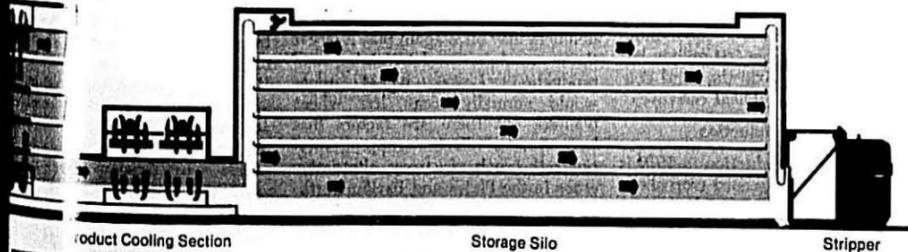
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## The Wheat Situation

Economic Research Service,  
U.S. Department of Agriculture

The hardness of the wheat plant was once more evidenced as it weathered a series of adverse conditions and still yielded a 1976 U.S. wheat crop that narrowly missed setting a new record. U.S. growers planted 80.2 million acres of wheat, the largest acreage since 1949. Despite drought over much of the Plains which caused heavier than usual abandonment, harvested yields were only slightly below 1975 and production is estimated just short of 1975's record of 2,134 million bushels. However, a substantial increase in beginning stocks on June 1, in addition to the large crop, means that total supplies are the largest since the early 1960's.

Domestic use of wheat is expected to climb about 10 to 15 percent from last season's 729 million bushels. This increase will come from livestock and poultry feeding, which is estimated to be more than double last year's 75 million bushels, since wheat prices have been unusually low relative to feed grains. Little change is expected in wheat's food use.

June-September exports totaled about 400 million bushels compared to 429 for that period in 1975/76. With larger wheat crops around the world, exports for the year are expected to range from 1.0 to 1.2 billion bushels, compared to last year's 1,173 million. Balancing supply and disappearance, ending stocks are estimated to be in the 780 to 960 million-bushel range, up from 664 million last season. This would be the third consecutive increase in wheat carryover.

### World Production

World wheat production in 1976 is expected to total a record crop about 15 percent above last year's crop of 349 million metric tons. The increase is due largely to the Soviet Union's dramatic recovery in wheat production and to Canada's outstanding season which resulted in a 38 percent increase to a new record high. A sharp increase in Argentina's wheat area may result in a crop about a fifth above last year's and the largest in over ten years. The European winter wheat crop escaped the ravages of last summer's drought; Western Europe harvested 5 percent more wheat

and Eastern Europe gained 12 percent. Among the major exporters only Australia will harvest a significantly smaller wheat crop this season. The record world crop, which also includes better crops in some traditional importing countries, will likely lead to a reduction in world trade of about 5 percent.

After a bullish start, the 1976/77 wheat crop year turned bearish in the August-October period. Surprisingly high wheat prices early in the season gave way to a prolonged decline in prices which only recently appeared to have bottomed out at the lowest level in 3 years. Over a 3-month period market prices lost over a dollar. For the season, it now appears that farm prices may average between \$2.75 and \$3.25 per bushel.

### Loan Rate Raised

On October 13, USDA announced an increase in the wheat loan rate from \$1.50 to \$2.25 per bushel. This will give most farmers an improved option to market orderly by placing their wheat under loan. Loan activity has been running ahead of last year and has reportedly picked up since the announcement.

### Winter Wheat

By the end of October winter wheat farmers had nearly finished planting their 1977 crop. While extreme dryness slowed early seeding, rains have now been sufficient in most areas to get the crop in and off to a generally good start. But subsoil moisture is still deficient and abandonment may once again play a larger than normal part in determining total production. Lower wheat prices would normally mean less wheat planted, but there are factors that have counter effects—cropping rotations; the lack of strong alternative crops in the Plains and Pacific Northwest; demand for winter wheat pasture in the Southern Plains; expansion of double cropping; and the higher loan rate. Apparently winter wheat producers have planted heavily again and if moisture improves next spring, wheat plantings may total near the 80 million acres for 1976 crop.

### Durum

Durum growers in the traditional Northern Plain states reduce their acreage by 10 percent in 1976. Part of this decrease was offset by a sharp

expansion of irrigated acreage in the Southwest so total Durum planting fell only 2 percent. The 1976 Durum yield increased from 28.4 in 1975 to 29.6 in 1976 on the strength of the 70-bushel-per-acre yields in the Southwest. The increased yield more than offset the slight decline in harvested acres to produce a record Durum crop of 136 million bushels.

Growers of other spring wheat expanded acreage dramatically to 17 million acres, 26 percent above 1975. The spring crop was generally planted ahead of schedule under good conditions, but then dry weather in Minnesota and the Dakotas began to plague the crop and caused the harvesting rate to decline slightly. Although yields were down in some States, the crop as a whole received sufficient rain in time to raise the average yield to 26.9 from 1975's 26. The improved yields and increased acreage resulted in a record crop of 448 million bushels, 25 percent more than in 1975 and 38 percent more than in drought-stricken 1974.

### Quarterly Durum Report

Durum Stocks Up 33 Percent—  
Prices Fall

The Crop Reporting Board on October 1 forecasted a record high Durum crop of 136 million bushels, 10 percent larger than the 1975 crop and 67 percent above the 1974 production. Acreage harvested was 2 percent from last year and average yield increased 3.2 bushels from a year ago. The 1976 crop includes Arizona and New Mexico. Harvest progressed well in September. North Dakota was virtually completed in September, considerably ahead of last year.

Land preparation and planting of small grains in the non-traditional durum producing states got underway in mid-October. Durum plantings expected to be cut sharply in the non-traditional states. Farmers are switching to hard red winter wheat due to the weaker durum cash market and lack of foreign contracts for next year's crop.

Stocks: Durum wheat stocks in all positions totaled 152 million bushels, 33 percent greater than last year and 66 percent more than on October

1. Farm storage of 113 million bushels was up 30 percent from the previous year. Off-farm holdings at 39 million bushels were 42 percent above last year. Disappearance during the June-September period amounts to 10 million bushels.

Exports: U.S. exports of durum wheat during the June-September period totaled 23.7 million bushels, which was an increase of 4.9 million bushels over the previous year. Algeria, Italy and Russia were the largest importers with a total of 14.4 million bushels exported to these three countries. In spite of the increased exports, the market undertone continues soft with surplus stocks.

Canadian Situation: According to Canadian statistics released October 8, based on yields indicated at September 15, production of durum wheat for 1976 was estimated at 101.0 million bushels, which was well over the last year's record crop of 93.2 million bushels. The yield per acre indicated was 31.1 bushels per acre compared to 25.5 bushels per acre a year ago. Exports overseas of Canadian durum wheat from June through September totaled 21 million bushels. The major market was U.S.S.R., taking 14 million bushels.

Since 1919 when the U.S. Department of Agriculture started reporting production data of durum wheat from other spring wheat, the statistics show that North Dakota is the major producer of durum wheat in the U.S. (1). For example, in 1975 and 1976 North Dakota accounted for 83 to almost 90% of the total U.S. durum production. This was due to the variable and growing conditions in other areas. The major deficiencies were lower wheat and semolina protein content and poorer color of the processed spaghetti.

The durum wheat crop in the southwest has been harvested and it was of interest from the cereal chemists standpoint to evaluate the market quality of this wheat, its milling properties and spaghetti producing characteristics. The results were compared with the average quality data seen for the durum crop from the 1975 North Dakota harvest (6).

As can be seen in Table 2, the planted durum wheat acreage in Arizona was estimated at approximately 319,000 acres with an average yield of 70 bushels per acres. This high acreage yield can also be seen for New Mexico and California and can be attributed to the use of irrigation coupled with high fertilization and ideal growing conditions.

Table 3 shows the southwest samples evaluated, their source and varietal identity. These samples were randomly selected by the Crop Quality Council and represented typical commercial durum wheat quality grown in that area. The WVD prefixes, representing "Western Durum" were

## Quality of U.S. South-Western Grown Durum Wheat

by Brendan J. Donnelly<sup>2</sup>

<sup>1</sup> Published with the approval of the Director of the Agricultural Experiment Station, North Dakota State University, Fargo, North Dakota, as Journal Series No. 707.

<sup>2</sup> Associate Professor, Department of Cereal Chemistry and Technology, North Dakota State University, Fargo, North Dakota 58102.



Brendan J. Donnelly (left) accepts a check for a Cereal Technology fellowship from NMAA Executive Secretary Bob Green.

periment Station had shown that although the external appearance of some Arizona produced durum was acceptable, the quality, as assigned by established criteria, was inferior to that produced in North Dakota and

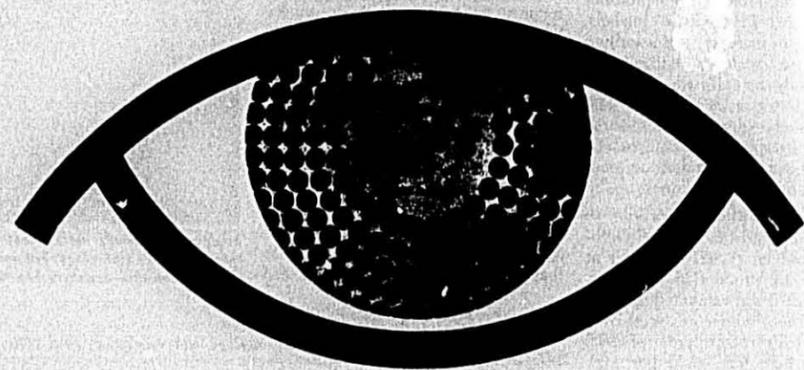
TABLE 1  
U.S. and North Dakota Durum Acreage and Production, 1962-1976\*

Year	Million Acres Planted		Production, Million Bushels		
	U.S.	North Dakota	U.S.	North Dakota	North Dakota %
1962	2.42	1.92	71.8	59.6	83.0
1963	1.99	1.65	50.4	43.8	86.9
1964	2.38	2.00	66.7	57.9	86.8
1965	2.23	1.94	69.9	61.1	87.4
1966	2.44	2.08	63.2	55.1	87.2
1967	2.75	2.29	66.4	54.9	82.7
1968	3.56	2.93	99.5	83.4	83.8
1969	3.33	2.78	106.3	91.8	86.4
1970	2.11	1.84	52.8	46.1	87.3
1971	2.86	2.53	91.8	82.1	89.4
1972	2.59	2.33	72.9	65.5	89.8
1973	2.95	2.59	78.5	69.6	88.7
1974	4.07	3.50	79.2	68.8	86.9
1975	4.67	3.96	123.2	104.9	86.4
1976**	4.59	3.64	137.2	94.6	69.0

\* Data from the Wheat Situation, Economic Research Service, USDA.

\*\* Estimate (9-1-1976).

