

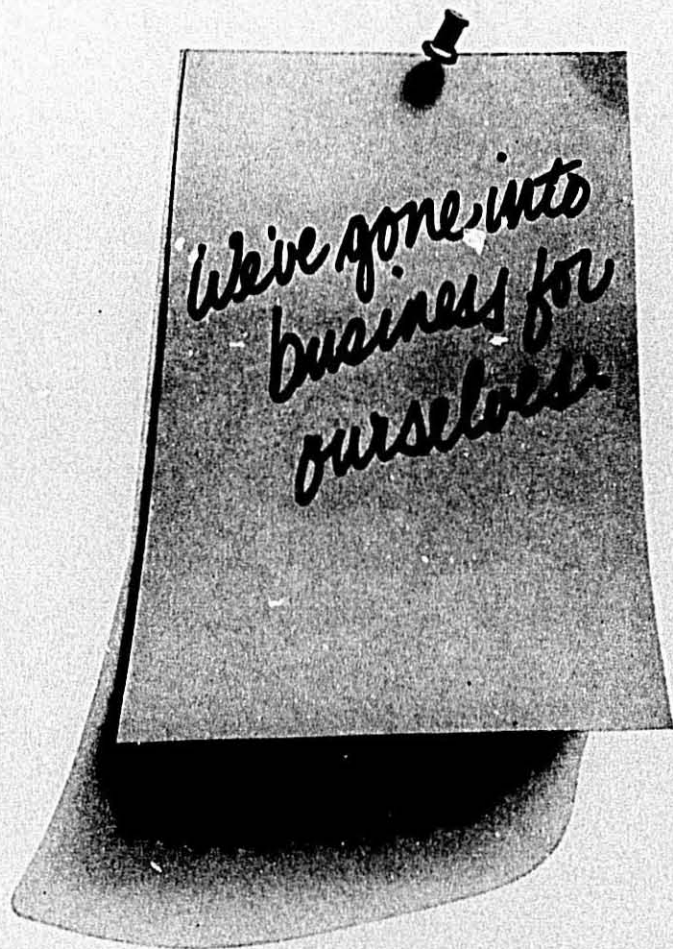
**THE
MACARONI
JOURNAL**

**Volume 53
No. 10**

February, 1972

Macaroni Journal

FEBRUARY, 1972



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The Macaroni Journal

February
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 No. 10

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Cover Photo

Macaroni and cheese is as natural a combination as ham and eggs. It is the base for many variations and for Lenten opportunities. See page 30.

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A Year of Controversy

WASHINGTON cast a long shadow on the business community in 1971. The Economic Stabilization Program with its wage and price controls, while applauded with its announcement on August 15 as a necessary means for controlling inflation, brought plenty of confusion and concern. And government spending, a prime cause of inflation, continues unchecked.

The Occupational Safety and Health Act has an unimpeachable objective, just as does the Fair Labeling and Packaging Act; but it is the application and administration of the regulations that gives business cause for concern.

The crisis in confidence in business caused in part by crusading consumers, Nader's raiders, and government actions such as the cyclamate ban, the tuna-fish scare, the Bon Vivant and Campbell Soup recalls are enough to give the average entrepreneur nightmares.

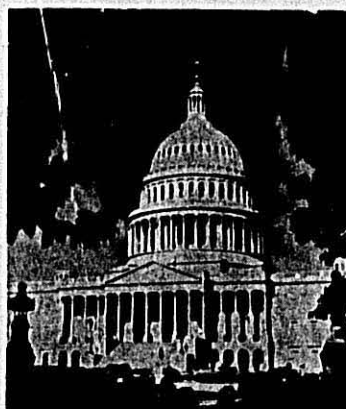
Defense of Standards

Macaroni found itself embroiled in controversy with the suggestion that its standards of identity be changed to allow an engineered corn-soy-wheat product to use its name, shape and consumer acceptance to bring certain segments of the market protein in cereal form rather than expensive meat.

Golden Elbow, "a macaroni product with improved protein quality," not only could be used as a meat substitute in School Lunch Program's Type A lunches for half of the two-ounce requirement of meat, poultry, fish, cheese or beans (all protein sources) but would give "ordinary" macaroni second billing in the process.

It took real effort on the part of industry spokesmen to point out that "ordinary" macaroni does contain protein, is enriched with vitamins and iron, and is normally served in combination with meat, poultry, fish, cheese, vegetables, dairy products and other foods, clearly showing that the consumer prefers to put her additives on the product rather than in it.

It took real effort to defend the Standards of Identity that were established to protect the consumer against substitute or deceptive products. Present standards for macaroni allow for protein fortification with soy, wheat germ, gum gluten, eggs, milk solids, as well as enrichment with vitamins and minerals. Tests showed that 68% semolina and 32% soy produced more protein with a higher protein efficiency rating than the corn-soy-wheat combination. General Foods modified their



formulation later in the year to put in more wheat to improve texture and consumer acceptance.

Issue Not Dead

But the issue is not dead. Recently, Dr. Jean Mayer, the nutritional consultant for the White House Conference on Foods two years ago, wrote a letter to the Washington Post deploring the fact that apparently the durum growers had halted the efforts of General Foods to get the macaroni standards changed to include Golden Elbow. We wrote the Post to assure them that the National Macaroni Manufacturers Association had an interest in protecting the standards for a food that has been wheat-based for some 600 years, for standards that have given the macaroni industry stability for more than a quarter of a century along with a growing per capita consumption in the face of a decline for other cereals. Further, we can give the government, or any special market, protein-fortified products if they wish them without giving our name, shape and acceptance to a substitute. We have nothing against engineered foods, but suggest they be called what they are.

Plenty of Durum

The durum growers had good cause for alarm. They have a two-year supply on hand. Excellent growing conditions produced a bumper crop, half of which goes for domestic needs, half for export. Exports were sharply curtailed because of the dock strike begun at harvest time and stopped only by Presidential Order under the Taft-Hartley Act.

The mill-grind this year barely kept pace with last year's record breaker, and proved again that frequently big

gains in sales in any given period are merely borrowed from the period that follows. The U.S. Department of Commerce reports showed the following seasonal trend:

	000 Cwt.	Gain
November, 1970	1,157	1.3%
December, 1970	1,216	0.7
January, 1971	1,397	2.9
February	1,354	3.9
March	1,429	1.1
April	1,114	-6.0
May	1,041	-10.0
June	1,021	-6.8
July	1,050	-0.6
August	1,347	-2.8
September	1,367	4.0
October	1,383	16.6
Total	14,856	0.9%

Durum millers were pleased with the new crop and made sales in September booking season at the \$6 per cwt. Minneapolis level. At year's end another flurry of booking, some to the end of the current crop year, but mostly for 120 days, occurred at the same price level. North Dakota Mill at Grand Forks resumed operations after being idle for about 18 months following a disastrous fire.

Plenty of Eggs

Marvin Painter of Ballas Egg Products Corporation was badly burned last Spring. Upon returning to work after a miraculous recovery he wrote at the end of Nov.:

This has been a very bad year for the egg producers and also very hard on the processors. The big surplus made it difficult to move the products. Prices have been below cost of production—all caused by only 2% too many eggs.

There were too many laying hens to start with. The Mercks disease vaccine stopped the high death rate of up to 3% per month; the rate of lay was up and the flock was younger. Some of the producer organizations tried to get egg prices up to the cost of production figure and ultimately prolonged the period of over-production.

There were five markets instead of the usual one or two: (1) the table egg market; (2) the scrambled egg mix market; (3) the future market; (4) the breakers market; (5) the market price at which eggs were actually sold. The processors had to work within all these markets as conditions changed from day to day.

The future is still clouded, but it appears that some stability will soon come. The hatch of egg type chicks has

been down all year, the rate of slaughter has been well above last year. The laying flocks are below last year and getting older. More re-cycling has been done this year than ever before, but there is a limit to this. Many producers have been forced out of business. Even Ralston Purina, one of the very large egg producers, has announced that they are going out of the egg production business.

Favorable Outlook

Robert W. Mueller, editor of Progressive Grocer magazine and speaker at the NMMA Annual Meeting last June, says the food business is alive and well at the end of 1971 but can look forward to a much better operating climate in 1972. Why?

- (1) **Stability in costs and prices** is by far the most favorable element in the forecast. Although no one expects that increases will come to a halt, most look forward to a more moderate rate of climb in wages and operating expenses.
- (2) **More amenable consumers.** Restraints on costs and prices should have a highly favorable influence on consumer attitudes and spending.
- (3) **New store construction and renovation,** sharply higher in 1971 than in 1970, promises to accelerate even more in 1972. It means more and much larger supermarkets with more space and facility for new lines, departments and items. It means more convenience stores, the fastest growing segment in retailing, and it means that thousands of stores in the middle—the older and smaller supermarkets—will receive extensive renovations.

(4) **More and cheaper money** will also exert a strong influence, not only in the attitudes and plans in food distribution, but also will produce actions that have been postponed by many stores and companies. Action will be seen in many ways in addition to capital expenditures, involving inventories, promotions, and services.

(5) **Manufacturer-retailer togetherness,** stimulated by the many problems created by consumerism, ecology, legislation and regulation, will certainly become far more meaningful and productive in the period ahead. Forward planning, better communications, better services, a more direct approach to mutual objectives can certainly be expected.

But of all the favorable factors for 1972, perhaps the most significant will be more realistic attitudes and practices in terms of pricing. For the past four

ECONOMIC STABILIZATION PROGRAM—PHASE II

Harold T. Halfpenny, general counsel of the National Macaroni Manufacturers Association, has issued the following summary on regulations pertaining to the Economic Stabilization Program.



Harold T. Halfpenny

DUE to the many questions received in regard to Price and Wage Freeze Phase II, and the numerous regulations, newspaper stories and bulletins released on the subject, it was our feeling that a condensed summary of the program to date would be helpful. This bulletin is prepared based on facts as they exist as of today. Please understand that regulations and amendments to regulations are being issued and changed almost daily. As regulations are changed and new ones are issued, you will be notified in subsequent bulletins.

Background Information: In August, the President froze prices, wages and rents. No increases of any sort were allowed. The freeze was just that—a freeze—it could not allow for any exceptions to be effective, and as a result there were none and in retrospect the freeze was effective. But it was only a temporary measure and was due to be replaced by a system of controls of a more permanent nature. That replacement system is termed Phase II of the Economic Stabilization Program (ESP) and it has proved to be more confusing and complex than its predecessor, the freeze. Basic policies and goals have been set forth under Phase II, rules and regulations have been issued and rules and regulations once issued have been changed and "re-interpreted." In its short history thus far, Phase II has firmly established itself as a flexible vehicle of control capable of being on one side the first day and the other side

Outlook for Macaroni

(Continued from col. 1)

years, the retail industry, faced with inflation and consequently high price consciousness among consumers, has had little choice but to discount and discount deeply. Over this span, retail margins in packaged products have declined by 3 to 5%. If this trend can be arrested and then reversed, 1972 should indeed be a banner year for the total food industry.

For macaroni, with plentiful raw materials and a determined and cooperative effort to protect and promote the products of the industry, 1972 should be an excellent year.

the next day. Nevertheless, it is important to understand the basic principles involved in Phase II-ESP, and to apply these principles to everyday business operations. A word of caution—any explanation of such principles or any interpretation of them at this time may only be done in the light of what has transpired since their first pronouncement. What is important is that each businessman become aware of the basic Phase II policies and that he stay alert as to changes and new interpretations so that he may adjust his business policies accordingly.

Phase II of the President's new economic program began with the issuance of rules and regulations by three government bodies, the Pay Board, the Price Commission and the Cost of Living Council.

The Price Commission announced a general price policy setting as a goal a national average price increase of not more than 2½% a year. This is a goal for the entire economy and does not necessarily relate to any particular business. The policies rely heavily on voluntary compliance. Some increases will be allowed much above this rate where justified on special factors, and some below that rate will not be allowed. A three-tiered system of pre-notification, reporting and monitoring was established.

Prices: Pre-Notification and Reporting Requirements

1. **Businesses with sales over \$100 million** annually must prenotify the Price Commission, giving details on proposed price changes, as well as furnishing other corporate information (there are about 1300 of them representing 45% of total U.S. sales).