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**TABLE 3**  
Wheat Quality Data—Southwest Durums

Sample	Variety	Source	Grade	Test Weight (lb/bu)	Moisture (%)	Falling Number (sec.)	1000 Kernel Weight (g.)	Protein* (%)	Ash* (%)	Kernel Distribution (%)			
										Large	Medium	Small	
WD-1	Blend	Ariz./N.M.	1H HAD	62.1	8.1	494	49.5	11.7	1.48	65	33	2	
WD-3	Produrum	Ariz.	1H HAD	62.8	7.8	540	47.6	12.1	1.61	67	31	2	
WD-4	Mexicali	Ariz.	1H HAD	62.8	8.2	709	59.9	12.6	1.85	88	11	1	
WD-6	Cocorit	Ariz.	1 HAD	61.4	7.7	632	41.5	11.6	1.77	49	49	2	
Average—Southwest durums				62.3	8.0	594	49.6	12.0	1.68	67	31	2	
1975 N.D. State Survey Average				1 HAD	61.5	12.6	388	40.8	13.3	1.65	36	60	4
WD-2	—	Calif.	1H HAD	62.2	9.0	428	46.7	12.4	1.92	64	35	1	
WD-5	Crane	Ariz.	3 HAD	58.4	8.7	538	40.7	13.2	3.03	31	66	3	
WD-7	Modoc	Ariz.	1H HAD	62.3	8.0	539	42.7	12.7	2.05	53	45	2	
Average—Southwest durums				61.0	8.6	502	43.4	12.8	2.33	49	49	2	
Overall average—Southwest durums				61.7	8.2	554	46.9	12.3	1.96	60	38	2	

\* 14.9% moisture basis.

**TABLE 2**  
1976 Durum Wheat Production State-by-State\*

State	Acres Planted (x1000)	Yield bu/a	Production mil. bu.	Production %
Ariz.	319.7	70	22.3	16.3
Calif.	83.7	75	6.2	4.5
Minn.	86.3	32	2.8	2.0
Mont.	295.3	29	8.6	6.3
N.M.	18.7	70	1.3	0.9
N.D.	3,640.2	26	94.6	69.0
S.D.	150.9	9	1.4	1.0
U.S.	4,594.8	30	137.2	100.0

\* Estimate (9-1-1976).

used by the Crop Quality Council for identification purposes.

#### Wheat Quality

The wheat quality data are shown in Table 3. Samples WD-2, WD-5 and WD-7 contained soil particles which could not be removed from the wheat by mechanical cleaning with the Carter Dockage Tester and Forster Scourer. Because the presence of such soil particles obviously had an adverse effect on many of the quality characteristics determined on these samples, WD-2, WD-5 and WD-7 are considered separately in this report. Insufficient quantities of these three samples were available for washing to remove the dirt and subsequent milling and processing evaluation.

Official U.S. wheat grades, as determined by a federally licensed Grain Inspection Service, ranged from 1H HAD to 3 HAD. Test weight ranged from 62.8 to 58.4 pounds per bushel. The average test weight for the clean wheat was 62.3 pounds per bushel which was 0.8 pounds per bushel higher than the average value obtained for the 1975 North Dakota sur-

vey. The dirt containing samples averaged 0.5 pounds per bushel lower than the state average. Wheat moisture was relatively low in all samples, averaging 8.0 and 8.6 per cent for the clean and unclean wheat, respectively. Falling number, an indicator of whether or not sprouting has taken place, was no problem with any of these samples. A value of 250 or less indicates possible sprout damage. Kernel distribution all samples showed, on the average, a higher percentage of large and a lower percentage of medium and small kernels when compared to the corresponding average values seen in the North Dakota survey. As would be expected this higher large kernel content had a significant effect on 1000 kernel weight. The average 1000 kernel weight for the clean samples was 49.6 g which was 8.8 g higher than the survey average. The samples containing dirt particles averaged 2.6 g higher in 1000 kernel weight than the survey average. Wheat protein averaged 1.3 and 0.5 percentage points lower for the clean and unclean wheat, respectively, when compared with the North Dakota average of 13.3 per cent. Wheat ash for the clean samples was similar to the state survey average of 1.65 per cent. The samples containing soil particles showed high ash values, with an average of 2.33 per cent.

The physical appearance of the southwest durum wheat was, in general, very good. Large, vitreous, amber colored kernels were a significant feature of the samples and the yellowberry content was not considered unusually high. There was evi-

dence of black point in all samples except WD-4 and WD-6. A potential problem with the low moisture levels seen in these southwestern durums is the high probability of kernel breakage on shipping and mechanical handling.

#### Semolina and Spaghetti Quality

Semolina extraction, on an experimental Bühler mill, averaged 5.1 and 3.8 percentage points higher for the clean and unclean samples respectively than the survey value of 53.1% (Table 4). This higher extraction level reflects the large kernel size and 1000 kernel weight seen for these samples. The average semolina protein levels were lower and the average semolina ash levels were higher than the corresponding survey values. Again, the high ash levels in the unclean samples reflects the soil particles present which were impossible to remove by mechanical means. The presence of these soil particles and soil point also affected the semolina count of these samples which averaged 75 specks per 10<sup>2</sup> inches

versus 17 seen for the survey. One of the problems encountered with processing this semolina spaghetti was the effect of lower protein. Semolina is normally processed in this laboratory on a DeLeco extruder under vacuum at 5.5% absorption (7). It was found that the semolina samples with protein values lower than 11% required higher absorption levels to gain proper consistency before extrusion. In a commercial operation these absorption adjustments could cause some difficulty in producing a uniform product. Spaghetti color scores on the aver-

**TABLE 4**  
Semolina and Spaghetti Quality Data—Southwest Durums

Sample	Semolina Protein %	Semolina Ash %	Semolina Speck Count per 10 <sup>2</sup> in. <sup>2</sup>	Spaghetti Cooking Quality			
				Spaghetti Color	Cooked Weight (g.)	Cooking Loss %	Firmness (g.cm.)
WD-1	10.8	0.60	30	5.5	38.2	9.2	3.0
WD-3	10.6	0.59	23	6.0	37.4	9.1	2.7
WD-4	11.5	0.75	23	8.0	37.1	8.5	3.7
WD-6	10.4	0.69	33	6.0	38.0	8.3	3.2
Avg.	10.8	0.66	27	6.4	37.7	8.8	3.2
1975 N.D. State Survey Average				9.1	36.5	7.5	3.7
WD-2	11.3	0.71	47	8.0	36.1	8.2	3.9
WD-5	12.2	0.90	100	4.5	35.1	9.0	4.1
WD-7	11.3	0.70	77	8.0	37.3	8.6	3.5
Avg.	11.6	0.77	75	6.8	36.2	8.6	3.8
Overall Avg.	11.2	0.71	48	6.6	37.0	8.7	3.5

age were low. Color, measured on a Hunter Color Difference meter for lightness and yellowness, is measured on a scale of 4.0 to 11.0, with scores of 9.0 or greater representing bright amber color (8). The color scores determined for the southwest durums were significantly inferior to the 9.1 average value seen for the 1975 survey. The 8.0 values obtained for WD-4 (Mexicali) and WD-7 (Modoc) represent dull amber color.

Spaghetti cooking quality of the low protein samples WD-1, WD-3 and WD-6 were inferior when compared with the 1975 North Dakota average values. Average cooked weight and cooking loss values were higher and the cooked firmness scores were lower than the average for the survey. These low firmness scores represent unduly soft cooked products. The other samples had cooking quality quite similar to the North Dakota average values.

#### Summary

In general, the representative samples of durum wheat from Arizona, Southern California and New Mexico exhibited inferior quality factors in the milled and processed products when evaluated by established criteria used for North Dakota durum wheat. Such deficiencies as relatively low protein levels, high ash (in the samples difficult to clean by mechanical means), low spaghetti color scores and generally poorer cooking quality will most likely have an adverse effect on the marketability of this wheat. Of the durum varieties

grown in the southwest, Mexicali and Modoc appear to be two that represent future promise for wheat quality grown in that area.

#### Literature Cited

1. Agricultural Statistics, USDA.
2. Donnelly, B. J., and Gilles, K. A. Changes in production and utilization of durum wheat and durum products. Proceedings of the Ninth National Conference on Wheat Utilization Research. Agricultural Research Service, USDA 76-85 (1976).
3. Wheat Crop Data State-by-State. *Milling and Baking News* 55 (30), 24 (1976).
4. Wheat crop estimate at record high. *Milling and Baking News*, 55 (33), 7 (1976).
5. Sibbitt, L. D. Private communication.
6. Banasik, O. J., Sibbitt, L. D., and Donnelly, B. J. North Dakota Wheat Quality Report (Durum) 1975. Agricultural Experiment Station, North Dakota State University, Fargo, North Dakota 58102.
7. Walsh, D. E., Ebeling, K. A., and Dick, J. W. A linear programming approach to spaghetti processing. *Cereal Science Today*, 16: 385 (1971).
8. Walsh, D. E. Measurement of spaghetti color. *The Macaroni Journal*, 52 (4), 20 (1970).

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### From The Peavey Annual Report

Achieving its best year in history, the Industrial Foods Groups increased earnings 54% from \$7.6 million in 1975 to \$11.8 million in 1976. Net sales were down 2%, reflecting lower wheat prices.

Flour volume increased 12%, outpacing the industry's 7 to 8% gain. This performance was achieved by increasing market share with new wholesale, specialty and government flour business. Also, as ingredient cost pressures subsided, traditional bakery flour customers increased their consumer sales—and flour orders.

Industrial Foods Group management of grain procurement, including control of wheat inventories; and operating efficiencies with firm control of manufacturing costs, further enhanced profitability. As one of the largest flour millers, Peavey has a daily production capacity of 95,000 hundredweights at nine mills across the country.

While the volume of durum products for pasta manufacturers was up, competitive pressures led to lower net sales and earnings. Pasta manufacturers blended more expensive durum with more favorably priced bakery flour to offset cost pressures, and lower meat prices caused a decline in consumers' use of pasta products to extend meat meals.

#### First Quarter Earnings Down

Peavey Company said preliminary indications are that first quarter earnings will be down about one-third from the record first quarter earnings a year ago.

Chairman Fritz Corrigan said it appears that Peavey's Agricultural Group will report a substantial earnings decline during the first quarter. "Farmer holding action because of low grain prices, low water problems on the Mississippi River, and a work stoppage at our Superior, Wisconsin export elevator during the entire quarter were principal factors causing the earnings decline," he said.

He further stated, "it appears that the Industrial Foods Group will be off from an excellent quarter a year ago but that Consumer Foods and Retail Groups are continuing their growth of recent years."

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**Rossotti Joins  
A. L. Garber Company**

Charles C. Rossotti, President of Rossotti Consultants Associates, Inc., has announced recently the association of Rossotti with the A. L. Garber Company. The Garber Company, which manufactures folding cartons as well as other paper or specialty products, is part of Wheelabrator-Fry Inc., a four hundred million dollar conglomerate. The Garber Company was established in 1896 and has four folding carton plants located in Chicago, Illinois; Ashland, Ohio; Syracuse, New York and Victory Mills, New York (45 miles north of Albany). Sales Offices are maintained in New York City; Paramus, New Jersey; Syracuse, New York; Ashland, Ohio; Chicago, Illinois and Victory Mills, New York. The Garber Company maintains complete packaging and designing facilities and supplies some of the largest folding carton users in the country.

With a complete sales and servicing organization, together with manufacturing facilities in strategic geographical locations, C. C. Rossotti feels that Garber is excellently equipped to produce the famous Rossotti Packaging Systems. In addition to the Rossotti/Garber packaging services, a Marketing expert has agreed to join the Rossotti organization. This will extend the Rossotti services in new avenues, new promotions and new marketing concepts that should help enhance and stimulate the sales of Rossotti customers.

On May 1st Charles Rossotti will be joined by his son, Jack, in continuing to service the Rossotti customers.

The Rossotti Consultants Associates, Inc. office will continue to be maintained at 2083 Center Avenue, Fort Lee, New Jersey 07024.

**Pasta Foods Limited**

Charles C. Rossotti has returned from a recent European trip and has this to say about the first British factory ever to be built for pasta in the United Kingdom.

"The plant was built by Pasta Foods Ltd. of St. Albans, and by the beginning of next year it should be able to produce up to 25,000 tons of macaroni annually. This plant is located in

Great Yarmouth, which is right off the coast of the North Sea. They have four Braibanti lines running seven days a week, and I saw a fifth line being installed when I was there.