2. **Those selling from \$50 million to \$100 million** must report price changes

(Continued on page 6)

Economic Stabilization Program

(Continued from page 5)

quarterly (there are about 1100 representing 5% of U.S. sales).

3. Those selling under \$50 million are exempt from reporting price changes. This group will be subject to spot-checks and monitoring (about 10,000,000 firms representing 50% of total U.S. sales).

The General Rule on Prices: Basically, the general rule on prices is that they must remain the same as charged during the freeze period. However, price increases are permitted provided certain conditions are met, or to meet certain conditions. Wider profit margins resulting from price increases are not permitted. Thus, the controls relate to prices but only as a component of profits.

However, before considering how prices may be increased, it is necessary to set forth the definitions of certain terms which are used in the regulations.

Markup base period—either

1. The last customary initial markup prior to November 14, 1971, or
2. The person's last fiscal year ending prior to August 14, 1971.

Base period—means an average of any two of the last 3 fiscal years ending prior to August 15, 1971, the selection of such 2 fiscal years to be made by the firm.

Freeze Base period—means either

1. The period beginning July 16, 1971 and ending August 14, 1971, or
2. If a person had no transactions during the above, the nearest preceding 30-day period in which he had a transaction.

Customarily initial percentage markup—means the markup determined on an item, product, line, department, store or other pricing practice. For these purposes, the initial markup is that markup which is applied to merchandise when first offered for sale.

Profit margins—means the ratio that net profits (determined before taxes) bears to the gross sales as reported on the person's published financial statement.

Base price—means the highest price charged to a specific class of purchasers in a substantial number of transactions involving such personal property or services during the freeze base period.

Retailers and Wholesalers—Price increase—The regulations permit a price in excess of the base price where—
1. The customary initial percentage markup with respect to the property sold is equal to or less than such firm's initial percentage markup which prevailed during the markup base period, provided

2. The effect of all such price changes is not to increase its profit margin as a percentage of sales, before income taxes, over that which have prevailed during the base period.

Therefore, a price increase can be made beyond the base price for cost increase as long as the markup does not exceed the percentage that prevailed during the freeze of the last fiscal year that ended prior to August 15, 1971. If your fiscal year is on the calendar year you may use the highest percentage that was used during 1970. You may use the customary method, by item, by product line, for determining the markup. However, prices cannot be increased if the effect is to increase profits before taxes as a percent of sales. The ceiling is on profits before income taxes as a percentage of sales.

To determine that ceiling, you examine the financial statements for the last three fiscal years ending prior to August 15, 1971. If you are on a calendar year basis, this would be 1968, 1969 and 1970. You select the best two years, take the average, and that is your ceiling.

How do you know now whether increasing your prices will break through the profit ceiling? The answer is probably you cannot fully predict it. But you are required to justify any price increase you make by showing the increased costs and resultant lowered markups and such justification must be substantiated by the records you keep.

Manufacturers: Price increases will be permitted provided they are justified on the basis of cost increases, taking into account any productivity gains with the proviso that any such price increase may not increase the profit margin as a percentage of sales over that which prevailed in the best two of the last three years.

No Automatic 2 1/4% Increase: There is no automatically allowed 2 1/4% price increase. No increase is allowed unless justified by the facts and in accord with the stated guidelines. Certain percentage ceilings have been set in the medical field but they are an exception rather than the general rule. There can be a price increase of more than 2 1/4% or less than that depending upon the particular facts and circumstances.

Unless a firm is a pre-notification firm, there is no requirement for obtaining permission in advance to raise prices. There is an absolute requirement of justification based on proper documentation and records.

Key Determinants in Pricing Policies: The key determinants of any price increase are (1) costs, (2) productivity

gains and (3) profit margins. The pricing policies of the Commission actually put a ceiling on profit margins and the price of goods sold is only one item in determining such margins.

Profits can increase in terms of absolute dollars—only margins are frozen and then only if there is a price increase.

Increased Profits Without Price Change—Increase in profits as a result of increasing sales, cost-cutting, better equipment and sales, better buying or higher buying or higher productivity. These are fully permitted under Phase II and in fact are an economic goal of ESP.

Posting of Prices by Retailers: The regulations provide that prices are to be posted by retailers. No price increase may be made by a retailer until the posting requirement is complied with. A retailer is one who sells to a consumer. If your company is making any significant volume of sales to consumers, then you are required to comply with a posting requirement on those items. Recently, in answer to a question about wholesalers, the Price Commission indicated wholesalers had to post prices. An inquiry to the Price Commission indicated the answer was in error, and would be corrected. Any company, including wholesalers, that makes sales to consumers is a retailer as far as those sales are concerned.

Exemption—From Controls: The most significant exemptions from controls are:

1. Damaged and used products, other than rebuilt products.
2. Non-residential commercial property rents.
3. Exports, including products sold to a domestic purchaser who certifies the products are for export.
4. Imports, but only the first sale into U.S. commerce.

Record Keeping: Complete records of prices must be maintained for four years, and made available for inspection of agents of the Internal Revenue Service. Only firms whose annual volume exceed \$50 million need report price changes, however. Reports have already been received that smaller firms are being audited to determine if they are in compliance.

Obtaining Official Rulings: If you need an official ruling, the place to apply is the District Director of the Internal Revenue Service.

Wages and Salaries: Under the freeze, wages and salaries could not be raised. Effective November 14, 1971 this is no longer true. On or after that date annual aggregate increases are permitted subject to a 5.5 percent limitation. The 5.5% standard does not apply to each

individual, but it applies instead to the average increase granted on appropriate employee unit. Thus, in any one unit, there may be some individuals getting a 10% increase, others 7%, still others 3% and some no increase at all. These increases do not violate the permissible standard as long as the overall average of increase is not greater than 5.5 percent. The standard is applied to the total wage base. Thus, wages and salaries, vacation pay, pensions, stock options and other fringe payments are included in the base to which the 5.5 percent applies.

A three-level classification system for reporting has also been established for the purpose of implementing the Pay Board policies. However, the categories are based on the number of employees involved rather than sales volume. Category 1 includes proposed pay adjustments that apply to or affect 5,000 or more employees. Category 2 includes such adjustments involving between 1,000 and 5,000 employees. Category 3 includes all adjustments affecting less than 1,000 employees.

Category 1 adjustments require pre-notification to and approval by the Pay Board before they become effective. Category 2 adjustments will be reported to the Pay Board at the time the adjustment becomes effective. Category 3 will be subject to monitoring and spot checks but will not be required to prenotify or to report pay adjustments.

Exceptions to General Wage Standard: The 5.5% guideline applies generally to all wage increases. There are a number of exceptions and refinements to the rule, some of which were in effect during the freeze period and some of which have become effective in Phase II. Bona fide promotions are excluded from the 5.5% annual aggregate. The Pay Board has ruled that longevity and in-grade pay increases may be made without regard to the 5.5% standard, as long as such increases are within a rate range according to the terms of pay plans as established practices in existence prior to November 14, 1971.

There is another exception with respect to pay plans and established practices in effect on November 14, 1971. This occurs for example in the case of a wage increase which came due during the freeze under the terms of an existing pay contract. The raise was not permitted during the freeze period, but it is permissible on and after November 14, 1971 irrespective of the 5.5 standard. Such contracts are subject to review when challenged by a party at interest or by at least five members of the Pay Board. In the event of such a challenge, the terms remain in effect unless and until the Pay Board rules otherwise.

Merit Increases: The Pay Board has made a limited exception to the general pay standard in regard to merit pay increases. If a labor agreement exists, merit increases provided for in such agreement may be put into effect without regard to the 5.5% limitation. In the absence of such an agreement, aggregate individual pay increases under a merit plan are considered pay increases subject to the general pay standard.

Major Wage Settlements: Some major settlements being approved will be over this 5.5% such as coal, rail, aerospace, longshoremen, but these increases will not have a vital impact on the President's goal of reducing inflation down to 2.5%. Only a small segment of the some 80 million work force will benefit. The larger than standard increases will be based on catch-up factor, union agreements and intra-industry pay relationships especially in regard to railroads, but it will not be a signal for lax control.

Regulations: Regulations are being changed and issued almost daily, some containing new interpretations. Subsequent bulletins will keep you advised of new developments. It is of the utmost importance for every businessman to know that the burden of proof is upon him. Any increases of prices or wages must be justified by complete and proper records.

THE PHONY-RONI ISSUE CONTINUES

On December 13, the New York Times carried a story by Richard D. Lyons entitled "New Type of Macaroni Embroils the F.D.A. in a Controversy Over Its Label." The item was syndicated across the country as follows:

WASHINGTON, Dec. 12 — At a time when holiday menus with exotic courses are catching the attention of most food-minded Americans, the Food and Drug Administration is acting as an almost unwilling mediator in a dispute over a far more prosaic product, macaroni.

At issue is whether a type of macaroni high in protein and different in composition from traditional formulations because it contains soy and corn flours may be labeled macaroni.

The General Foods Corporation, which makes the product, called Golden Elbow Macaroni, wants to market it with that label. Under present Federal regulations, the product, which its makers say offers eight times the protein of usual macaroni, may be used

only in institutional test feeding programs.

Organized Opposition

The nation's macaroni manufacturers and wheat growers—macaroni usually is made only from high-grade wheat—have complained that widespread use of the new product would undermine the acceptance of regular macaroni. These groups contend that Golden Elbow differs not only in protein content, but also in taste and texture.

"Macaroni made from wheat and water has been called macaroni for 600 years and we want to keep it that way," said Robert M. Green, executive secretary of the National Macaroni Manufacturers Association in Chicago, whose members produce more than a billion pounds of macaroni a year.

Bureaucratic Inertia

General Foods executives, such as C. W. Cook, the board chairman, replied that marketing something labeled "imitation macaroni," as the other manufacturers want, would place a stigma on their product that would inhibit sales. They also contended that "bureaucratic inertia" was preventing the mass marketing of their product.

A Congressional source familiar with the controversy said that the application of General Foods to the F.D.A. to change the "standards of identity" of macaroni—that is, Federal regulations that govern its content—"ran into terrific opposition from the macaroni association and the durum wheat people."

"The F.D.A. has been treading water on the issue, hoping not to get into a big fight," the source said, adding: "But the F.D.A. is very vulnerable on this issue because it knows it has no good reason to approve the product."

Dr. Ogden Johnson, director of the division of nutrition in the F.D.A.'s Bureau of Foods, said, "We do not want to do battle on every formulation, but would rather have the various sides do it themselves."

"It would appear to us," he continued, "that there is a legitimate place for the high protein product in the market place and we ought not to narrowly restrict the manufacturers as to what they put into their products."

It has been more than two years since the first White House Conference on Food, Nutrition and Health urged that enriched foods be made more available to consumers. As one example of improving nutrition, it was suggested that a different type of macaroni be made available that would offer more protein than the types made from wheat alone.

(Continued on page 8)

Phony-Roni Issue

(Continued from page 7)

The current formula for Golden Elbow is 30 per cent wheat, 30 per cent defatted soy flour and 40 per cent corn flour. Small amounts of thiamin, riboflavin, niacin, iron and calcium have been added.

General Foods, which has conducted test feedings of Golden Elbow in North and South America, boasts that its product contains twice as much protein as normal macaroni. But Dr. Kenneth Dykster, director of the corporation's Center for Applied Nutrition in Tarrytown, N.Y., said that the enrichment in protein was even greater.

"Golden Elbow has a protein efficiency rating—a measure of how effectively the body uses the protein—four times that of regular macaroni," he said. The company, therefore, contends that its product offers eight times as much protein because Golden Elbow has twice as much to start with, and that this is four times as efficient. The two products cost about the same.

Macaroni Industry Announces New High Protein Product

Formulation Under Existing FDA Standards for Macaroni

WASHINGTON, D.C., December 15—The macaroni industry has developed and will shortly offer to school feeding programs a new high protein macaroni which can be produced under existing, long-standing federal standards for the pasta product.

"The new product has been developed as an industry project in response to the federal government's desire for a high protein macaroni for special feeding purposes," Robert M. Green, executive secretary of the National Macaroni Manufacturers Association, said. "It proves that it is not necessary to abandon the traditional quality of durum wheat-based macaroni to provide a high protein product."

The industry executive revealed that, with the development of the new product within existing Food and Drug Administration standards, the macaroni manufacturers have asked the Department of Agriculture to withdraw its request to FDA for a new standard for macaroni which would permit substitution of corn or other grains for high quality durum.

Analysis at the Cereal Technology Laboratory of North Dakota State University at Fargo, according to the industry executive, shows the new formulation to contain 25 percent protein by

volume compared to 22 percent claimed for a corn-based substitute being test marketed by General Foods Corporation.

Accomplished Within Standards

"Thus," Mr. Green said, "our new product provides the same protein quality with higher protein quantity than the substitute for which FDA is asked to amend the macaroni standard of identity. And we accomplish this without undermining the taste and texture qualities which are responsible for the acceptance of macaroni world-wide."

The new industry product contains 68 percent durum wheat and 32 percent soya, plus vitamins and minerals. The General Foods product contains 30 percent wheat, 30 percent defatted soy flour and 40 percent corn flour, plus enriching vitamins and minerals.

The new industry product is the latest development in a controversy which has been raging for months over the FDA proposal to revise the standards for macaroni. The industry has complained that substituting cheaper corn for high quality hard durum wheat deprives its product of its traditional taste and cooking qualities, providing a pasta which is mushy when cooked. This, the industry maintains, would reflect on all macaroni and hurt it in the marketplace.

Consumers Join Fight

Numerous consumer organizations joined the fight against the new standard of identity in comments filed with the FDA. In the face of the protest by consumers and the macaroni industry, the Food and Drug Administration has held up promulgation of the new standard. Instead, it asked the macaroni industry to ascertain whether macaroni could be modified to provide a high protein product within present standards.

"This we have now done," Mr. Green explained. "The work at the Cereal Laboratory at Fargo, including cooking tests, demonstrates that we have an eminently successful product for those purposes where protein enrichment is desired. Our members will now offer this product for school feeding programs. And we have every expectation that FDA will withdraw its proposal."

"There is nothing," Mr. Green added, "to foreclose the marketing of other high protein products under some name other than macaroni and in shapes which won't deceive the consumer into thinking the product is macaroni. But we are confident, based on 600 years of experience, that traditional macaroni is what the consumer wants and will buy."

In the Washington Post, Dec. 23

The Politics of Nutrition

The sale of high protein macaronis developed by General Foods containing 4 times as much protein as ordinary noodles has been effectively prevented by F.D.A. and U.S.D.A. action protecting "standards of identity." The two agencies seem to be caving in under the pressure mustered by durum wheat farmers. At present, the availability of a new inexpensive source of protein, of particular use to growing children and low income groups, appears to have been blocked.

This episode follows the cancellation of the important hearings on the prevention of heart disease by the U.S. Senate Committee on Nutrition and other Human Needs. Examination of this problem, the most important health problem facing the nation, was prevented by the pressure of dairy producers on captive politicians. Dairy interests also intervened at the White House Conference on Aging to confuse and bury the issue of decreasing the amount of saturated fat (and salt) in donated commodities received by the elderly.

Two years ago, at the White House Conference on Food, Nutrition and Health, a consensus was reached that we must improve the nutritional value of our food supply, based on what we know on the relation of food and health. We have the agricultural resources, the medical knowledge, the technology and the distribution system we need to make great strides forward. But we will not be able to move until politicians of both parties learn to protect the nutrition and health of the American people against the pressures of special interests.

JEAN MAYER

Boston.

The writer, Professor of Nutrition, Harvard School of Public Health, was Chairman of the White House Conference on Food, Nutrition and Health and of the Nutrition Section, the White House Conference on Aging.

Response to the Editor, Dec. 23

Dear Editor:

In a letter appearing December 23, Dr. Jean Mayer laments that General Foods has not been given permission to sell a new product it wants to call "Golden Elbow, Macaroni." He says this is because of pressure applied by

(Continued on page 10)

THE MACARONI JOURNAL

Clermont CONTINUOUS NOODLE DRYER

Dramatically New in Appearance

Clermont



Side view noodle finish dryer taken at plant of Tharinger Macaroni Company, Milwaukee, Wisconsin

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The only Noodle Dryer available that affords free access to the screens from both the fan chamber and the air chamber sides.

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Response to the Editor

(Continued from page 8)

durum wheat growers. Opposition to this move has also come from the National Macaroni Manufacturers Association.

Dr. Mayer is wrong in indicating opposition is an attempt to deny the American people the right to have nutritious food. We simply are protecting our product which has for hundreds of years been produced from wheat. General Foods has sought to base its product on corn, but to label it macaroni. Corn is not a suitable ingredient because it produces a mushy macaroni and we fear that all macaroni products will suffer from customer rejection if this move is allowed.

We feel General Foods should be free to market their new product and people who might want to buy it should be free to do so. But FDA should not alter the standards for macaroni so this can be done.

The new product should not be sold as macaroni. General Foods has come up with some imaginative names for other products, such as Dream Whip, Tang, etc. They should be able to do the same for this product.

As further evidence to Dr. Mayer that we are not against nutrition, the macaroni industry is now prepared to offer to school lunch programs a form of macaroni containing 68 percent durum wheat and 32 percent soya which contains more protein by weight than does the General Foods product. And, this is accomplished within the existing FDA standards.

Dr. Mayer talks about the "pressures of special interests." The macaroni manufacturers are asking only that the standard of identity for their product be left unchanged so that the consumer can know what she is buying. Consumer organizations support this position, as evidenced by the protests on this matter to FDA. General Foods is the party asking for a change in standards so they can infringe upon the tradition and customer acceptance of macaroni. General Foods is the party asking to be able to sell something that is not macaroni, but which will be labeled macaroni. So who's guilty of applying special interest pressure?

ROBERT M. GREEN

Palatine, Ill.

Dr. Mayer Writes:

I am delighted to hear that N.M.M.A. is planning high protein wheat macaroni—macaroni is a very basic food which we ought to make as good as possible while maintaining its economy. My one interest is to see our food supply upgraded.

Labeling Protein-Fortified Enriched Macaroni-Type Products

James J. Winston, director of research for the National Macaroni Manufacturers Association, reports that the requirements for protein-fortified enriched macaroni-type products can be met with the formulation of 56% durum semolina and 32% defatted soy flour. The labeling requirements can be met by listing the ingredients in order of predominance by weight, i.e. durum semolina or durum flour, defatted soy flour, water. The enrichment legend should likewise appear on the carton. Also, in order to assist the school lunch supervisors using this type of macaroni, it has been suggested by the Nutrition and Technical Services of the U.S.D.A. that the following statement be added on the shipping label: "One ounce of this dry macaroni (1/2 to 3/4 cup cooked) may be used as one ounce of meat alternate if served with meat, poultry, fish or cheese to meet the remaining requirement."

FNS Notice 218 Feb. 22, 1971

U.S. Department of Agriculture, Agricultural Research Service

Protein-Fortified, Enriched Macaroni-Type Products (B-2)

Enriched macaroni-type products meeting the following requirements may be served in the Type A School Lunch as an alternate to meet up to one-half the minimum requirement for two ounces of cooked meat. For this purpose, one ounce equivalent dry product, which will measure one-half to three-fourths cup cooked, will serve as alternate to one ounce of meat if served in combination with meat, poultry, fish or cheese to meet the remaining requirement.

Protein-fortified, enriched macaroni-type products include macaroni, spaghetti, vermicelli and similar formed products made from cereal flours or meals, alone or in combination with one or more ingredients with a relatively high protein content such as an oilseed flour, nonfat dry milk or derived protein concentrates, and include the vitamins and minerals specified under "Chemical Composition." Optional ingredients include amino acids or their salts, binders or other ingredients that serve a necessary and useful purpose.

All ingredients shall be in conformity with the requirements of the Federal Food, Drug and Cosmetic Act and regu-

lations pursuant to that Act as applicable.

Chemical Composition: Protein-fortified, enriched macaroni-type products shall meet the following compositional requirements. Analytical methods employed for these determinations shall be those prescribed in Official and Tentative Methods of Analysis of the Association of Official Agricultural Chemists, 10th Edition, 1965. All values except moisture are given on a dry basis.

	Minimum	Maximum
Protein, ¹ weight %	20.0	25.0
Moisture, weight %	—	13.0
Iron, mg./lb.	13.0	16.5
Thiamin, mg./lb.	4	5
Riboflavin, mg./lb.	1.7	2.2
Niacin, mg./lb.	27	34
¹ Nitrogen times 6.25		

Biological Value of Protein: The protein efficiency ratio, PER, of the macaroni-type product shall not be less than 95 percent of that of casein. PER shall be determined on the cooked, drained product by the method "Biological Evaluation of Protein Quality" in the reference cited in the preceding section.

Prince Gets Permit

On December 14, Prince Macaroni Manufacturing Company of Lowell, Mass. received a marketing permit from FDA for a product with 8% soya with added wheat gluten, wheat germ, egg white solids and lysine. It will be labeled "enriched macaroni made from wheat and 8% soya."

Gooch Foods in Lincoln, Nebraska has been working with school lunch people in their markets with a 78% durum, 20% soy and 2% egg albumen content, macaroni, spaghetti and egg noodles (noodles have 5.5% egg solids). Protein runs 21.5%.

German Village Products is producing a 25% protein macaroni in 10 and 20 pound institutional packs. They have facilities for making more. Contact: Stanley Tregillis, P.O. Box 360, Wauseon, Ohio 43567.

Fortified Pizza?

WASHINGTON (FNS)—Frozen TV dinners, pizzas and breakfast and snack foods are getting more than a once-over from the Food & Drug Administration, which is proposing a beefing up of the nutritional content of such items.

FDA is studying the possibility of a massive food-fortification program, which would encourage manufacturers voluntarily to add vitamins, minerals and protein to most of these products.

The move was prompted by the FDA's concern over changing American

eating habits—away from meats, vegetables and dairy products, the usual nutritional sources, to processed foods that generally have lost much of their food value.

An FDA spokesman said the high consumption of convenience foods makes it necessary to guarantee some level of nutrition to those who rely on them almost exclusively.

The agency has already asked the National Academy of Sciences to establish nutritional guidelines for certain classes of foods, beginning with frozen whole dinners and main course products, such as stews and macaroni and spaghetti dinners.

Studies are also planned for analog foods (meat substitutes) and soft drinks.

The FDA indicated that once the guidelines are established, setting maximum and minimum nutritional standards, manufacturers will be urged to adopt them voluntarily. A spokesman said it was unlikely that any legislation would be sought seeking mandatory compliance.

F.D.A. Moves to Improve Flour, Bread Enrichment

A proposal by the Commissioner of the Federal Food & Drug Administration, published in the Federal Register, Dec. 3, provides for substantial increases in iron level in flour and bread, and adoption of revised standards for B Vitamins. The move was strongly endorsed by industry leaders as an important forward step, giving recognition for expanding use of enriched flour in baking. Southwestern Miller carried the following story:

The Food and Drug Administration on Dec. 3, moved for substantial improvement in the nutritional contribution of wheat flour, bread and other baked foods to the American diet. On that day, the F.D.A. published a proposal in the Federal Register that represents endorsement, after months of study, of a proposal that originated almost exactly two years ago within the breadstuffs industry. Its final adoption will mean the first modification of the standards of flour and bread enrichment since the program was started 30 years ago in 1941.

The F.D.A. proposals will be open for comment for 60 days after publication. The potential effective date is still very much in doubt, depending on any questions or hearing requests that may be raised by various interests within and outside the food industry. One expert on F.D.A. procedures has estimated that it may be six months before the revised standards for enriched flour and bread

become effective. Many hope for quicker action, especially in light of the fact that the proposals, in one form or another, have been a subject of public review and attention for a full two years.

Leaders of milling and baking were unanimous in their endorsement of the F.D.A. action as an important forward step in the nutritional contributions of flour and bread to the American diet.