"The most dramatic achievement that I was told is that with 55 million people in the United Kingdom, the per capita consumption of pasta is now 1.7 lbs. per year. When I first visited Great Britain some years ago I was told that the per capita consumption per year at that time was less than 1/2 lb.

"Together with the old Pasta Foods plant in St. Albans, which now produces mainly specialty macaroni items, the Pasta Foods organization produces most of the macaroni made in the United Kingdom. There is still a small Quaker Oats macaroni plant outside of London and there is another macaroni plant in Scotland but, by far, the majority of macaroni made in England is by the Pasta Foods organization.

**Leading Food Company**

"The Pasta Foods Company is owned by the Ranks, Hovis, McDougal, Ltd. organization of London. RHM is one of the world's leading food companies, operating largely in grain, milling and baking in the United Kingdom. RHM recently acquired majority interest in the Gioia Macaroni Company of Buffalo, New York.

"Mr. Fred F. Fox, Managing Director of Pasta Foods, is very optimistic about the future of the pasta industry in Great Britain. He foresees a continuing increase in the consumption of pasta in his country. With increasing inflation and economic conditions as tight as they are in Great Britain, he feels that pasta is an ideal food because of its low cost and high nutritional value. With the difficult economy that exists in Great Britain, I told Mr. Fox that his company is a good example to other companies in helping turn the economy of his country upward."

**British Developments**

The Pasta Record, formerly Pasta Post, reports that Pasta Foods Ltd. has decided to promote its Record brand of pasta products more keenly in an attempt to boost still further Britain's fast increasing pasta market.

Until now pasta sales have grown largely on the back of private labels

and general publicity. Pasta Foods believes the time has come to establish a primary brand.

Meat and potato prices in Britain causing such headlines as "Meat 'May Macaroni'", and "U.K. 'nation of spaghetti eaters'". A spokesman for the Potato Marketing Board said prices could peak at 20p. The are certainly not going to be cheap. Pasta Foods general manager Freddie Fox observes that pasta prices would be lower with lower prices for durum wheat were it not for EEC levies.



**UPC Film Masters**

Universal Product Code film masters and printability gages are now available from the Precision Artwork Laboratory of AMP Incorporated for processing and production. Customers need only supply their product code. Computer-aided design and manufacturing combined with long experience in developing microelectronics with tolerances of 0.0002" to provide competitive fast order turnaround.

Masters are produced on film, or on glass, under controlled environmental conditions in AMP's fully equipped laboratory. All equipment is maintained by laser interferometry with resolution in microinches. When desired, AMP can provide both design and software services for the development of special symbols.

Egg consumption dropped over the past decade, possibly because men—the traditional egg eaters—pass up breakfast due to time pressures, weight control or cholesterol worries.

# Something New Has Been Added

It is with great pride that I announce that the 400 million dollar conglomerate, Wheelabrator-Frye Inc., of which the A.L. Garber Company is a part, has sponsored and supported the Rossotti Packaging Systems and the Rossotti principles of good packaging. To my friends in the Macaroni Industry, this means the continuation of all the Rossotti packaging principles, including graphics of good packaging, all the production principles and procedures, warehousing and delivery facilities of high standards.

The sales and servicing offices of the A. L. Garber Company are strategically located to insure maximum and complete servicing of all accounts.

In addition, something new has been added to round out the Rossotti services. A well-known marketing expert has agreed to join and supplement the Rossotti packaging services with marketing expertise. He has agreed to assist me in evaluating your present sales structure, analyze its potential, ascertain the need, if any, for new avenues, new promotions and possibly new products to broaden, enhance and stimulate your sales.

There is no cost for a review and discussion. All that is needed is an appointment for a preliminary discussion.

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## Canadian Food Industry Conversion to Metric

An Instructive Example for the U.S.

Despite the Canadian food industry's efforts to insure a smooth transition to metric, occasional problems have arisen. In some cases they could have been prevented if all parties involved had known ahead of time which problems to be aware of.

For most consumers, metric awareness begins in the corner store and often retailers must bear the brunt of resentment toward the unfamiliar system. As metric products are introduced in retail stores, occasional complaints are received that either a metric package is being sold for the same price as a previously larger package in traditional measure, or that the price of a metric package has not been reduced proportionately to its size.

According to John Buchanan, acting director of Weights and Measures in Canada, investigation into alleged price deception uncovered "no evidence of deliberate price hikes slipped in under the metric banner." All price increases were found to be in line with normal business practice, although in some cases pricing errors occurred when shelves improperly marked two-kilogram bags (approximately 4.4 pounds) with the same price as five-pound bags because the bags looked similar. In other cases, manufacturers found it impossible to make a price reduction in direct proportion to a package size reduction because other costs increased at the time of conversion (the cost of raw materials, new packaging, or labor costs in the production of smaller packages sizes, for example).

### "Voluntary" a euphemism?

Metric conversion in Canada is on a voluntary basis, with each sector of the economy to coordinate conversion with its manufacturers and its customers, according to industry guidelines dates agreed on and published from time to time. The guidelines dates are set within committees in the Canadian Metric Commission.

According to Frank Moran, metric coordinator of Steinberg's Limited, a large Canadian retail food chain, "voluntary basis" means that each company must plan and implement its

own conversion program in its own way, at its own cost. Coordination requires that each company knows just what is going on with metric conversion outside its own operation.

Says Moran, "Conversion costs for the retailer are not offset by any real or early return on investment and we cannot, therefore, expect him to be in the vanguard of conversion, extolling the undoubted virtues of SI and Canada's metrication program." He does point out, though, that most retailers are responsible and have an attitude of cooperation with the federal government's overall conversion plan, coupled with a determination to achieve metric conversion at the lowest possible cost to customers and to themselves.

### Retailer-supplier-manufacturer interdependence

Proposed sizes and target dates don't deal with specific introduction dates, which means that the retailer must maintain close liaison with suppliers before and during product conversion. Frank Moran points out that guideline dates should be viewed as a warning that a commodity group is to convert within a certain period of time. Actual introduction of metric sizes is determined by the retailer's suppliers and will take into account:

- existing stocks of imperial sizes—which raises the questions of dual inventories, product freshness, and confusion between imperial and metric sizes leading to possible inventory and pricing problems;

- availability of product packages or containers—which identifies the suppliers' dependency on the container manufacturers' conversion plans and schedules;

- degree of probable acceptance by the customer—which is connected with the introduction of a new product, and is the responsibility of manufacturers and suppliers (advertising, potential markets, distribution, etc.);
- timing with other suppliers' introduction of competing products—both the supplier and retailer must consider the effects of trying to sell a metric size of 500 grams which appears side by side with competing brands of the same product type in the 454 (one pound) size.

If a customer decides not to buy the larger metric size while there are still available stocks of the previously satisfactory imperial size, that supplier's metric leadership may cost him (and his retailers) money.

When the retailer finally does get the actual conversion date from his supplier, he then begins the process of product introduction at the retail level.

Since the retailing buyer is first to know, his is the task of listing the product in inventories, order guides, purchase order files, etc., for general dissemination via data-processing to store, warehouse, distribution and accounting personnel.

According to Moran, "It is at the retail store that metric conversion becomes a reality" for consumers. If the retailer has done a good job of coordination with his suppliers, his employees and his customers, conversion will proceed smoothly, with a minimum of confusion and error.

### Dominion, Loblaw's, and Steinberg's metric programs

Dominion, Loblaw's, and Steinberg's are three of Canada's largest retail food store chains.

Dominion is following a policy of no price increases six weeks before or after a product conversion, according to R. G. Fry, manager of manpower development for Dominion Stores Limited in Toronto.

The company has developed their own training materials, Fry reported. A metric awareness training pamphlet was issued to each of the 26,000 employees in June and July of 1976. It was designed to make them aware of the overall metric conversion and office a metric conversion chart to be posted in a prominent position for quick reference.

Dominion has also developed, in conjunction with Cornell University Home Study Division and Loblaw's, an audio-visual seminar which is specifically geared to the supermarket business. As conversion progresses, Fry anticipates a need for specialized materials for persons using scales and for maintenance personnel.

Loblaw's, according to David Pringle, director of company training and

## Canadians Convert to Metric

(Continued from page 20)

development, it has taken "a very strong stand on pricing during metric conversion."

They provide their suppliers with the following worksheet for metric conversion, which states, "When pricing your new metric size package, your cost per unit of measure cannot be any higher than the cost per same unit of measure that applied to your former imperial package."

Former Imperial Package	New Metric Package
A. Case Cost \$3.25	F. Case Cost \$3.35
B. Case Pack 12	G. Case Pack 12
C. Selling (A + B) Unit Cost 27.08¢	H. Selling (F + G) Unit Cost 27.92¢
D. Selling Unit Size 12 oz.	I. Selling Unit Size 350 Grams Metric
E. Cost per Unit of (C + D) Weight 2.26¢	J. Imperial Equivalent Selling Unit Size 12.36 oz.
	K. Cost per Unit of (H + J) Weight 2.26¢

NOTE: C, E, H, J and K must be computed correct to two decimal places.

Steinberg's provides metric information for consumers in the form of wall charts and metric messages imprinted on food bags. According to metric coordinator Frank Moran, they now have a policy of unit-pricing a whole product group in metric when one product in a group is being converted. Based on an agreement between retailers and the Canadian Government Specifications Board, unit pricing labels are based on the cost per 100 grams.

Steinberg's has also developed an audio-visual awareness program for employees.

### Food industry guidelines for conversion

In September, nine Canadian associations representing the food industry endorsed a series of guidelines that will govern marketing procedures during the industry's continuing conversion to metric sizes.

Four general guidelines developed for the industry are:

- Where there is a change in product size leading to a change in product cost, a change in unit price should reflect only the cost of conversion.
- Other costs, separate and distinct from adjustments necessary for metric changes, will continue to be handled

as in normal business practice (for example, a significant rise in commodity prices).

- Information to assist the consumer to understand conversion to different metric product sizes will be provided by the industry as appropriate.

The industry representatives also recommended the identification of outer shipping cases in the same manner as consumer packages are identified, to reduce the chance of pricing errors. They also recommended giving sufficient notice (six weeks) to the trade of the shipment of a new metric size to permit suitable introduction and handling, and the provision of invoicing on a new metric product size on the same basis as the product size designation on the consumer package.

### Who pays for the cost of conversion?

A. R. Chadsey, director of packaging services for George Weston Ltd. in Canada, had some pertinent comments about the cost of metrication when he spoke to the Canadian Home Economics Association's 1976 conference in July.

Chadsey remarked, "The fact is that it is probably long past the time when, despite official protestation to the contrary, people should be aware that there will be metric costs to the public just as there will be metric benefits to the public.

"One thing is for sure, those costs will be recouped—one way or the other—and it is the public who pays or wins." There will be cases when the unit price of a product will go up, because of unavoidable costs for new metric packaging or for raw materials. But, according to Chadsey, sometimes "... the pendulum swings the other way. When a product moves from 454 grams (one pound) to the preferred 500 gram size there is 10 percent more product content with the same measuring, filling and sealing operation. What's lost in the reels may well be won in the rounds."

### Flat Trend in Corrugated Shipments

Corrugated box shipments for the first three quarters of 1976 are 14.4 percent above comparable 1975 levels, according to Robert F. Rebeck, vice president of the Fibre Box Association. He added, however, that "bus-

ness has been on a plateau for nearly all of this year" on a seasonally adjusted basis.