The proposals themselves involve several innovations for the standards. These include establishment of a single level for iron and the B vitamins, rather than the range allowed in the standards for the past 30 years, and recognition of increasing attention to the use of flour enriched at the mill by bakers and other processors of flour foods.

Proposed, Present for Flour

The following table shows the proposed enrichment levels for flour, as compared with the current standards, in milligrams per lb.

	Proposed	Current
Iron (Fe)	40	13.0-16.5
Thiamine	2.9	2.0-2.5
Riboflavin	1.5	1.2-1.5
Niacin	24	16.0-20.0

For enriched self-rising flour, the proposed and current standards for enrichment are the same as for plain white flour, except that self-rising flour must contain at least 980 milligrams of calcium (Ca) per lb. of flour. The addition of calcium is also permitted in enriched flour, but it can only be claimed on the label if the content is at least equal to the level of 980 milligrams per lb. The present optional range in regular enrichment flour is 600 to 625 milligrams per lb. in self-rising flour 500 to 1,500.

Also, the same requirements will be established for enriched farina as for flour, including the minimum calcium level required in order to make a claim that the product is enriched with calcium.

Varied Changes in Bread Levels

For enriched bread and enriched rolls or enriched buns, the following table shows the proposed enrichment levels in the modified standards, compared with the current levels, in milligrams per lb. of product:

	Proposed	Current
Iron (Fe)	25	8.0-12.5
Thiamine	1.8	1.1-1.8
Riboflavin	1.1	0.7-1.6
Niacin	15	10.0-15.0

Also, the baked foods may contain added calcium, with a label claim permitted only if the calcium content is 600 milligrams per lb. of finished food, compared with the range of 300 to 500 milligrams in the present standards.

Joint Petition Filed in 1969

The move for modification of the standards for enrichment of flour and bread originated in the fall of 1969, specifically in early November of that year, when the Millers' National Federation and American Bakers Association filed a joint petition with the F.D.A. proposing an increase in the amount of iron in the enrichment formula. That proposal, in modified form, was not published by the F.D.A. in the Federal Register until April 1, 1970. Even though the joint petition was modified considerably at the agency's suggestion, it was still considered an industry recommendation.

Appreciate Enriched Flour Use

The upward revisions in flour reflect recognition by the F.D.A. of the increasing use of flour enriched at the mill in the manufacture of bread and other baked foods. The F.D.A. said:

"The commissioner concludes that the amounts of nutrients, calcium, thiamine, riboflavin and niacin presently provided for in the standards should be changed to make it easier to prepare enriched bread and significantly fortified nonstandardized bakery products from enriched flour alone. The commissioner proposes that the amounts of nutrients in enriched flour be so adjusted that bakers, relying on the enrichment provided in enriched flour, will be able in most instances to produce enriched bread meeting the requirements of the enriched bread standard."

Lower Protein in Durum Flour

The Durum Wheat Institute Committee has recommended to the Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture, to lower its protein requirements for durum flour.

Present specifications call for the following:

Protein	12.5	minimum
Ash	.90	minimum
Moisture	14.0%	maximum
Carotenoid Color	6	minimum
Sieving according to FDA Standards of Identity.		

Discount Schedule:

Protein	12.4-12.3	minus 10¢
	12.2-12.1	minus 25¢
Excess Ash	.91-.92	minus 10¢
	.93-.94	minus 25¢
Excess Moisture	14.1-14.2	minus 10¢
	14.3-14.4	minus 25¢
Carotenoid Color	5	minus 10¢
	4	minus 25¢

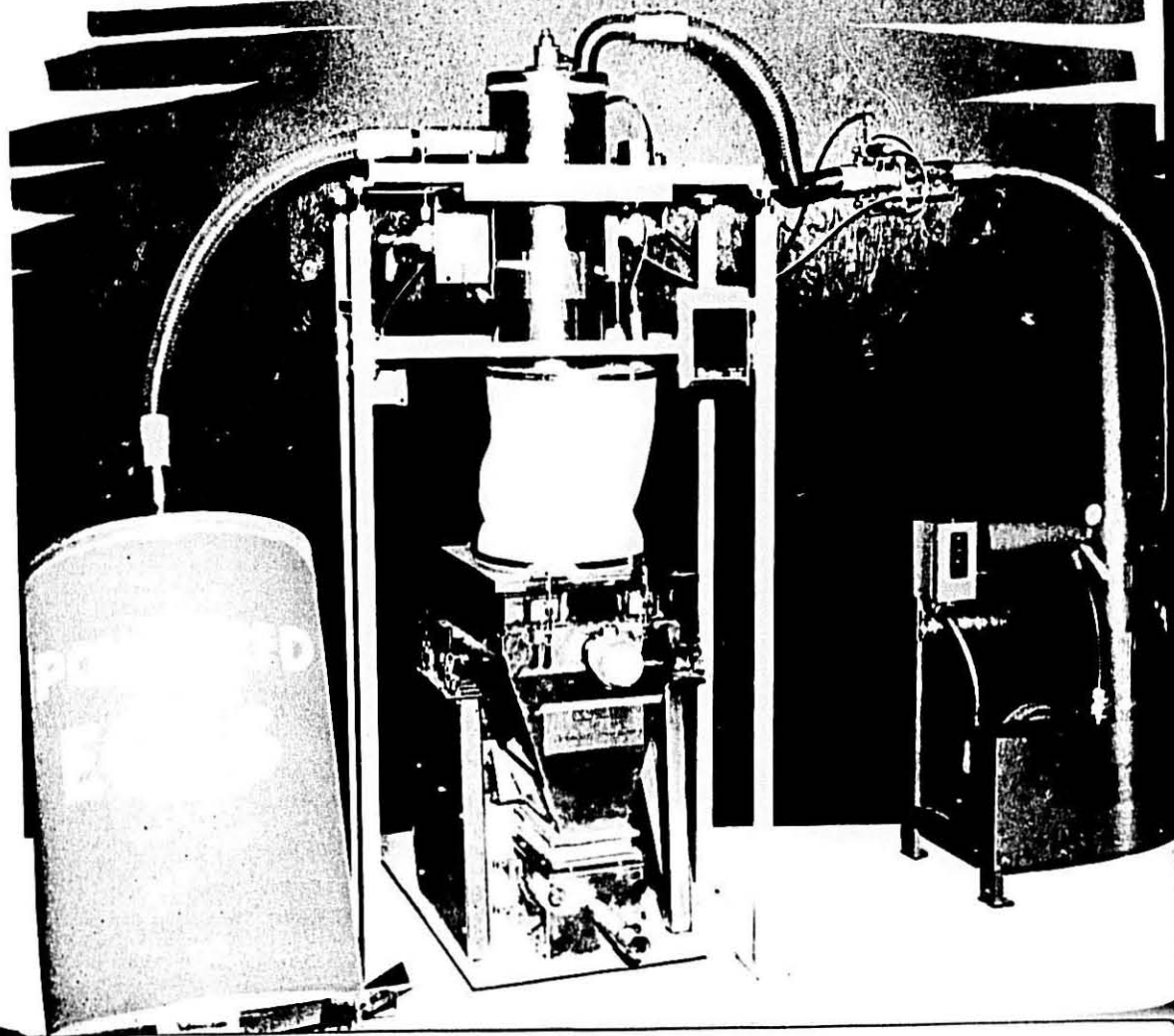
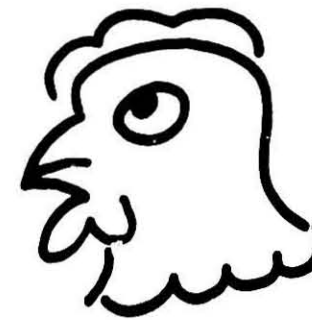
Protein Down

The 1971 durum wheat crop had a much lower protein content, and a re-

(Continued on page 14)



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The stainless steel wand is inserted into the dry egg container and the vacuum pump is started, to draw the eggs into the storage hopper. When the storage hopper is fully charged, the vacuum pump automatically shuts off.

The level indicator in the hopper of the volumetric feeder actuates the discharge of the dry eggs from the storage hopper to the hopper of the volumetric feeder. A constant head in volumetric feeder is maintained eliminating variations of delivery. This feeder delivers a pre-set amount of dry eggs to the mixer. Manual adjustment of delivery rate is provided.

The egg feeder and conveying system will deliver from 14 pounds to 140 pounds of eggs per hour at a maximum variation of 2% of set delivery rate. An optional Model will deliver from 55 pounds to 550 pounds of eggs per hour, also at a maximum variation of 2% of set delivery rate.

For additional information, specifications and quotations, contact

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Lower Protein

(Continued from page 11)

quest for revision is made for the minimum protein from 12.5 to 12 for durum flour with discounts scaled down accordingly, leaving all other specifications unchanged. The request was supported by a report of the North Dakota State University on the quality of the 1971 crop.

International Multifoods Introduces Duregg

International Multifoods has "cracked the egg problem" with its unique, new Duregg, according to Sal Maritato, vice president in charge of durum products in Multifoods' industrial foods division.

Duregg is a mixture of durum flour and egg solids to be used in the production of noodles. The manufacturer just adds water and blends to make noodle mix from Duregg.

"Adding egg solids has always been a headache for the noodle manufacturer," Maritato said. "Because of the diverse, technical nature of the operation, manpower needs are significant. He has to contend with maintenance of sanitary conditions, mechanical breakdowns and wasted ingredients during mixing. He also must provide storage space for both flour and egg solids."

The introduction of Duregg resulted from a year of intensive research. Our aim was to minimize the noodle manufacturer's mixing problems as well as insure him the highest quality mix possible, said Maritato.

Many Advantages

"Duregg offers more effective and efficient quality control by eliminating a major measuring and mixing step in the production of noodles.

"The manufacturer no longer has to worry about sanitary or mechanical problems involved in mixing flour and egg solids. Waste, generally associated with adding egg solids, is eliminated. With flour and egg solids already mixed, less storage space is required.

"With fewer sanitary, mechanical and mixing problems, the manufacturer's manpower requirements are noticeably less," added Maritato.

"In addition to improving efficiency, Duregg also provides consistent quality. Duregg guarantees at least 5.5 percent egg solids in every batch of noodle mix," stated Maritato. "The highest grade eggs and the finest quality flour are carefully blended for even distribution of egg solids."

Maritato emphasized the importance of sanitation, strictly maintained throughout Multifoods' production of Duregg and its transport to the noodle manufacturer.

Duregg is available now in bags or bulk from Multifoods durum products salesmen.

International Multifoods Sets Records

International Multifoods reported record earnings and sales for both the third quarter and nine months ended November 30.

Consolidated net earnings for the third quarter were \$2,591,000, an 18 percent increase from \$2,191,000 a year ago. Earnings per common share, after deduction for preferred dividends, were 75 cents, up 4 percent from 72 cents in the third quarter last year on a higher average number of shares.

Consolidated sales in the third quarter rose 2 percent from \$116,200,000 a year ago to \$118,900,000 today.

For the nine months, consolidated net earnings were \$5,819,000 versus last year's \$5,157,000, a 13 percent increase. Per share earnings, after provision for preferred dividends, were \$1.74, up 3 percent from \$1.69 for the nine months a year ago. Sales for the nine months were \$339,200,000, up 6 percent from \$321,300,000 last year.

Stock Issuance

The results reflect the issuance of 384,755 common shares including 300,000 shares issues in a public offering last July 1. This was partially offset by the return of 30,908 shares as reimbursement in connection with a settlement of claims arising from previous acquisitions.

President William G. Phillips said that the net and per share figures reflected a favorable currency exchange rate on the company's Canadian working capital which resulted in a net gain on foreign exchange during the nine months of \$188,000 or six cents per share versus 15 cents a year ago.

Consumer Product

Phillips said he was pleased with the "excellent" performance of the consumer products division. He also said that the industrial foods division continued its strong showing compared to a year ago.

In addition, the firm's Sveden House and Mister Donut restaurants, both recent acquisitions, continued to operate profitably versus losses a year ago.

Phillips said that he was optimistic about surpassing last year's record earnings of \$2.41 cents per share based on a number of factors, including higher egg prices and a marked improvement in the company's U.S. agricultural products division.