Rebeck presented the latest industry data at the trade group's Annual Meeting. The 350 executives who heard his remarks represent more than 80 percent of the industry's 1975 volume of 194 billion square feet, valued at \$5.6 billion.

In contrast to the steady improvement in shipments throughout the quarters of 1975, Rebeck said that "the pattern this year is more like the usual one which prevails during relatively stable business conditions."

Comparison of shipments for the first three quarters shows this year ahead of last by 21.2, 16.9 and 6.1 percent respectively. However, the quarter-to-quarter changes show the flat trend: +1.5, +3.6 and -3.6 percent. The slight third-quarter dip "is a more or less seasonal condition," Rebeck said, yet it is "one other indication that, as of this time, the strength of the recovery has abated somewhat."

### Regional Trends

Regional trends are similar to the national pattern, he added, with the Eastern Division up 14.4 percent, the Central Division up 15.4 percent, and the Western Division up 11.9 percent for the year to date.

The national overall corrugated price trend "has exhibited a great deal of stability since the first of last year," Rebeck said, cautioning that the data serves only as an indicator of rate and direction for the general level of prices.

Container board mill production, up 22.6 percent for the year to date, has risen faster than box plant consumption, up 14.3 percent. The result, Rebeck said, is higher inventories. Roll stocks at mills and box plants now total 2,602,000 tons, a record high. Translated into weeks of supply, the current 8.5 weeks is still below the 9.1 weeks experienced on May 1 of 1975, when consumption levels were lower.

Many people had expected wider gains this year, Rebeck said, and "because it didn't happen, the actual results tend to be disappointing." Despite the leveling off, however, he again noted the 14 percent gain in shipments for the year to date—"and that's really not all that bad."



### Private Label versus National Brands

The Brand Power Study—nothing happens til the label goes on—is a comprehensive review in the October issue of Progressive Grocer.

The super market business runs on the power generated by national brands. They spend close to \$4 billion a year in measured media advertising to motivate and presell consumers. They introduce a steady flow of new items which annually account for about 7% of that year's retail sales. They support over 35,000 sales representatives to keep the distribution pipelines filled and flowing. They underwrite continuous consumer promotions and supply merchandising materials to translate them into store sales. They distribute billions of volume-building coupons, on which the handling fee alone tops \$100 million. And they offer a variety of allowances which, in aggregate, exceed the total after-tax profit of the entire retail grocery industry.

It is fair to say that the industry could not function in its present fashion without the ongoing contributions of national brand manufacturers.

Yet private labels also have a role to play—one which most retailers and distributors feel is destined to expand. In this respect, the wish may be father to the thought because many in the trade have a strong rooting interest in their own brands.

There exists an overwhelming and apparently unshakeable conviction that private brands are the way to increase profits.

It is widely believed that private labels are better than national brands in creating a low price impression and as a weapon for meeting competition.

#### 2,100 Brands

In the not-so-private world of private label the Independent Grocer's Alliance stands tall.

IGA brands—all 2,100 of them—are distributed through 60 warehouses to 3,400 stores flung across 45 states, including Hawaii and Alaska. Indeed, while the term national brand is used for convenience throughout the trade, there are but a handful of brands that are as "national" as IGA. Even Safeway and A&P labels, marketed by the two largest food chains in the world, don't have as wide distribution.

A table based upon sales results achieved by sixteen independent IGA supermarkets supplied by Wetterau, Inc., Hazelwood, Missouri division. Averaging \$65,500 a week, most are within the area served by major St. Louis newspapers but some are located in nearby southern Illinois. Figures are based on warehouse shipments during 17 weeks commencing mid-December 1975 and ending March, 1976.

What these figures do not show—aside from the absence of direct delivery goods, the single most important fact to note is that the margins here represent a going-in gross—the gross that is achieved before subtracting ad markdowns, in-store price markdowns and in-ad coupons which are not redeemable by the store. Most effected are the frequently featured items in the top 25. In general, the fewer the price and coupon features the more exact the figure.

Of 200 items, we are only listing those of interest to macaroni manufacturers.

### Meeting Changing Conditions

"The Food Industry has had mixed success in adapting to the highly turbulent, unpredictable environment which has characterized the first half of the 1970's," declared Dan C. Swander, a principal, McKinsey & Company, at the annual meeting of the National Association of Food Chains.

Mr. Swander stated that most companies had responded well to changes they could handle with traditional management tools, such as operating policies, decision guidelines and management information systems. He added response to inflation and the resulting cash squeeze. In the unsuccessful category he placed response to changing patterns of consumer demand in such areas as pricing, private label and product introductions. He concluded that the industry had not succeeded in changing its posture to respond to the rise of consumerism.

#### Back to Basics

Panelists discussing the talk did not agree that all of these conclusions were valid. "New tools are more glamorous, but it is important to go back to basics", said Robert D. Stuart, Jr., of Quaker Oats.

The industry turned to discounting in response to growing consumer price sensitivity, Swander pointed out. Between 1970 and 1974, the percentage of firms considering themselves discounters more than doubled to include almost half of all stores. But these moves did not succeed as there was no real sales increase but there was adverse pressure on the bottom line.

W. H. Fisher, Jr., Chairman of Lucky Stores, acknowledged on this point that the grocery industry usually reacts in typical fashion—when sales are flat, we lower prices.

(Continued on page 26)

Brand Name	Item-Size	Average \$ Gross Profit Per Week	Penny Profit Per Unit	Average Unit Movem. Per Week	High Store	Low Store
14. Kraft	Macaroni Dinner (7 oz.)	\$14.14	.08	184	291	77
37. Contadina	Tomato Paste (6 oz.)	9.34	.06	144	336	60
39. Hunts	Tomato Sauce (15 oz.)	8.91	.07	130	254	66
78. IGA	Tomato Sauce (15 oz.)	6.70	.09	73	189	35
142. Kraft	Deluxe Macaroni Dinner (14 oz.)	5.23	.14	38	75	12
145. Hunts	Tomato Sauce (8 oz.)	5.21	.04	143	254	66
161. Chef Boy-Ar-Dee	Beef Ravioli (15 oz.)	4.88	.13	38	60	19
166. Contadina	Tomato Paste (12 oz.)	4.80	.11	44	129	18
183. IGA	Long Spaghetti (32 oz.)	4.64	.33	14	29	5
184. Creamette	Elbow Macaroni (2 lb.)	4.63	.24	19	32	8
195. IGA	Long Spaghetti (12 oz.)	4.52	.12	38	69	19

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## Meeting Changing Conditions

(Continued from page 24)

Retailers also lost an opportunity to increase private label sales, as a means of offering consumers increased value, Swander claimed. "In 1972," he said, "private label had reached an 18 percent level and was predicted to go higher. However, house brands were given no extra promotional support and volume declined."

Mr. Fisher observed that private labels basically constitutes a copying of successful national brands.

In the past, Heinz has not done a good job on new product selection, Burt Gookin, Vice Chairman, conceded. But with the cash squeeze the firm is more realistic and the result has been fewer new products in the past few years, but a better job on the ones introduced.

Mr. Fisher likened product introductions to store openings. Both are enormously important, he said, "but if we concentrate our energies on areas we are convinced will be productive, everyone will be better off."

### On Consumerism

On consumerism, it was Mr. Swander's opinion that the industry has neither worked with regulators to insure the greatest effectiveness of consumer programs with the least cost to the industry, nor attempted to communicate with a basically ill-informed public. Individual companies have attempted to do many of these things, he conceded, but few have succeeded and some practices may have been counterproductive.

Retailers have lowered working capital as a percentage of sales from about 4.5 in 1972 to less than 4 percent at the end of 1975. Wholesalers went from 5.1 to 4.8 percent. But the response by individual companies has varied widely. Some retailers have been able to finance their inventory requirements through very high inventory turnover and tough minded management payable levels. Others, because of much lower inventory turnover and lower payable levels, would be forced to absorb as much as 80 percent of the increase in inventory carrying costs during a period of rapidly rising prices.

The use of paper work is not as important, Swander said, as the realization that the job must be done. This may not entail using new techniques, he conceded, but applying a

different perspective to the tools that are available.

### The Impact of Labor Costs

If labor costs continue to increase at their present rate, the food industry "as we know it will no longer exist," Clarence Adamy, retiring NAFC president, declared.

Discussing the outlook for the food distribution industry during the next 10 years, Adamy noted that "food distribution doesn't have to be in this present form" and said the industry has gone into a period of technological change.

"We don't want to do it but, since we have to because of labor costs, we'll do it," he said, noting that 12 years ago labor costs accounted for 53 per cent of the industry's expenses, while last year they increased to 67.4 per cent.

### Mother of Invention

"Necessity is the mother of invention and the necessity is here and the inventions will come," he proclaimed.

"The electronic funds transfer system will come, but don't hold your breath. And now we're installing five to nine electronic front end systems a month, which is the manufacturer's production capacity.

"The same applies to other technological changes, such as modularization," he continued. "It's not a revolution, but will evolve slowly and methodically.

"We also will continue to move much larger stores—the economies of scale are better—and will continue to carry a great many diverse items in the store."

Over the past 20 years, the store mix has changed "dramatically" and he predicted it would continue to change.

### Inflation

Besides labor costs, Adamy said inflation is another factor that will induce change. He warned that although the years of a 14-15 per cent yearly food price increase are over, prices will continue to advance at a 5 per cent yearly rate.

Consumerism, environmentalism and government involvement in the industry also will contribute to the changes in industry structure, he said.

Adamy said all food industries are interrelated and interdependent and

each element "must understand the economies of the other guy."

"Unless both of us do a lot better job than in the past, maximization is not for us."

### Public Affairs Must Be Stressed

Clarence Adamy, retiring president of the National Association of Food Chains, says: "Anyone who is not budgeting a significant part of his business time to industry related and public affairs related matters is being unrealistic. You will spend that time this year, and you will spend more next year, and you don't really have any choice. The choice you do have is how you spend that time. You can spend it the way you have in the past—waiting for your opposition to attack and then putting together a defense, always on someone else's terms, or on someone else's issues. Or you can spend it in being a positive force, helping to create the kind of economic and social climate that will allow you to do a better job with people you serve."

### Don't Blame Middlemen

Don't blame "middlemen" for rising retail food prices, concludes a newly released study by the government's inflation-monitoring agency, the Council on Wage and Price Stability.

The council compared farm prices and retail prices of 22 food products from 1960 to 1975 and it found that, on the average, while the "spread" between farm and retail prices doubled in the 15-year period, the farmer's share of the retail price didn't decline. That means of that dollar going to food wholesalers and retailers—middlemen between the farmer and consumer—didn't increase.

The council said the near doubling of spread was caused by "general inflation"—the increases in the man's cost of labor, transport, packaging, as well as the price of farm products.

### SMI Studies Direct Store Delivery

The current status of "direct store delivery" (DSD) and a projection of what will happen to this type of distribution in the future is the focus of a new research paper now available from Super Market Institute.

The report, **An Insight Into Direct Store Delivery Systems**, was developed by SMI after data processing executives overwhelmingly identified DSD as a major industry concern. A second survey provided the data for the report. Those companies responding to the survey had an estimated annual retail sales volume in 1975 of \$35.9 billion and estimated total direct store delivery sales at retail of \$6.5 billion.

The research underlines the need for an improvement in present systems, calling for more control and procedures to be incorporated at the store level. Results from the second survey are presented in the report as tables, and include these highlights:

- companies not using a standard check-in document—75%
  - present systems not computerized—63%
  - companies having lists of authorized items—87%
- The report also noted:
- total number of different vendors for each store—175
  - total number of DSD items—3500
  - DSD items represent: 25% of total store sales; 27% of the total number of items sold; 25% of the total cases delivered.

To request copies, contact the Institute at 303 E. Ohio St., Chicago, IL 60611.

### 1977 Thomas Grocery Register

The food industry's largest and most diversified directory now has 50,000 companies and more than 100,000 listings within its 2,800 pages, according to Thomas Publishing Co.

Buyers and sellers will find the addition of 300 firms has fattened by the new two-volume 1977 edition of the Thomas Grocery Register. Each volume contains pertinent information for users, and each has a full company name, address and telephone number. Also new is a directory of rack jobbers and a 16-page index of the book's 4,000 product categories and references.

Volume One, which lists US and Canadian firms, has added 400 food chains and 800 wholesalers. The thumb-indexed section now has 1,700 chain and 3,300 wholesaler buying

offices. Their data includes names of key personnel, size and sales volume. Wholesalers' data also shows names of voluntary groups and key chains served.

The wholesalers are divided into mini-directories with separate listings for wholesalers of general line groceries, frozen, institutional foods, produce, provisions and meats, specialties, general merchandise and rack jobbers.

The addition of 400 brokers covering the grocery field brings the listings to 4,000. There are also 2,000 frozen food brokers listed. Information includes the type of products sold by the brokers and markets they cover. To foster growth of food exporting, Volume One provides aids in developing export trade and includes a list of trade offices in the United States of countries that are among our best food customers.

Public dry and refrigerated warehouses and exporters have separate thumb-indexed sections in Volume One.

### Volume Two

In Volume Two, the statistical breakdown shows there are 1,000 canners and 1,000 frozen food processors, 800 importers and hundreds of listings under categories such as bakeries, confectionery and meat packers. There's a separate brand names/trademarks section with 8,000 listings.

Volume Two also has manufacturers of non-foods including health & beauty aids, machinery used by the industry, supplies, equipment, back room needs, warehouse trucks, data processing and materials handling firms as well as freight carriers and service companies.

Food manufacturer listings show if products are packaged in consumer or institutional trade sizes, in bulk or under private label.

The new edition, available on a 10-day free trial basis, is priced at \$48 for the 2-volume set; each volume purchased separately is \$32. Write to Thomas Grocery Register, 1 Penn Plaza, New York, NY 10001.

### Market Scope

The new, expanded 1976 Market Scope, now available from the Progressive Grocer Company, offers a comprehensive share-of-market analysis of grocery distribution in the top

249 U.S. Metro Areas—40 more than in the 1975 edition.

Market Scope is a valuable tool for developing and improving marketing plans, determining sales quotas, analyzing distribution patterns, checking retail sales coverage, locating major distribution centers, selecting test markets, entering new markets and as a ready-reference for complete data not available in other marketing publications. It is used by manufacturers, wholesalers, retailers, advertising agencies, libraries and others interested in the distribution of products through super markets and convenience stores.

### 600 Page Sourcebook

In this over-600-page sourcebook, Metro Areas are arranged alphabetically by state. Share-of-market data includes: Names of all chain and wholesale distribution centers operating in each market; names, buying office locations and number of stores operated by chains and retail groups in the market; the percentage of food store sales accounted for by each retail organization; market share ranking of each distribution center; and the total number of stores served by each chain or wholesale buying office.

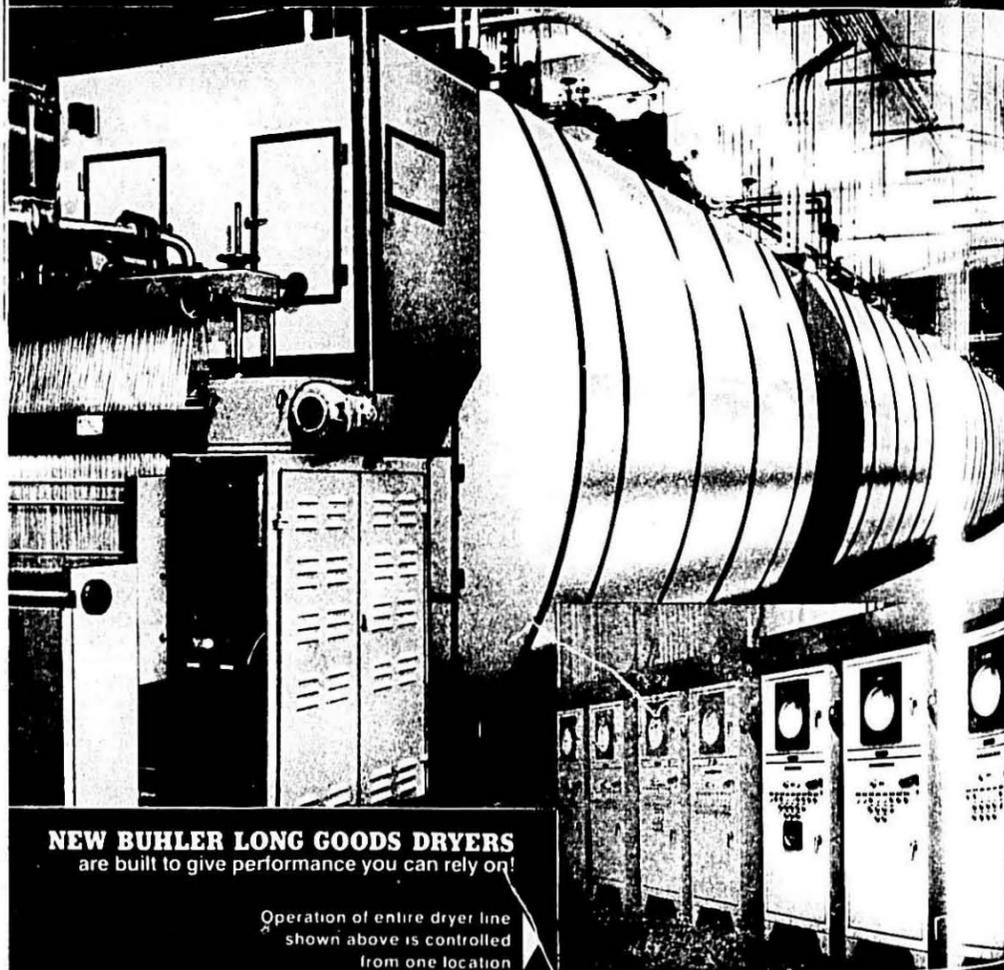
In addition, demographic information for each Metro Area includes the name of each county in the market and its: Nielsen rating; population; projected 1976 total food store sales; total number of food stores, convenience stores and super markets, and number of chain and independent supers; total convenience stores; and average sales per super market.

The average number of checkouts per super market and the square feet of selling area per checkout for each Metro Area also are included.

This year's 40 additional Metro Areas include such markets as Lincoln, Neb., and Tallahassee, Fla., as well as less-familiar ones like Provo-Orem, Utah, and Richland-Kennebec, Wash., providing coverage that no other source, single or collective, can match.

Selling at \$79.95 a copy—about \$24 per Metro Area—Market Scope is currently available from Progressive Grocer, Dept. C, 708 Third Avenue, New York, New York 10017. The book is offered on a 10-day, free-inspection basis and generous quantity discounts are available.

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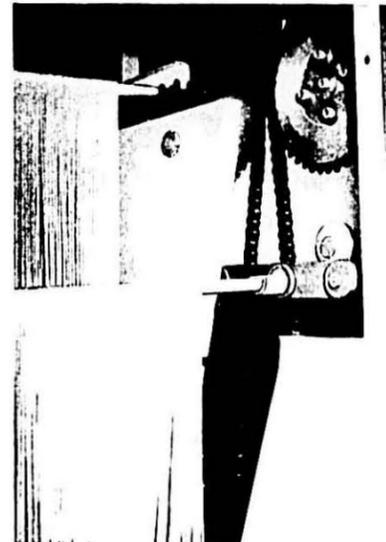
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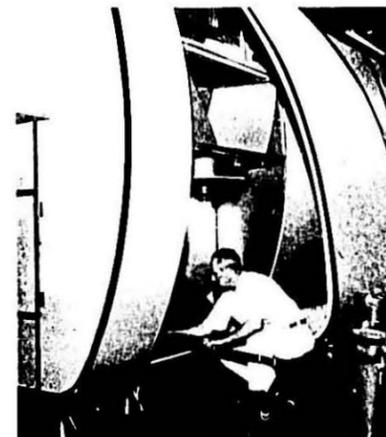
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## Complexities of "Food Standards"

from *The Professional Nutritionist*

In most countries the definition of "food" is clear and concise. So is the explanation for "standards." But in the United States, when combined as "food standards," the words virtually become an idiom. They often lend themselves to confusing and self-interest interpretations by consumers, industry and nutritionists—and even by government officials who are charged with defining and communicating the words' precise meanings.

Food standards in the United States are covered in the chapters of the Code of Federal Regulations (CFR) which describe in official language what a food is. They are prepared and issued by the Food and Drug Administration's (FDA) Bureau of Foods.

What constitutes a food item? What kind of syrup and how much of it may be in certain sized cans of fruit? How many eggs in mayonnaise? The CFR has the answers.

In some cases CFR chapters describe how much food must be in a particular size of container. Those amounts would be expanded if a current FDA proposal concerning "drained weight" is finally promulgated. Again with exceptions, the chapters provide that a food must be labeled as "imitation" if it doesn't fit the described standards.

As might be expected in so complex a subject, progress is slow in development of a complete and workable set of standards that is acceptable to all concerned.

There appears to be some forward motion: actions suggest that tangible, understandable and realistic guidelines are evolving. Most important is "amending." It is playing a key role in the evolution of food standards. Industry, consumers, nutritionists and others with proprietary interests in food standards continue to submit amendments that languish or seem to go ignored. But increasing numbers are getting through.

### Interlocking Complexities

A review of the current situation underscores the many interlocking complexities inherent in establishing sound food standards in the U.S.—or anywhere in the world.

- Only specialized experts can comprehend the tangle of legalistic requirements in the food standards regulations.

- When a food is covered by a standard, the only way a consumer can find out what must be in the food is to ask an expert or try to unsnarl the regulations—if the person knows they exist.

- Standards can contribute to high food prices. Although designed only to protect against lower quality, certain standards may also work to prohibit the introduction of lower-cost safe substitute ingredients which would not lower quality. A food manufacturer who doesn't want to use the cheaper (competitive) substitute, could simply state in its proposed food standards comments to FDA that use of the substitute ingredient would lead to deterioration of quality. Such objections must be carefully studied by the agency.

- Restricted international trade also can result. The standard, in effect, is an artificial trade barrier. Higher-priced, less competitive domestic products result.

- Some standards have long served to forestall innovation and flexibility in food processing, packaging, competition and consumption.

Although many of these problems have been evident for a long time, they only recently have been publicized widely due to consumer objections, particularly in the last few years. Yet the standards process was never as static as persons outside the food field might suppose. A constant proposal-disposal process includes continuing proposals from industry or consumers.

### USDA Standards

U.S. Department of Agriculture (USDA) has a different and just-as-extensive set of rules covering any food that has meat or poultry in it.

An important difference in the USDA standards: they concentrate on labeling, rather than on actual "recipes" for a food. USDA, in effect, leaves it up to the processor to decide what will be in a food, and in what proportion, so long as these ingredients and proportions are placed on the label. However, under the "recipe"

approach, which dominates FDA regulations, every ingredient is specified in the standards, along with its proportion; but for most standardized foods this information is not required to appear on the label.

Because the agencies have usually been able to agree on whether a product technically has meat in it, conflicts between the two sets of regulations have been minimal.