Poultry and Egg Meetings

Among the meetings scheduled for 1972 by the Poultry and Egg Institute of America, are those listed below. They include industry meetings formerly sponsored or planned by the American Poultry and Hatchery Federation and the Institute of American Poultry Industries, the two national organizations recently merged to create the Poultry and Egg Institute of America.

Feb. 8-10 Poultry Products Quality Control School, Sheraton-Chicago Hotel, Chicago, Ill.

Apr. 12-14 Fact Finding Conference and Exhibit, The Rivergate, New Orleans, La.

May 18-19 Institute Research Council, University of Nebraska, Lincoln.

Aug. 22-25 Production & Marketing Conference, Stouffer's Riverfront Inn, St. Louis.

Nov. 7-8 Egg Products Quality Control School, Sheraton-Chicago Hotel, Chicago, Ill.

Contact is Harold M. Williams, president, Poultry & Egg Institute of America, 67 East Madison Street, Chicago, Ill. 60603.

The Egg Machine

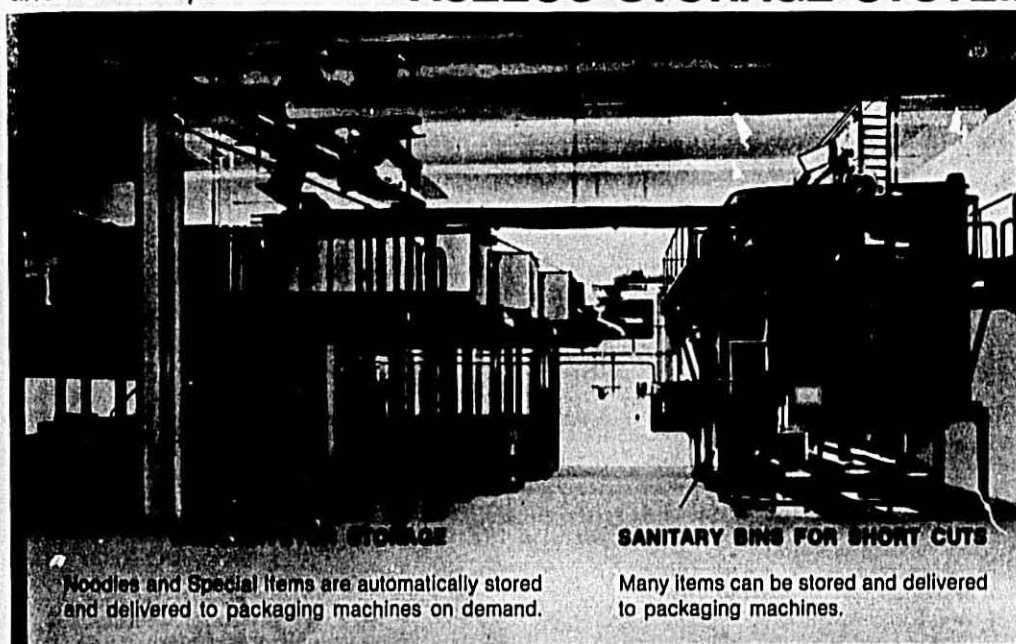
Uncle Sam lost a tax case last summer but now it's on appeal. The case involved a big chicken operator in Mississippi and how it carried its chickens on its books. The main business was selling eggs, but after the hens had given their all, they were dispatched to a meat-processing plant. (After a chicken becomes a laying hen at age 24 or 26 weeks, she has, on average, about 12 months of commercial output in her.)

The taxpayer inventoried its flocks at the price they fetched at the meat processor's. The IRS contended, however, the chickens shouldn't be inventoried at all. It argued that because the taxpayer was mainly selling eggs, the laying hens should be construed as self-constructed production equipment ("egg-making machines"). The IRS would have the unsuspecting birds capitalized and amortized.

To the Tax Court, the whole thing smacked of which comes first—the chicken or the egg? Obviously, the taxpayer was selling both, the court declared, and the meat processor's price was a fair measure for depleted hens. The court saw no fowl play in the taxpayer's books.

Eggs are on the Plentiful Foods list for February, along with broilers and fryers in entrees, salads, casseroles, soups and sandwiches.

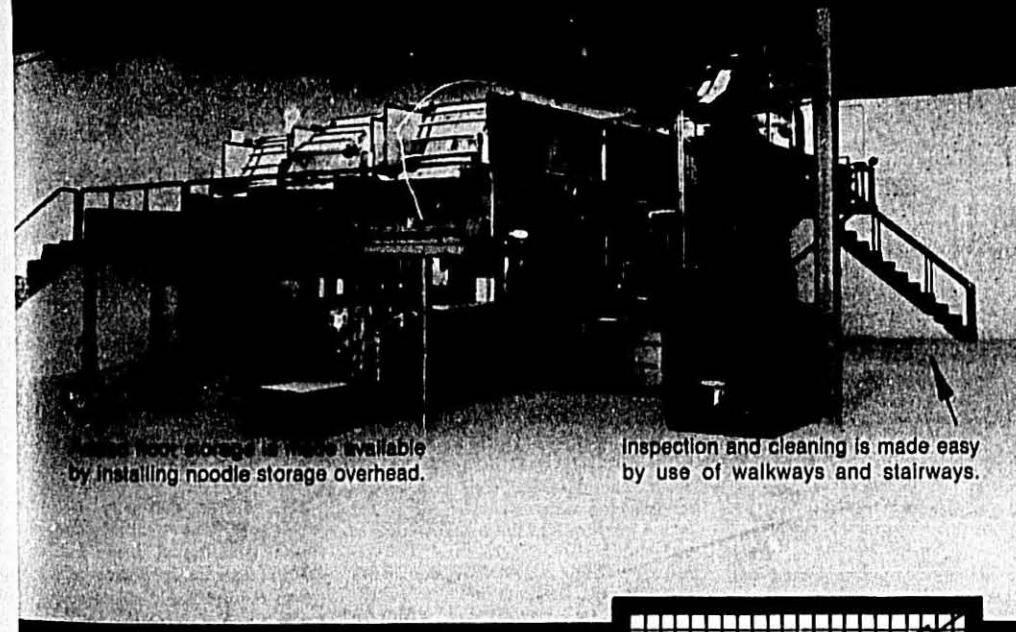
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FEBRUARY, 1972

15

Bacteriological Aspects of Pasta Processing, (The Salmonella and Staphylococcus Problems)

David E. Walsh*

Published with the approval of the Director of the Agricultural Experiment Station, North Dakota State University, North Dakota, as Journal Series No. 296.
* Assistant Professor, Cereal Chemistry and Technology, North Dakota State University, Fargo, North Dakota.

THE problem of microbial contamination of food greatly concerns the regulatory agencies as well as the consumers. Food of all types, including pasta products, have been seized or recalled from the market because of contamination with microorganisms. According to the Food, Drug and Cosmetic Act, a product may be held in violation if it is a potential risk to public health. Consequently, products which contain such microorganisms as *Staphylococcus*, *Escherichia coli*, *Salmonella*, or are suspect of contamination, can be seized under the law.

FDA Actions

According to data supplied by the FDA,¹ the number of legal actions and voluntary recalls of contaminated foods has increased steadily in the last few years. Table I shows data on the types of actions taken by the FDA in 1968, 1969, and 1970. The number of total actions involved was: 554, 431, and 678, in 1968, 1969, and 1970, respectively. Moreover, the total number of actions involving microbiological contamination of food nearly doubled during the same period—121 actions in 1968, compared with 221 actions in 1970. Most of the increase in actions was due to a jump in the number of voluntary recalls of foods rather than seizures, prosecutions or injunctions issued. This trend reflects not only an increase in the surveillance efforts of the FDA, but also the willingness of the food industry to voluntarily recall suspect products from the market.

Of more specific interest are the data in Table II which show the number of seizures and recalls of pasta and other cereal products for fiscal years 1968, 1969, and 1970. Three types of pasta products are listed: macaroni cheese mixes, egg noodles and macaroni products, and noodle soup mixes. As with foods in general, there was an overall increase in the total number of FDA actions taken against this class of product. Interestingly enough, not a single seizure of noodles or macaroni products was listed. The number of voluntary recalls of noodles or macaroni products, however, increased from 3 in 1968 to 7 in 1969, and to 8 in 1970. Although the 8 recalls represent only a very small



Author, Dr. D. E. Walsh, examines bacterial cultures which are used at North Dakota State University to study how *Salmonella* and *Staphylococcus* can be killed during pasta processing.

percent of the total pasta products sold annually it, nonetheless, indicates that quality control failures can and do occur, and that there is a need for constant emphasis on good sanitation and microbiological testing at every phase of pasta processing.

Food-Borne Illness in the U.S.A.

The Center for Disease Control (CDC) has published statistics² which show the dimension of the food contamination problem in the U.S.A. (Table III). Total number of outbreaks of reported food-borne illness was 371 in 1969 and 366 in 1970. Of the total outbreaks of food-borne illness, over 60 per cent involved microbiological contamination.

Because most forms of food-borne illness are mild, many cases are either not properly diagnosed or are not reported. Estimates by the CDC indicate that only 10 per cent of the actual cases are reported.

The 1970 CDC reports showed 5 cases where pasta products were listed as the contaminated food. In all cases, the pasta products were used in a mixed food. Therefore, it was not known whether the pasta or another ingredient in the mixture was the actual vehicle of the contaminant. Where pasta products were involved, one case of salmonellosis, two cases of staphylococcal poisoning, and two cases with unknown causes were listed.

Because of the nature of the raw ingredients and the fact that pasta is not heated high enough to destroy bacteria during commercial processing, some microorganisms will be found even in the most carefully processed pasta products. In most cases, these organisms are harmless saprophytes which are of

little concern. However, under certain conditions, harmful organisms, particularly salmonellae and staphylococci, can survive the processing operations and could result in contaminated products.

In this report, current research information on the nature and survival of salmonellae and staphylococci in foods will be discussed. An attempt is made to interpret recent research findings and predict future developments for control of microbial populations in macaroni products.

Salmonella

Salmonellae are enteric organisms which are found in the digestive tract of animals. Based on antigen tests, over 1200 different serotypes of salmonellae have been identified.³ Salmonellae are aerobic and facultatively anaerobic organisms; this means they are able to grow in foods such as eggs, pasta (if the moisture is high enough) and milk, whether or not oxygen is present. Salmonellae grow through a temperature range of 44° to 114° F.⁴ These conditions are met in the mixing stage of most commercial pasta extruders. Consequently, if contaminated ingredients are used, the *Salmonella* organisms are able to grow rapidly in the moist, warm conditions in the mixer, especially in areas where dough builds up and remains in the mixer for long periods of time. Logically, it follows that if a batch of contaminated ingredients were processed, the *Salmonella* would not be limited to a single lot of finished goods, but will spread throughout the processing run and remain as a source of contamination until the mixer and extruder were cleaned and disinfected.

Reports have shown that salmonellae can survive for long periods of time in dried food products. For example, it was reported that live salmonellae were isolated from dried whole eggs and other products after a period of up to 4 years.^{5,6,7} Consequently, under normal storage conditions, it can be assumed that contaminated macaroni or egg noodles will retain viable salmonellae for a similarly long period.

Salmonella are not particularly sensitive to acid pH and will survive for days at pH 4.⁸ Salt, on the other hand, has an inhibiting influence on the growth of *Salmonella*. In meats with 8 per cent salt, no growth occurs and in 30 per cent sodium chloride solutions, salmonellae are destroyed after a one

week storage period.⁹ It appears that adding salt at a high level to pasta products could provide a possible way of decreasing *Salmonella* survival in both the processing steps and the storage of the final products. However, no specific data on survival of *Salmonella* in stored pasta products are currently available.

In general, salmonellae are destroyed in foods if the internal temperature of the product reaches 160° F. or 165° F.⁷ To pasteurize whole egg solids, the U.S. Department of Agriculture recommends heating of the eggs to not less than 140° F. for 3.5 min. Recent findings at our laboratory¹⁰ indicate that spaghetti can be extruded at 140° F. without damaging the quality of the product. Although no microbiological data are available, it seems likely that salmonellae would be destroyed during extrusion or drying at this temperature.