It is the "recipe" nature of the food standards governed by FDA that has led to many of the complaints regarding their lack of flexibility—and, ultimately, to the "safe and suitable" approach. Until a decade ago, all FDA standards were of the recipe type. Anything that wasn't in the recipe called for the food to be labeled "imitation."

Under the impetus of a 1969 White House Conference on Food, Nutrition and Health, FDA began that year to write a new kind of standard for some foods. Under this method, the entire "recipe" would be spelled out and a processor could use any ingredients desired if these were both "safe" and "suitable."

The process for amending standards was not changed appreciably, although some streamlining has taken place and more is being attempted by the agency. But the number of matters in controversy were considerably lessened by the adoption of the "safe and suitable" approach.

This approach is being used for most foods today—except that FDA hasn't yet been able to get the massive job of rewriting all of the recipe standards.

### Fundamental Changes

The change to "safe and suitable" ingredient standards was a fundamental one. A major effect was encouragement of innovation in food processing. If a food processor wanted to look for a safe and suitable substitute ingredient, he could have a reasonable assurance that it would not be turned down on an arbitrary basis. If it worked and was safe, there was no basis for FDA refusal—unless other processors had objections which merited further study.

The words "safe" and "suitable" have very specific meanings under the new standards.

(Continued on page 32)

THE MACARONI JOURNAL



Good critics 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.

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### Complexities of Food Standards

(Continued from page 30)

law when related to food standards. "Suitable" is easiest. The additive or ingredient must have a functional purpose in the food.

"Safe" takes a little more explaining. Briefly, an ingredient is safe if it is either (1) "generally recognized as safe" (GRAS), or (2) covered by an approved Food Additive Regulation.

Although the latter definition might stand up in court, GRAS ingredients generally can be described as ingredients which were in use before the enactment of food additive laws, and for which there have been no indications of a lack of safety. In a few instances new ingredients can receive "GRAS affirmation" from FDA.

Ingredients covered by Food Additive Regulations also are listed in CFR. They include anticaking agents, preservatives, emulsifiers, stabilizers and others.

One by one, food standards are being changed to require declarations on the food labels of all optional ingredients in the standardized foods. However, FDA has pointed out that it has no authority to require listings of mandatory ingredients.

Consumers may or may not content themselves with this action by FDA. If not, they can be expected to give a push to Senate Bill 641, which was passed by the Senate this spring. Among other areas, S.641 would require label listing of mandatory as well as optional ingredients.

#### World Standards

Another problem with U.S. food standards is that they were written (for the most part) with little attention to what was going on in the rest of the world.

An international organization under the auspices of the World Health Organization and Food and Agricultural Organization—Codex Alimentarius—has been working for years to establish voluntary international standards for foods. The United States (FDA and USDA) has been represented on Codex Alimentarius since its beginning.

But it has been only in the last few years that Codex has developed standards for which FDA can begin to bring U.S. standards into line. FDA standards writers are now attempting to meet international needs.

Of course, there is no guarantee of success; in some areas the attempt is almost certainly doomed to failure. Food traditions and "taboos" among certain ethnic groups and "tribes" are strongly held; food "culture" cannot be dictated to them. Another formidable obstacle: international economic complications.

As previously noted, the rationale for international standards is that restrictive national standards tend to create artificial barriers both for products exported or imported. It is easy for "protectionist" sentiment to hide behind food standards, although there are many genuine attempts to maintain a line of food quality. Of course, there are many other factors that complicate the effort to adopt international standards.

#### Hope for the future

The system is far from perfect. Industry, nutritionists, consumers and agency officials are far from satisfied. A way must be found to expedite amendments, and to overcome the economic (and potentially nutritional) harm for all that results from the delay in approval of safe and suitable food ingredients.

Despite these complexities and conflicts, FDA is indeed moving ahead and trying to change standards on a wide front. The initial evidence of success or failure of this evolution will be in the actions and reactions of the interested parties involved in each of the proposed revisions, and finally in their issuance. The long-range measure, however, will be in the effect revised standards have on the quality, safety and prices of foods for U.S. consumers—and, indirectly, throughout the world.

#### Child Nutrition Program Law

A new law, P.L. 94-105, makes a number of substantial changes in the Child Nutrition Program administered by USDA. The changes could materially affect marketing programs of some food processors.

USDA has summarized some of the major changes as follows:

"For purposes of food programs, school has been redefined to include institutions where children live. This in effect extends the National School Lunch Program to institutions, such as orphanages and hospitals for the

mentally retarded, which are structured to serve children but do not necessarily have educational programs. Private as well as public institutions are eligible if they are licensed and non-profit.

"The National Breakfast Program received permanent authorization. The program has been a pilot project available in about 16 percent of the schools participating in the National School Lunch Program. Now any school that needs to provide breakfast can join.

"Senior high school students now have the right to decide what they want for lunch and are not required to take food they don't intend to eat. This means high school cafeterias must "offer" instead of "serve" the Type A lunch prescribed by the National School Lunch Program. However, students still must pay the full price for the Type A lunch whether or not they take all the components. This change is aimed at the problem of food waste, a problem primarily in high school lunch programs.

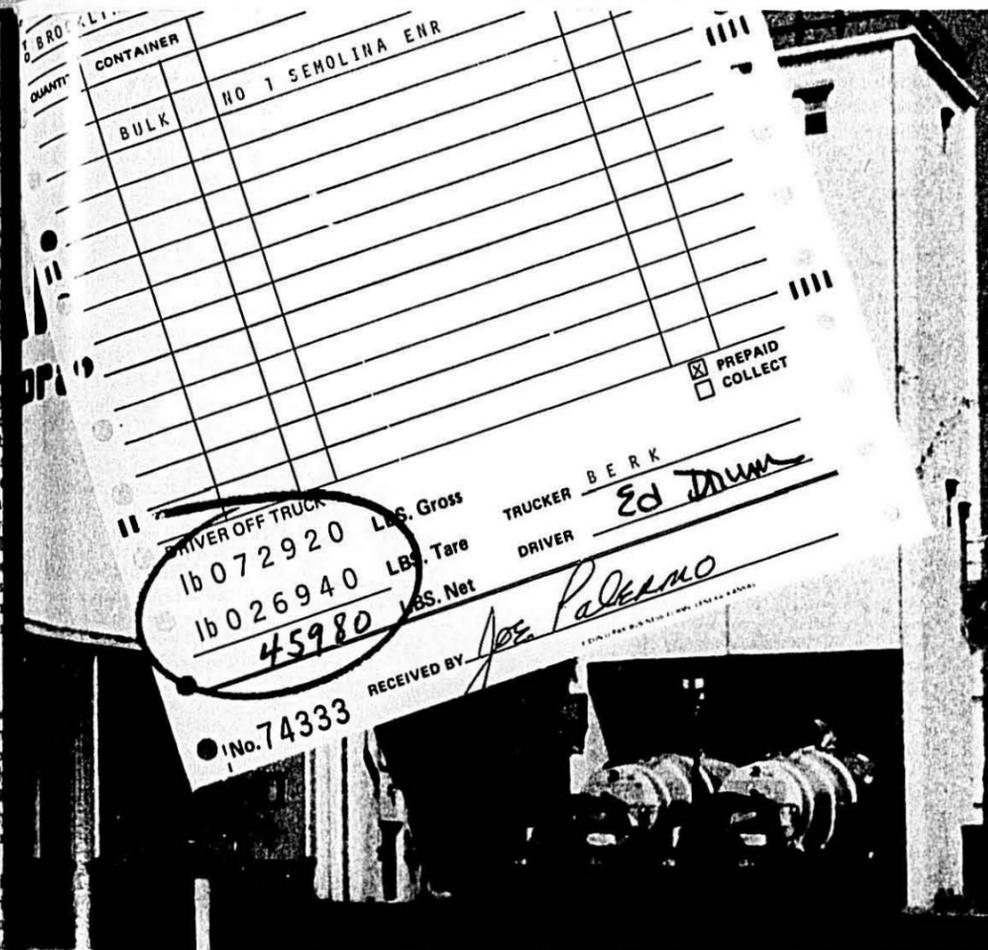
#### Reduced-Price Lunches

"All schools participating in the National School Lunch Program are now required to offer reduced-price lunches to needy children. Also family income eligibility is now set at 90 percent above the income poverty guidelines rather than the previous maximum of 75 percent.

"The Child Care Food Program is now available to all public and private, non-profit day care centers, including family day care homes, Head Start Centers, settlement houses and recreation centers. Before P.L. 94-105 the program was available only through day care centers in poverty areas or in areas with a high percentage of working mothers.

"The Summer Food Program has been extended to residential camps. It is limited to nonprofit public and private institutions, such as city recreation programs. Too, summer camps and residential institutions qualify for the program if one-third, rather than one-half, of the children they serve are needy; and all meals are now served free.

"The Supplemental Food Program for Women, Infants, and Children (WIC) was extended through September, 1978.



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### Noodles Galore

Chef Merry White brings together 203 international recipes for one of the world's staples in her new cookbook, *Noodles Galore*, published November 18, by Basic Books, New York City.

Illustrated by New Yorker cartoonist Edward Koren, the book includes recipes based on noodles of oriental and western origin for every course, from Mexican Vermicelli Soup to Tossed Salad with Garlic Noodles to Noodle Pudding Souffle. Ms. White also presents recipes for entrees combining noodles with eggs, cheese, vegetables, fish, meats, and poultry.

### Professional Cook

A professional cook and Harvard graduate student who has just returned from a year in Japan, Ms. White explains in her introductory chapter that "noodles appear in virtually every culture, in a dazzling profusion of shapes, and in a surprising variety of cooking styles . . . the principal reason for the universality of the noodle is its economy."

She surveys recent discoveries in the nutritional value of the noodle, and includes a short history of its origin (myth has it that Marco Polo brought them to Italy from the Orient).

Ms. White is the author of *Cooking for Crowds* (Basic Books, 1974), which is highly recommended by Julia Child.

### Creamette Ad

Actor Vincent Price will be endorsing the superior wheat The Creamette Company uses for its pasta products in the December and January issues of *Family Circle*.

An internationally known gourmet, Price will offer a macaroni casserole recipe—"Vincent's Supper Casserole"—in the four-color "checkerboard" ad, in which he tells readers that Creamettes uses only hard, lean wheat to prevent sticking together or starchy taste.

Price, who has signed a three-year contract as advertising spokesman for The Creamette Company, is also appearing on television, in newspapers and on point-of-purchase materials.

### Dumplings

C. F. Mueller Co., Jersey City, is marketing dumpling macaroni, an extra wide, curly shaped product.

### Effective Advertising

Newly release data measuring the effectiveness of television commercials show that few TV spots score as high as Golden Grain's series advertising Stir-N-Serv Dinners.

"Only a tenth of the commercials test as high as the Stir-N-Serv spots," said the research supervisor of nationally known Burke testing service.

Especially noteworthy in the series is the Stir-N-Serv Brunch commercial featuring TV personality Susan Tolsky. Brunch is Golden Grain's newest addition to the Stir-N-Serv line. It makes a gourmet-type dish of tender thin egg noodles with rare cheeses, herbs and mushrooms in the sauce. Eggs may be added if desired. The Brunch commercial and the other high test Stir-N-Serv TV spots are currently on the air in West Coast markets and elsewhere.

Pictured at the time the commercials were filmed are cameraman Kent Wakefield, art director Jack Keeler of Vantage Advertising and TV actress Susan Tolsky.



### Ronco Ad

A recipe for easy-cooking "Noodles Stroganoff," made with beef and Ronco Egg Noodles, was featured in this four-color, two-thirds-page ad appearing in December *Family Circle*. The ad is one of a continuing series of ads for products by Ronco Foods.