Recently, workers at the USDA Beltsville Md. Laboratories¹¹ added *Salmonella* to various mixtures of food ingredients and tested the heat stability of the bacteria. Milk had a stabilizing effect on *Salmonella* and showed survivals of 31,000 to 58,000 salmonellae per ml. after heating for 3.5 min. at 131° F. On the other hand, some materials rendered salmonellae susceptible to destruction by heat. Inoculated mixtures of glucose and citric acid showed *Salmonella* counts of less than nine per ml. after incubation at 131° F.

Staphylococcus

Staphylococcus is another major class of food contaminating organism which can cause problems in pasta products. Although there are many species of micrococci, the species of major significance to the pasta processor is *Staphylococcus aureus*. This species is distinguishable from the other species of "staph" by its ability to ferment mannitol and coagulate human blood plasma (coagulase positive).

Like salmonellae, which cause an infectious disease in humans, certain strains of *S. aureus* produce a toxin (enterotoxin) which causes a true food poisoning.¹² The symptoms of staphylococcal poisoning appear 2 to 4 hours after eating contaminated food usually consist of nausea, vomiting and abdominal cramps. Because recovery usually occurs in 24 hours, staphylococcal poisoning seldom requires treatment by a physician, and the ailment usually is not reported or is confused with other common ailments.

Furthermore, since the toxin and not the organisms cause illness, pasteurization will not render contaminated products free of the poison. Boiling, as is

customary for preparing pasta, will kill the *Staphylococcus* organism; however, the toxin remains unchanged by boiling and will cause food poisoning.

Foods which are most often incriminated in cases of staphylococcal food poisoning are: ham, eggs, poultry products, macaroni salad, cream-filled pastries, sandwich fillings, and dairy products. Dr. Casman¹³ of the FDA reviewed the problem of staphylococcal food poisoning and discussed the latest method of detection of enterotoxins. Prior to the development of reliable methods for detecting the enterotoxins, foods which showed high counts of *Staphylococcus* bacteria were incriminated in outbreaks of food poisoning. However, because the enterotoxins (not the bacteria) cause staphylococcal food poisoning, the mere presence of staphylococci in food is not sufficient proof that the food contained the poison.

New methods developed at the FDA can detect less than one part of toxin in 200 million parts of food.¹³ The new method is simple, reliable, and requires no test animals, and seems ideally suited as a quality control tool for food processors. Detection of the toxin depends on an antigen-antibody precipitation reaction. A sample of extract from a suspect food mixture is allowed to diffuse through a thin layer of agar gel. At the same time, the specific antigen (antienterotoxin) diffuses through the gel in the opposite direction. When precipitation lines are formed where the toxin and antitoxin meet in the gel, it is considered proof positive that the food contains the toxin. On the other hand, if no precipitate forms, the food is considered free of staphylococcal toxin.

With the new detection methods, four types of enterotoxin have been identified—types A, B, C, and D. Enterotoxins A and D have been shown to be the most important in food poisoning. In cases where products are suspect of staphylococcal contamination, the serological assay can be used not only to identify the type of toxin but also to distinguish between toxic lots and lots of food which are free from contamination.

A good sanitation program is the main defense against staphylococcal contamination.^{14,15} The principal source of contamination in pasta products by staphylococci are the people who are in contact with the ingredients, the wet product during processing, and the final product. Staphylococci are most commonly found in the human nose,¹⁶ although the organism is also found in open wounds, human skin and hair. Consequently, to reduce *Staphylococcus* contamination, the personal hygiene of

plant employees should be given close attention.

Another source of staphylococcal contamination are the ingredients used in pasta products. Eggs which were not properly pasteurized or pasteurized after the toxin has been produced can cause staphylococcal food poisoning.¹⁷ However, cases involving commercially processed eggs or egg solids are rare. Although no data were available specifically for semolina, *S. aureus*, along with 31 other bacteria, have been isolated from bread wheat flour samples.¹⁸ In spite of high standards of mill sanitation, 18.2 per cent of the flour samples tested in the research study yielded viable *Staphylococcus* cultures. Furthermore, *S. aureus* was isolated from four of the cultures. It was assumed that the staphylococci found in the flour originated from the wheat and that the wheat cleaning operation at the mills failed to completely remove or destroy the bacteria.

Pfeifer and Vajnovich¹⁹ reported on a number of methods for reducing the microbial populations of wheat and wheat flour. Ordinary washing, dry scouring of wheat, adding chlorine, chlorine dioxide or bromine to the wash and tempering water were helpful in reducing microbial counts. The level of antimicrobial agents and the number of treatments influenced the total bacterial count of the finished flour. Heat treatment of the wheat before milling also was effective in lowering the total microbial count of the final flour. A recent study reported that the chlorine tolerance of microorganisms was not related to their ability to survive chlorine treatment used in wheat milling.²⁰ The carry-over of microorganisms from wheat to flour apparently results from the organism escaping the action of chlorine by virtue of being within the wheat kernel. Consequently, in spite of excellent precautions and good sanitation practices, some bacteria are present in nearly all wheat flour.

Wiseblat²¹ investigated several methods of lowering the microbial populations in wheat flour. Wheat flour was inoculated with several microorganisms, including *Staphylococcus aureus*. Various antimicrobial treatments were used on the inoculated flour in an attempt to lower the total counts as well as to eliminate specific microbes. Although effective against mold growth, solid chemical additives proved worthless in changing bacterial counts.²² Chlorine was very effective, although a relatively massive dosage of chlorine gas (½ atmosphere of Cl₂ pressure) was required to lower

(Continued on page 20)



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PEAVEY COMPANY

Flour Mills

(Continued from page 17)

Staphylococcus counts in wheat flour. Neither propionic acid vapor nor hydrogen peroxide (3% solution) were effective in lowering bacterial counts in wheat flour. However, a combination of heat treatment with propylene oxide showed a marked effect on bacterial content of flour. After treatment of an unclotted flour at 130° F., for 30 min. with 50 p.p.m. propylene oxide no detectable staphylococci were reported. Although no data for durum products were reported, the technique most likely would show a similar antimicrobial action on semolina.

Recently, a process for pasteurizing flour was patented.²³ In the process, a slurry of flour, water and hydration-preventing agent was heated to 135°-150° F. to pasteurize the flour. The slurry was then mixed with various other ingredients, spray-dried and stored. Long storage life, and low enzymatic activity were claimed for the pasteurized flour product. In any case, at 150° F. staphylococci, as well as other pathogenic organisms, would be killed if the treatment lasted long enough. A process such as the inventors described quite possibly would work for pasteurizing pasta ingredients.

What Can Be Done?

The question arises: What, on a practical level, can be done by the macaroni manufacturer to avoid Salmonella and Staphylococcus contamination problems? The answer to this question has been well documented by Winston,¹⁴ Bremer,²⁴ Smith,²⁵ and others.^{26, 27, 28, 29, 30, 31} The main points emphasized were these:

- (a) Prevent microbial contamination from entering your plant in contaminated ingredients. All ingredients should be thoroughly inspected and tested on a regular basis to detect contamination. Powdered milk, egg products, and dry yeast should be tested for Salmonella since these are the ingredients most often incriminated in Salmonella contamination.
- (b) Insist on close adherence to the Current FDA regulations which establish good manufacturing practices for food processing plants.
- (c) Egg handling systems and presses should be cleaned and sanitized on a daily basis. Since salmonellae and staphylococci are able to grow rapidly under conditions found in the mixing and extruding operations, it is a worthwhile practice to thoroughly clean the presses after 24 hours of continuous operation.
- (d) Test the final products for microbial contamination on a regular basis. If detected early contamination problems can be solved before they become serious and involve large amounts of

product. Furthermore, unfortunate publicity of an FDA action can be avoided.

(e) Used pasteurized ingredients when available. A process for pasteurizing all ingredients as well as the final products would go a long way toward eliminating Salmonella and Staphylococcus problems.

The scientific basis for devising a feasible pasteurization process for pasta products seems at hand. Perhaps we can look to the future when a process for pasteurizing pasta products is available and adds another weapon to our arsenal against bacterial contamination.

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(Continued on page 34)

**Table I
NUMBER OF LEGAL ACTIONS AND RECALLS INVOLVING FOODS DURING FY 1968, FY 1969, AND FY 1970**

Action	1968		1969		1970	
	Total	Micro-biological	Total	Micro-biological	Total	Micro-biological
Seizures Approved	373	65	269	75	268	64
Prosecutions Recommended	66	6	18	6	32	3
Injunctions Recommended	3	2	7	4	23	8
Recalls Initiated	112	48	137	65	355	146
TOTAL ACTIONS TAKEN	554	121	431	150	678	221

**Table II
NUMBER OF APPROVED SEIZURES AND RECALLS OF CEREAL BASE PRODUCTS INVOLVING MICROBIOLOGICAL CONTAMINATION, BY TYPE PRODUCT, ACTION AND FISCAL YEAR**

Product	FY 1968		FY 1969		FY 1970	
	Seizures	Recalls	Seizures	Recalls	Seizures	Recalls
Breaded Onion Rings	3	—	3	—	13	—
Macaroni Cheese Mix	—	—	—	—	2	—
Egg Noodles and Macaroni	—	3	—	7	—	8
Noodle Soup Mixes (Beef, Chicken, and Turkey)	—	—	—	—	—	5
Doughnut Mix	—	—	—	—	—	1
TOTAL	3	3	3	7	15	14

**Table III
NUMBER OF PEOPLE ILL OF OUTBREAK OF FOOD-BORNE ILLNESS OF SPECIFIC ETIOLOGY FOR 1969 AND 1970***

BACTERIAL CAUSE	1969		1970		Total Patient
	No. Outbreak	Percent	Total Patients	No. Outbreak	
Bacillus cereus	3	0.8	14	3	1.0
Clostridium botulinum	10	2.7	17	7	1.9
C. Perfringens	65	17.5	18,527	54	14.7
Enterococci	4	1.1	37	7	0.3
Coliforms	5	1.3	398	7	1.9
Salmonella	49	13.2	1,692	48	13.1
Shigella	10	2.7	1,444	8	2.2
Staphylococcus	94	25.3	3,481	102	27.5
Vibrio Parahemolyticus	2	0.5	71	2	0.5
Multiple etiologies	1	0.3	30	—	—
PARASITES					
Giardian lamblia	1	0.3	19	—	—
Trichinella spiralis	11	3.0	35	9	2.5
VIRAL					
Hepatitis	9	2.4	116	4	1.1
CHEMICAL					
Monosodium glutamate	2	0.5	6	5	1.4
Mushroom	4	1.1	9	—	—
Metals & other					
Chemicals	21	5.7	157	17	4.7
UNKNOWN					
UNKNOWN	80	21.6	2,310	99	27.2
TOTAL	371	100.0	28,563	366	100.0

* Data reported with the permission of the U.S. Department of Health, Education, and Welfare, Center for Disease Control, Bacterial Diseases Section, Bacterial Disease Branch.

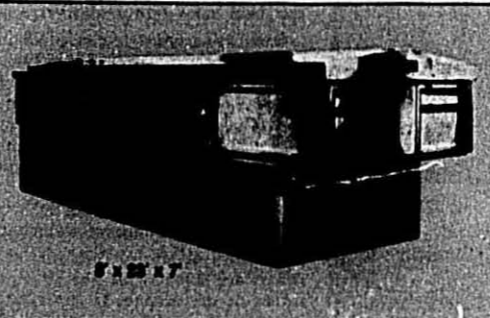
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Gioia Finds Computer Major Asset in Controlling Operations

by John Opalka, Controller, Gioia Macaroni Company

OUR business of manufacturing and distributing macaroni and many other specialty foods is highly competitive. Consequently, we are constantly seeking ways to operate more efficiently and thereby increase our profitability.

The key to taking the measures necessary to be more efficient is to provide our management with the right kind of information concerning all facets of our operations in a timely manner.

Until recently obtaining this information was a difficult task. Too often the data was received too late to be of any value to our production planning and did not reflect the shifting changes in consumer demand for the various products we manufacture.

Since we installed a third generation computer system almost a year ago, this picture has changed. We feel we are now receiving the information we need to conduct our business efficiently.

The expansion of our business over the years and the fast moving marketing climate today have dictated the need for a "better handle" on operations compared to the slower pace of life when the Gioia Macaroni Company was founded in 1910 by Antonio Gioia, grandfather of our current president, Anthony H. Gioia.

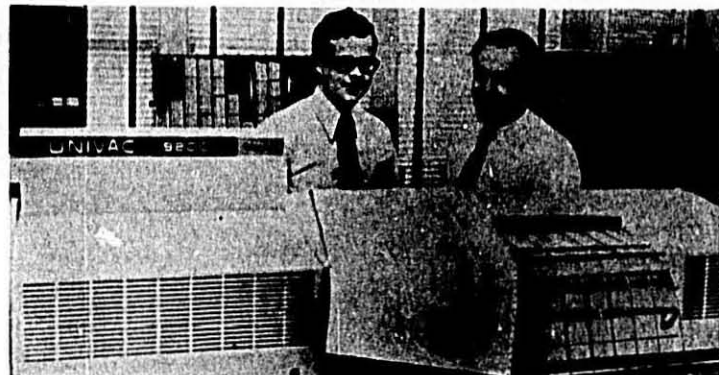
Started in Fredonia

Antonio Gioia started in business in Fredonia, N.Y., by making macaroni products for friends and neighbors when he was unable to find manufactured products of the quality he had known in his native Italy.

From the original Fredonia plant, Gioia moved to larger quarters in Rochester and then to Buffalo shortly after World War II. Our growth has led us to becoming one of the top macaroni producers in the United States, and along with it the acquisition of two firms, the Niagara Macaroni Company of Buffalo and the Piscitello Macaroni Company of Rochester.

High product quality has always been the hallmark of Gioia food products as evidenced by the top honors won by the company at the International Food Fair in Rome, Italy, in 1961 and again in 1964. Our attention to quality has been a major factor in helping the company increase its sales volume about 30 percent over the past four years.

Currently we produce about 110 different food products in a variety of different sizes. Most of the items such



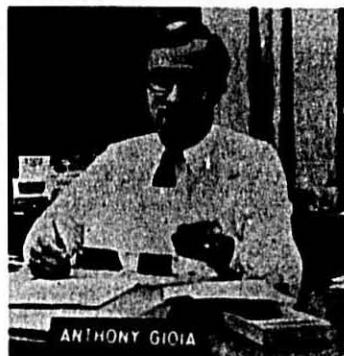
Jeffrey Bennett, Manager of Data Processing, and John Opalka, Controller, look over print-out produced on UNIVAC 9200 computer system operated by Gioia Macaroni Company.

as macaroni and spaghetti are produced at the Buffalo plant, which is also our headquarters. A subsidiary company, Gioia Specialty Foods, Inc., in Odessa, Delaware produces sauces and other Italian specialty foods.

Data Processing

The company first entered data processing in 1954 with the installation of key punch equipment to automate our billing and payroll procedures. However, this system could not provide us with the information we needed to control our operations.

Due to limited warehouse facilities, we required much better inventory control so that we would not be in the position of tying-up valuable space by overstocking. We wanted to know the right quantities of each different food item to manufacture so that no one



Anthony Gioia, President of Gioia Macaroni Company.

product would be overproduced. It was essential to gear production much closer to consumer demand.

These are crucial problems in our business because in addition to the many products we manufacture, they come in a total of about 300 package sizes.

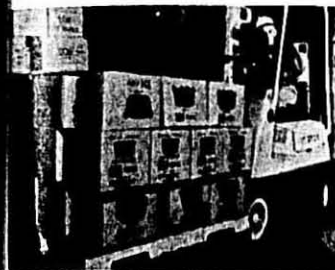
Last year we acquired a UNIVAC 9200 computer system with a 8000 byte memory. The computer uses punched cards as the input media and is equipped with an integral card reader, card punch and printer. All of the programs are prepared in the Report Program Generator language.

Start With Sales Order

The key to the operation of our computerized information system is the sales order, which is received either by mail or telephone (with a follow-up, written confirmation sales order) from either the customer himself or one of our own sales representatives.

Each sales order is converted into a punched card on one of our two key-punch machines before being entered into the computer system. The punched card then becomes the basis for preparing invoices. Using the computer, we do pre-billing, invoicing the customer prior to shipping. One copy of the invoice goes to the shipping department to prepare the orders for shipment.

Usually about 80 percent of our orders are shipped the day after preparation of the invoice. In the local area we ship daily. The remainder of the orders are shipped within 2 to 3 days.



Cartons of macaroni are moved on fork lift truck to loading bay for shipment at the Gioia Macaroni Company plant in Buffalo. Computer control gearing production of various food items to actual sales has helped ease strain caused by cramped warehouse facilities at Gioia plant.

The bulk of our distribution is handled by our own fleet of ten trucks. Because freight charges represent a considerable factor in our distribution costs, our sales region is mostly limited to New York State, Pennsylvania, Illinois, Ohio, Kentucky, Wisconsin, Indiana, and Washington, D.C.

The computer automatically batches orders according to truck routes and calculates the gross weight on each invoice. We can therefore quickly obtain a total weight for each truck leaving the plant so as to avoid any possibility of overloading and possible fines from state highway authorities. Figuring truck weights was previously a time-consuming clerical chore.

We are now receiving a variety of useful reports from the computer that previously we couldn't obtain or were received too late to be of any use.

Product Analysis

Tropical is the monthly Product Analysis Report which breaks down sales of the various items by salesman, territory, on a monthly comparative and a yearly comparative basis. This report is also prepared for our subsidiary company in Delaware.

We also have a weekly Product Analysis Report which shows the number of cases sold by package size and by bulk cartons. This data is particularly useful for packing purposes and for knowing when to order cartons and inside packages so as not to overstock. The same report also provides figures on the number of pounds sold by item, which is, of course, vital data for planning our production schedules. Normally, this report is available Monday morning covering sales for the preceding week.

Another monthly report is the cases by item and total cases of products sold

according to key customer classification. From this information we perform sales analysis and can check our performance from month-to-month.

A daily inventory report shows the stocks of various items in our warehouse. We usually keep a three-week inventory of most items.

Another critically important report for our management produced daily is an "Outage" report showing those products out of stock. Other computer-prepared reports are "Business Lost Because of Shortages" and a report showing sales involving promotional allowances which allows us to determine periodically the proportion of our business in this area.

Tax Refunds

To enable us to claim a refund from New York State on sales taxes paid on corrugated containers used out of state, the computer prepares a report on all sales outside of New York.

In addition to the other tasks, our Univac system is also performing payroll processing, accounts receivable, accounts payable, trial balances and general ledgers.

No More Guesswork

Our experience with the computer has been such that the guesswork has been taken out of production planning. We have improved our profitability, realized economies in our purchasing procedures for cartons, and obtained maximum utilization out of our limited warehouse space. Without the computer we would have needed at least three more persons to handle the paperwork.

Although we have already realized a much better control of our operations than ever before, we feel we still have not tapped the full potential of the computer.

In the future, we will be adding new applications to the computer's workload such as a program that will encompass automatic reordering of cartons, and another to deal with the complex commission reports now being done by hand.

Judging from our experience at Gioia, there is no question that properly handled the computer can be a major asset in providing top management with the information they need to operate with maximum effectiveness.

It is now the absolute duty of all of us with special skills and insights to spell out the nature of our powers and our limitations in terms which the ordinary man can understand, so that the ordinary man can choose how we should serve him best.

PETER BEACONSFIELD



Punched cards being prepared on a UNIVAC 1710 Verifying Interpreting Punch are the basis for input of information into the UNIVAC 9200 computer operated by Gioia Macaroni Company.

American Beauty Official

Charles E. Vierling has been elected to the position of assistant treasurer of the American Beauty Macaroni Company and its subsidiaries, according to Ralph Larli, president. The appointment was made at a recent board of directors meeting held at corporate headquarters in Kansas City.

Vierling joined American Beauty in June of 1949 as comptroller of the Kansas City division.

In his new capacity, Vierling's responsibilities will include overseeing accounting and financial operations for all American Beauty plant facilities. The company has manufacturing bases in St. Louis, St. Paul, Dallas, Denver, San Diego, Los Angeles and Fresno. He will also be assigned similar duties with the company's subsidiaries.

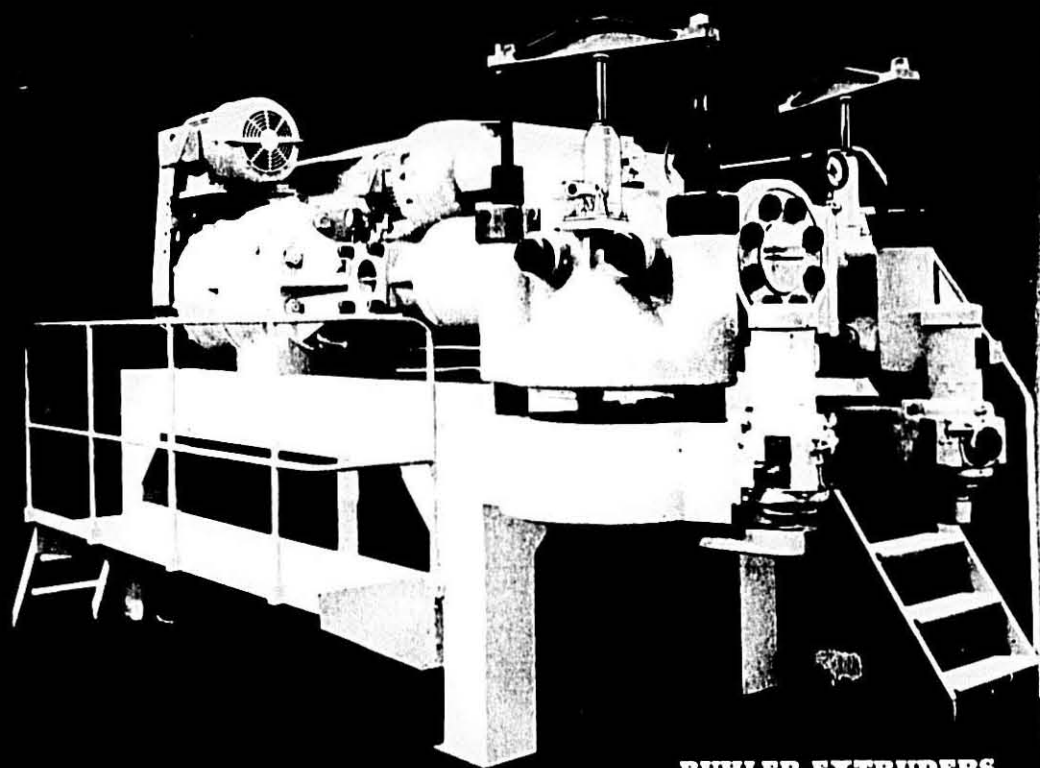
Vierling is married and lives in Shawnee Mission, Kansas.

McCormick Quality Control Supervisor

Kent R. Zeller has been appointed Quality Control Laboratory Supervisor for the Industrial Flavor Division of McCormick & Company, Inc., Baltimore-based international producer of spices, extracts and specialty food products, according to a recent announcement by Bailey A. Thomas, Vice President and General Manager of the division.

You're a genuine oldtimer, says Woodman of the World, if you can remember when a data processing center was known simply as a woman's afternoon bridge club.

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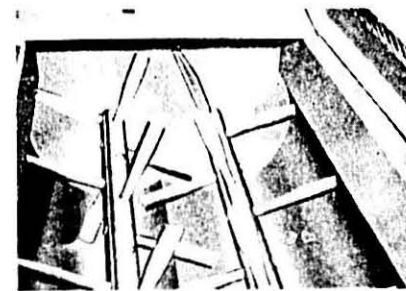
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TPAD (Double Screw)	1,320-2,640
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TPBD (Double Screw)	2,000-4,000
TPCE (Single Screw)	2,000-4,000
TPCD (Double Screw)	4,000-8,000
TPCV (Four Screw)	8,000-16,000

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New Packaging Converter

The previously announced plan of reorganization whereby Riegel Paper Corporation's Packaging Group has been spun off as a new corporation known as Rexham Corporation and its Paper Group merged with Federal Paper Board Company, Inc. was completed today.