### Food Consumption

USDA reports that the average American family of four eats about 2½ tons of food a year. This breaks down to 1,154 pounds of vegetables, 1,136 pounds of dairy products, 694 pounds of meat and fish, 598 pounds of fruit, 592 pounds of grain products, and 349 pounds of poultry.

Macaroni consumption is placed at 10.5 pounds per person in 1976.

### New York State Lenten Promotion

The New York State Department of Agriculture and Markets is launching another major campaign to tell consumers about New York State food products. A cooperative effort of all segments of the food industry will be organized for a Lenten (February 23-April 9) promotion of macaroni and cheese products.

### Supermarket Promotion

Bill Byrne, the Department's coordinator of supermarket promotions, will spearhead the campaign working under Deputy Commissioner Doris Cadoux. Participating in the promotion are the State's cheddar cheese and macaroni producers, retail food outlets and allied industries.

"The cheese and food manufacturers' reception to the campaign has been very enthusiastic," according to Byrne. "Advertising themes and materials will be developed by the Department," added Byrne.

"Produced in N.Y. State/We're in a great state for cheese" promotion, which was commenced last spring, resulted in a dramatic increase of New York State cheese sales. "This promotion," according to Mrs. Cadoux, "will maintain that momentum and involve other New York State food industries. The retailers' reception of the entire 'Grown, Produced and Processed in N.Y. State' program has been excellent," added Mrs. Cadoux.

### Consumer Option

Consumers must be informed of the many options they have when buying New York State food. Since beginning the State product identification program in 1973, the Department found that consumers prefer to purchase food from the State's producers. We intend to keep our consumer informed in every way possible, so they can purchase New York State products. Retailers' use of the logos identifying New York State foods have assisted the consumer to purchase those foods.

Details of the upcoming program will be released in early 1977. Meanwhile, Bill Byrne will be contacting stores and food manufacturers to work toward the goal of calling the public's attention to yet another New York State cooperative effort.

# ASEECO

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## Campbell Achieves Records

Campbell Soup Company achieved record sales and earnings during the Company's 1976 fiscal year, and in the 1977 fiscal first quarter as "sales volume increased broadly across our major product categories," President Harold A. Shaub told the Company's annual meeting of stockholders.

Volume accounted for 70% of the Company's increased sales during the first quarter ended October 31. As announced the previous day, consolidated sales in the quarter total \$439,351,000, an increase of 10% over sales in the previous first quarter, while net earnings per share rose by 7.2%, from 69 cents to 74 cents.

### New Products

"While about 55% of our sales growth over the past 10 years has come from new products, this percentage is expected to increase during the next several years," Mr. Shaub told the meeting. "Since the beginning of our current fiscal year on August 1, in the United States alone, more than 15 new products have been introduced in national or broad regional distribution, and 24 additional new products placed in market tests."

Noting that "severe inflation rates were substantially reduced in the United States in the past year," Mr. Shaub said that "a continuing disturbing factor in the international economic scene is the high rate of inflation coupled with the presence of ineffective and, in our opinion, largely counter-productive, restrictive controls in a number of countries."

### Expenditures on Improvements

The Company is projecting expenditures of some \$70 to \$75 million for expansion and improvements in the current fiscal year, following record capital expenditures of \$66 million in fiscal 1976, stockholders were told.

The Company emphasizes expenditures on improvements that help increase quality, capacity and productivity, Mr. Shaub said. "We feel strongly that our plants and equipment should be kept as modern and up-to-date as possible in order to maintain and improve on the efficiency which has always been a Campbell hallmark."

Significant project expenditures in the past year included funds for completion of the new tomato paste

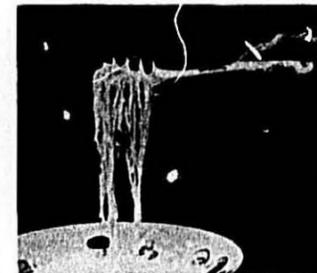
processing plant at Guasave, Mexico, which is now operational; a new regional Pepperidge Farm bakery at Aiken, South Carolina, and start-up work on a major new Pepperidge Farm bakery at Willard, Ohio, scheduled to be completed next spring; the Company's new agricultural research complex at Napoleon, Ohio, where several agricultural research programs are being consolidated; and major improvements or expansion at a number of processing plants including those at Sacramento, California; Hammond, Utah; Napoleon, Ohio, and Linden, New Jersey.

### World Markets

Campbell currently sells products to approximately 115 markets throughout the world, including Israel and Arab countries, Mr. Shaub said, stating that Campbell "is not and never has been a participant in the Arab League Boycott against Israel." He also assured the meeting that Campbell intends to defend an antitrust suit recently filed by the H. J. Heinz Company "vigorously and successfully."

### Hungry-Man Dinners

Campbell Soup Co., Camden, N.J., is introducing nationally two varieties of Swanson Hungry-Man dinners—lasagna with meat, and spaghetti & meatballs. The former contains lasagna with meat in tomato sauce, bean salad, pudding cake and a garlic roll. The latter includes spinach with sea-



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soned sauce, tortoni pudding and garlic roll.

Customers will be offered a \$1 refund via point-of-sale materials for proof of purchase of two of the new dinners. Knitted ski caps in traditional tassel cap or skier's cap style, featuring the Hungry-Man lettering will be offered free for a variety of name panels from any five dinners in the entire line.

### New Franco-American Products

Three new, easy-to-prepare and eat "Franco-American" pasta products—Rotini, Rotini & Meatballs and Beef Ravioli—are being introduced nationally by Campbell Soup Company.

Rotini and Rotini & Meatballs are the newest additions to the "Franco-American" line of popular canned macaroni products moving into national retail distribution. Rotini contains enriched macaroni twirls in a rich, tangy tomato sauce, while Rotini & Meatballs features the same curly macaroni and sauce with beefy meatballs.

Beef Ravioli—plump beefy squares in a tasty meat sauce—is also going national following successful consumer testing.

"These distinctively new pasta products are convenient, economical and tasty, and are great for the whole family as a delicious luncheon or dinner-time dish," C. S. Conner, product marketing director for Franco-American products said. "Rotini and Beef Ravioli products will complement existing 'Franco-American' pasta products," he said.

A combination of television, newspaper coupon and magazine advertising will support the new beginning in January. Two ads with coupons worth 1¢ toward the purchase of one can of Rotini or Beef Ravioli will appear in mid-January in major newspapers will 32 million circulation.

Magazine advertisements scheduled for the March issues of three major women's magazines. Network prime, daytime and weekend children's programming television commercials will appear beginning in January. Versatile point-of-sale materials will also be available.

### New Ground Tester

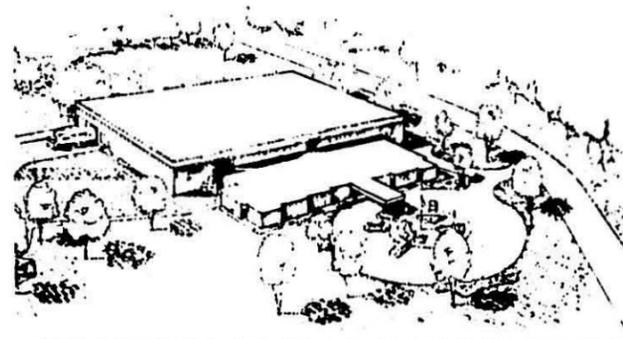
One of the fundamental health hazards sought out—and cited—by OSHA inspectors is the astonishing prevalence of unground or improperly grounded electrical equipment and outlets. Violation penalties average about \$26.60 per receptacle. If a short occurs, a person can be badly burned or killed outright; electrical shorts maim and kill machine operators, maintenance people, construction workers, electricians, plumbers, homeowners, housewives and children—nobody is immune. As a major contribution to safety campaigns, those who prefer to avoid expensive OSHA citations, and those who want safer shops, homes, and homes, Butrick Manufacturing Co. announces the Model 317 Ground Tester, a simple, fool-proof, totally reliable, \$8.00 device which can check the ground on 3-wire outlets, 2 or 3-wire equipment and tools, 2/3-wire adapters, and even 2-wire outlets.

Use requires nothing more than plugging the Model 317 Ground Tester into an outlet, using the ground probe, and noticing which of the three indicator lamps become lighted. A total of ten tests can be performed, with 29 different indications for precise troubleshooting. No experience or skill—and only a moment of time—are required for accurate and reliable tests. The Butrick Ground Tester is only \$8.00, postpaid. Butrick Manufacturing Co.—Box 18-Akron, Ohio 44309



### Research Report

Bulletin No. 504, Final Project Report "Study of the Use of the Unique Functional Characteristics of Wheat Product Development" is available from North Dakota State University, Fargo, North Dakota.



Food Engineering Corporation of Minneapolis, manufacturers of single- and multi-pass dryers, continuous bulk product belt storage and surge systems, vibratory conveying and classifying systems, and other food processing equipment, has begun construction of a new building in the City of Plymouth, Minnesota, a western suburb of Minneapolis, reports Ralph Burgess, President.

The building will be a 51,450 square foot phase I manufacturing and assembly plant with adjoining engineering and administration offices which the firm hopes to occupy in May, 1977. The new site will allow the eventual expansions, which are already being planned, to grow to a maximum building size of about 135,000 square feet.

### Scientist Criticizes Verbal Hogwash

"It may not be nice to fool Mother Nature but sometimes she fools us by including toxic substances in the food we eat."

Dr. Richard L. Hall, Vice President-Science and Technology for McCormick & Co., Inc., stresses that much of the American public is being fed "verbal hogwash" about vast differences between "natural" and processed foods.

In a recent speech before Sigma Xi national honorary scientific fraternity, Dr. Hall pointed out that Mother Nature often adds toxic substances to our food supply that governmental agencies would never permit companies to include. In many cases, he said, processed foods are safer than natural.

For example, he said a raspberry grown naturally on the vine with no sprays and no man-made fertilizers still contains traces of three naturally occurring poisonous substances, adding that you'd have to eat enormous amounts of raspberries to receive any harm.

"We've simply put the emphasis on wrong things," he said. "The least harmful rather than the most harmful health hazards in food are the ones getting the major attention in the press, in legislation and from consumer groups."

### Ignored Hazards

"The two hazards which are most serious—microbiological and nutritional—are widely ignored, yet they are precisely the ones most within the control of individual consumers."

Dr. Hall, who heads research and development activities for the Baltimore-based seasonings, spices, flavorings and specialty foods firm, said:

"Potential dangers from food additives, pesticidal residues and environmental pollutants are both remote and small, but consumer interest has been focused on them—instead of on hazards of food preparation and storage in the home, which clearly are far greater."

"The best way for individuals to enhance food safety and avoid microbiological and nutritional hazards is by paying careful attention to variety in the diet, to proper sanitation procedures and by eating with moderation."

"It's perspective and context which are lacking in most talk about food safety," he said. "We need to develop both."

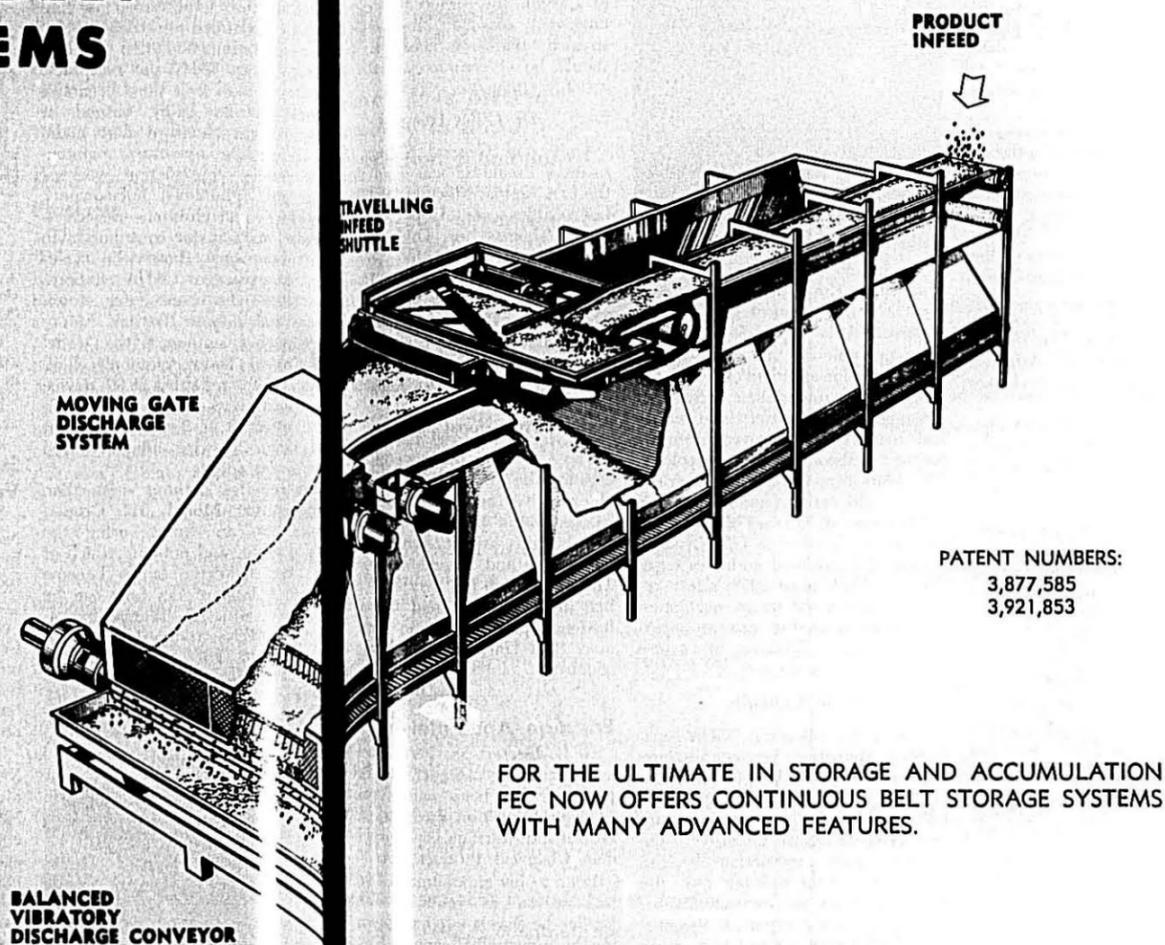
"Safety is simply the absence of hazard. Since we can never be free of all hazard, no matter how uncertain or remote, it makes sense to say that relative safety is the relative absence of hazard."

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### Verbal Hogwash Criticized

(Continued from page 37)

Dr. Hall quoted Dr. Virgil Woldicka, former director of the Bureau of Foods of the Food and Drug Administration, as listing the sources of hazards in the following order: microbiological, nutritional, environmental pollutants, natural toxicants, pesticidal residues and food additives.

Science, said Dr. Hall, is increasingly adept at finding hazards in the environment where none was previously found.

But he went on, "when found against the background of such inflexible concepts as 'no residue,' they create problems of regulation and consumer understanding."

The ability of science, he said, to find traces of substances in food is not matched by science's ability to know for sure if the newly found trace is safe or harmful.

An "enormous variety of toxic substances" are found in food naturally, he said, and there even are rare—and rarely serious—hazards from food allergies.

But, he said, "most people assume without thinking that food should be absolutely safe. This, of course, is not and cannot be so. Absolute safety is absolutely unattainable—even by Mother Nature."

### Cereal Chemists Meet

The food industry's hottest topic—fiber in the diet—received primary focus during the 61st Annual Meeting of the American Association of Cereal Chemists in New Orleans.

In all, 27 out of the 183 papers in the technical program dealt with the subject of food fiber. Dr. M. A. Eastwood, Western General Hospital, Edinburgh, Scotland, said cereals are not the only source of fiber and that relating everything to bran or cellulose was nonsense. Other plants such as carrots and apples are equally valuable sources of crude fiber. Dr. Eastwood declared bran isn't something you ladle into your diet, although it may plan an important role in the reduction of diverticular disease.

### Government Regulations

Another "hot" topic—government regulations—drew many meeting participants to a symposium on "The Impact of New Food Regulations on the Cereal Industries." Leading off the



Dr. Kenneth A. Gilles

symposium, Howard R. Roberts, Acting Director, Bureau of Foods, FDA, summarized the Agency's current review program on the safety of all food and color additives. He said the program was undertaken because of consumer demands for food safety and because of improved scientific testing methodology in toxicology. Five years away from completion, the review calls for: completion of the safety review of the uses of non-flavor ingredients classified as GRAS; safety review of direct food additives regulated by FDA since 1958; safety review of flavors and spices; evaluation of procedures used to measure occurrence of indirect additives; and safety review of color additives.

### Grain Standards

Donald E. Wilkinson, USDA Agricultural Marketing Service Administrator, reviewed the U.S. Grain Standards Act of 1976. Indicating that it was probably the strongest measure ever taken to ensure integrity in the national grain inspection system, Wilkinson said the new law gives the federal government responsibility for inspecting grain at export. It also provides USDA with a mandate to study the current grain standards to encourage the production of high quality grain and to better meet the end use requirements of buyers. Wilkinson also noted that the new legislation calls for a Federal Grain Inspection Service within the USDA which virtually cancels the current capability to AMS to cross-utilize its Grain Division employees for a variety of duties. Establishment of this new agency would require an additional 945 employees and an estimated \$62 million; this latter figure contrasts

with \$9 million USDA spent on grain inspection in 1976.

Continuing with the discussion of grain standards, Henry H. Kaufman of Cargill, Inc. urged the care taken in changing standards. He stressed that any changes made should be of commercial value actually attainable.

### Dr. Gilles Honored

Only one General Session Continental Breakfast was held during the 61st Annual Meeting. The breakfast was the scene of the presentation of the Thomas Burr Osborne Medal to Isydore Hlynka. After accepting the award from President Howard Becker, Dr. Hlynka presented the Thomas Burr Osborne Address. In the traditional surprise ceremony, the William F. Geddes Memorial Award was presented to Dr. Kenneth A. Gilles.

### Professional Society

The AACCC, the leading professional organization in its field, is composed of executives and scientists engaged in the overall process of converting cereal grains (wheat, rice, corn, etc.) into edible and non-edible products. The Association has over 2,500 members in 34 countries, and its two professional publications are read by more than 4,000 scientists in over 60 countries.

### Eastman Appointments

G. H. Doefert has been appointed field marketing manager, and Robert J. Evans has been named product manager, Nutrition Products, for the Health and Nutrition Division of Eastman Chemical Products Co. Doefert had served as product manager for the Industrial Chemical Division. A native of Rochester, N.Y., he graduated from Heidelberg College with a B.S. in chemistry. He also received a Bachelor of Laws degree from LaSalle Extension University. He is a member of the American Association of Cereal Chemists.

Evans is a native of Buffalo, graduating from the University of Buffalo with a B.A. degree in chemistry, foods and nutrition. The Navy veteran is a member of the American Chemist's Society.

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## INDEX TO ADVERTISERS

	Page
A D M Milling Co. ....	13
Amber Milling Co. ....	31
Asseco Corporation ....	35
Braibanti Corporation ....	8-9
Buhler-Mieg, Inc. ....	28-29
DeFrancisci Machine Corporation ...	4-5
Diamond Packaged Products Div. ....	43
Fibreboard Corporation ....	2
Food Engineering Corp. ....	38-39
International Multiloids Corp. ....	44
Jacobs-Winston Laboratories ....	41
Malderi & Sons, D., Inc. ....	12
Meyer Machine Company ....	16-17
National Macaroni Institute ....	41
North Dakota Mill ....	25
Peavey Co. Flour Mills ....	22-23
Rosotti Consultants Associates ....	19
Seaboard Allied Milling Corp. ....	33

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### Packaging Institute President

Richard H. Deane, Technical Advisor Packaging, Eastman Kodak Co., Rochester, N.Y. was elected President of The Packaging Institute U.S.A. for 1977. Mr. Deane, a consultant to Kodak management on special packaging projects, ecology and plastics, previously served PI/USA as First Vice President and Treasurer and as Vice President. Education. He attended the University of Rochester and is active in the Rochester Area Packaging Association.



### Albert J. Ravarino

Albert J. Ravarino, 63, president of Ravarino & Freschi, Inc. of St. Louis, died Nov. 15 after suffering a heart attack in his sleep while visiting in Mexico City. He was in Mexico City with other St. Louis businessmen on a trip sponsored by the St. Louis Ambassadors.

After attending St. Louis University High School, Mr. Ravarino was graduated from the University of Notre Dame in 1935. He sold pasta to the fraternities while in school. He then began working full time for Ravarino & Freschi which had been founded by his father and Joseph Freschi. He was named president in 1949.

Always active in industry affairs, Mr. Ravarino had been a member of the board of directors of the National Macaroni Manufacturers Association for many years. He was president in 1962-64 and was Chairman of the National Macaroni Institute for several years following.

Survivors include his wife, Helen Marie; two daughters, Anne Marie and Mirella; and two brothers, Ernest of St. Louis who is in the business, and Mario of Bologna, Italy.

### Corrugated Box Manual

A new edition of the corrugated industry's basic reference, the "Fibre Box Handbook," are available from box manufacturers, according to Thomas M. Wall, chairman of the Fibre Box Association committee guiding the publication.

Members of the trade group, who produce almost 90 percent of the nation's corrugated containers, have ordered 68,000 copies for distribution to box buyers and users, Wall said.

This will bring the total to approximately one million copies distributed since the first edition in 1952.

The 104-page manual, subtitled "An illustrated reference for designers, engineers, buyers and marketing specialists," is divided into three sections.

Introductory material describes the protective ability of corrugated, and the versatility which can be obtained through design, graphics and other techniques. A checklist for box users lists many of the factors to be considered in box selection. Basic data on metric measurements is also provided.

### Basics of Boxes

The second section, "The Basics of Boxes," offers definitions of industry terminology, a description of box construction, and illustrations of common box styles. Standardized testing procedures, voluntary standards for manufacturing tolerances, and recommended practices for box storage and the use of adhesives are among other topics covered.

### Regulations

The final section on "Regulations" begins with a guide to the use of the rail, truck and other classification which govern the selection of boxes for shipment. The basic regulations with the latest changes, are given along with summaries of those used less frequently.

The Association members' plants which will be distributing the book are scattered throughout the United States. They are listed in the classified sections of local telephone directories under "Boxes—Corrugated and Fiber."

### Divider & Converger Data Sheet

A new data sheet is available from Hi-Speed Checkweigher Co., Inc. its package line divider and converger system—the Magnetic Flow Director. Included in the four-page brochure is information on the Magnetic Flow Director's application and purpose, operation, design and construction features, condensed specifications, as well as potential MFD applications.

Copies of Data Sheet 76-1 on the Magnetic Flow Director are available from Hi-Speed Checkweigher Co., Inc. P.O. Box 314-MJ, Ithaca, NY 14850.

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