Riegel's Paper Group consisted of its Paper, Forest Products and Real Estate divisions.

Riegel's Packaging Group, consisting of its Packaging and Industrial Divisions, and two wholly-owned subsidiaries, Laminex Industries, Inc. and D-S Industries, Inc., now constitute the new company—Rexham Corporation. As part of the spinoff, Rexham has acquired Riegel's 50% interest in Britains-Riegel, Ltd., a United Kingdom corporation.

W. J. Scharffenberger, Chairman of the Board of Rexham, stated that the transaction "should be in the best interests of Riegel common stockholders." He further stated that "in regard to Riegel's paperboard, paper and pulp manufacturing operations, with the substantial investment required, the stockholders would be better served by participation in a more broadly-based manufacturer." He added that prospects for success in the growth of Rexham's packaging and industrial business in terms of flexibility and responding to commercial opportunities, new product development and efficient plant operations should be best served by an independent corporation specializing in these fields.

Rexham Corp.

Rexham is a publicly-owned corporation. Its shares are to be listed on the New York Stock Exchange under the ticker symbol RXH. 1972 sales are planned at approximately \$80 million. The terms of the plan of reorganization provide that for each common share of Riegel, the stockholder will receive one share of Rexham common, 3/10ths of a share of Federal common stock and 4/10ths of a share of Federal \$1.20 convertible preferred stock.

Rexham has approximately 2200 employees, and operates thirteen plants, with over 1.1 million square feet of manufacturing, warehouse and research floor space.

Principal Rexham packaging products are:

- Flexible packaging materials, including coated materials, film-foil-paper laminates, and other laminated and printed packaging papers;
- Fashion packaging and labels for soft goods such as hosiery, lingerie, bed-

ding and other textile products;

- Packaging materials for snack foods;
- Folding cartons for dairy products, and other wet and dry foods;
- Pharmaceutical packaging;
- Packaging machinery, including Bartelt pouch-forming machines, automatic cartoning machines, thermoforming equipment and special systems.

Products of Rexham's Industrial Division are thin-film laminates, metallic yarns, decorative laminates, flexible circuitry materials, photosensitive films, dielectric films, adhesive systems for film laminates, and coated and printed papers for photographic applications. Laminex and D-S Industries manufacture and sell security/identification systems for industry, government, schools and other institutions.

Rexham plants and warehouses are located in Atlanta, Ga., Rockford, Ill., Edinburg, Ind., Hazelwood, Mo., Flemington, N.J., Honeoye, N.Y., Newark, N.Y., Charlotte, N.C., Cleveland, Ohio, and Memphis, Tenn. Sales offices are in Saddle Brook, N.J., Chicago, Atlanta, Rockford, Hazelwood, New York, Lakeland, Fla. and Charlotte.

Rexham's packaging research and development facility is in Flemington, New Jersey. Rexham Industrial Division's research and development facility is in the Matthews, North Carolina plant. Packaging Machinery Division maintains research and development facilities in Rockford, Ill.

William J. Scharffenberger is Chairman of the Board and Chief Executive Officer of Rexham; F. Gregg Bemis, Jr. is President; Keith F. Kennedy is Senior Vice President, Finance and Law, and John V. Shea is Senior Vice President, Marketing. Vice presidents and general managers of Rexham operating divisions are: W. F. Collins, Flexible



Horace P. Gioia

Packaging Division; S. C. Lea, Board Conversion Division; W. T. Boston, Packaging Machinery Division; E. Boston, Jr., Industrial Division.

15 Corrugated Converters Close

Fifteen corrugated converting plants—firms that convert paperboard into the familiar corrugated box—have closed their doors during the past year, according to James N. Andrews, president of the Fibre Box Association.

Although production and sales are reaching all-time highs, the \$3.6 billion industry, largest segment of the packaging industry, is finding itself hard pressed to make ends meet.

The reason, Mr. Andrews said, is that box makers, caught between rising costs and severe competition, are supplying their product for about the same price that prevailed a decade ago. "This has occurred even though the corrugated box is playing a more vital role than ever in the marketing and distribution of more than 95 percent of consumer and industrial goods," he asserted.

Of the 15 plants cited, only two were closed to shift production to newer facilities. "All the rest simply went out of business," Mr. Andrews said. "This is the first time in the 100-year history of the industry that we have seen converting operations closed for purely economic reasons," he said.

Gioia President of Rochester Auto Club




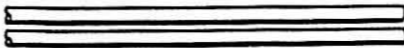












Horace P. Gioia has been elected new president of the Automobile Club of Rochester for 1972. He succeeds M. B. Nelsner, who was elected assistant treasurer.

Mr. Gioia has been president of the Bravo Macaroni Company since 1950 and associated with the firm since 1938. He also is a partner of Gioia Brothers operating fruit and livestock farms in Hilton and Kendall.

He served as director of the Automobile Club since 1962 and the Central Trust Company since 1960. Mr. Gioia is a member of the Board of Trustees of St. John Fisher College as well as the boards of Rochester Council, Boy Scouts of America; Genesee Hospital and Community Chest.

He is a member of the Country Club of Rochester, Oak Hill and Genesee Valley Club. Mr. Gioia attended Mohegan Lake School, John Marshall High and the Wharton School of Finance and Commerce of the University of Pennsylvania where he received a B.S. Degree.



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Salaried Salesmen or Food Brokers

by David E. Guerrant, Libby, McNeil & Libby
Chairman, President, and Chief Executive Officer

WHEN Watson Rogers invited me to express my thoughts on sales representation, I had to agree I was uniquely qualified . . . having been neither a direct nor a broker salesman.

Yet, as every businessman must be, I've been a salesman all my working life; as a matter of fact, I spent twenty years in a service industry . . . the advertising agency business.

So, we have something in common, for food brokerage is certainly a service industry, and, simply stated, your service is to represent your principal's products more efficiently and effectively than any other form of competitive sales representation.

There are now, always have been, and perhaps always will be both direct and broker sales representation. In my judgment there are many excellent direct sales organizations in this country and I certainly do not oppose the use of direct sales representation per se.

Unique Advantages

I do happen to believe that in the current and future environment a broker sales organization can offer unique advantages to accomplish the primary goal of any principal, which is a selling organization in a local market area that will make the maximum amount of NET profit together with solid growth of the brand. This seems rather simple to me. I am not going to get hung up on commissions or obtaining an unfair advantage of your time. I want results—everyone understands what a net profit is, and, as far as we are concerned, that is what counts. If a direct selling organization can do a better job than any available broker in that market area, then a direct sales organization should be there.

But, why do we believe a broker should outperform a direct sales organization. Let me highlight the primary factors as we saw them and you might well examine yourself relative to these points. If in your own self-analysis you do not score too highly on these, then you certainly wouldn't be a candidate for our consideration, and I doubt that you would be a candidate for any other principal now depending on their own direct selling force.

1. Local Activity

First, we believe selling is a local activity influenced by all the existing variables too numerous to list. To evidence this attitude, our broker sales

team consists of fifty-four individual marketing areas or points of order entry.

I understand that one of our major competitors has just moved in the last month to reorganize his direct selling operation into additional regions. The purpose of his reorganization as stated was recognition of the importance of local "entrepreneurship."

Within the framework of local market emphasis is the recognition that a broker should outperform a direct counterpart if for no other reason than his entire life, well being, and future aspirations are dependent on his being successful "where his roots are planted."

He is not concerned with transfers, promotions, hierarchy of organization, outside expertise.

He should know that market backwards and forwards—certainly better than any direct sales organization that we or any other manufacturer could put into that market.

2. Local Businessman

The second factor considers today's difficulties in personnel recruitment, training, development, supervision, compensation, etc. Here again we believe the broker, as the result of being a local businessman, can do a substantially better job of attracting and maintaining an organization geared to his principal's requirements—he has flexibility and elasticity, and he should certainly do a better training job relative to knowing the local market and how to sell it.

3. Longevity & Continuity

Third, because of today's high rate of attrition in direct sales representation, we feel that the broker, as a result of his longevity and continuity, should have the edge in a complete understanding and knowledge of his principal's products, policies, procedures and their application to his local market.

4. More than One Line

Fourth, I personally think it's healthy for a sales organization to represent more than one line of products, and normally the broker is far more alert to the "law of diminishing returns" than a direct organization which often continues to experience a proliferation of products within a constant allocation of manpower.

Also, we believe the multiple line representation not only creates the essential volume to amortize the costs of a strong selling organization, but broadens capabilities through interchange of ideas and experiences. And, of course, the multiple representation creates a greater importance to customer interests.

5. Communication

Fifth is a matter of communication. We, sitting "in the home office," must have the maximum of prompt objective communication with the field, especially since the multitude of our problems and opportunities are local in nature.

With this in mind I like the objectivity of a broker.

Looking back at the advertising agency business, I didn't believe in the concept of an in-house agency. I believe firmly that in the many gray areas of marketing, one of the most valuable assets is to have people with enough independence and courage of conviction to be assured of the most objective observations and recommendations possible.

We cannot afford yes men or political motivation.

I am not saying brokers guarantee the optimum in objective communication, as they, too, are sometimes overwhelmed by the principal's influence.

But, I do believe they are generally more willing to "say it like it is" than a direct representative whose entire economic interest is sometimes at stake.

6. Variable of Sales

Sixth and last, I like the idea of a variable of sales as opposed to a fixed cost.

Again, it's a matter of the fundamental objective or net profit.

If we are producing results, I don't mind paying the bill. On the other hand, if we are not accomplishing our goals, I certainly don't like to see a fixed expense in any function of our organization.

However, within this attitude is the belief that the fundamental value of a broker is the fact that he can do a better job at a competitive cost.

In the preceding I believe I have covered the major considerations leading us to move from a direct selling organization to a national sales team. Needless to say, in reaching this de-

(Continued on page 30)

ADM Milling Co.

Salaried Salesmen or Broker?

(Continued from page 28)

cision, we considered all the pros and cons.

I feel now, as I did then, the decision was absolutely right for us, and I believe brokers can offer the same values to many other principals now represented by their own direct selling organization.

Net Profit Growth

However, to fully realize their potential for both ourselves and other principals, I would like to make a few points. First, since our objective, as previously stated, is net profit growth in a marketing area, then I must have a good method of measurement. We, of course, have measurements, but, in my opinion, they are not good enough. And though the development of a good, practical method can be viewed as our responsibility, I think the brokerage industry has much to gain if they would assume it's their responsibility and take the initiative in developing a performance measurement built on net profit rather than sheer case volume.

Here again, I might go back to the advertising agency industry, which probably has the most obsolete and impractical approach to commissions of any industry. Their pay comes from the amount of dollars spent in media primarily. This really has nothing to do with the effectiveness of their work. By the same token, I'm not convinced that volume alone is the criteria by which brokerage should be measured or paid.

Another opportunity for brokers to better realize their potential for current and potential principals concerns the brokers expertise of the product categories and individual items he represents as well as complete knowledge of all elements of the individual marketing programs.

Responsibility

Being critical for a minute, too often brokers complain about their principal's lack of effort and involvement in communicating this knowledge. In many instances their attitudes are theoretically sound, however, in a practical sense the basic responsibility is fundamentally theirs—one they must accept.

Again, in the advertising business, I felt I was hired to do a job for which I was paid a commission, and if certain knowledge or activity was fundamental to accomplishing my assignment, then it was my responsibility to initiate the learning program and provide the necessary time, talent and effort.

Expertise

Last, I want to tie back what I consider the most important reason for brokerage.

This is the knowledge, expertise and entrepreneurship of the broker in the local market.

Most problems, most opportunities, most losses, and most profits are locally oriented. That's certainly where the action is.

Basically this means the broker must exhibit the qualities of organization, quantity and quality of personnel, methods of operation, techniques of communication—and, most important of all, the knowledge of his market, its characteristics and the inter-related influences bearing on his principal's products and interests.

If he falls in any one of these, he can be certain his principal will ultimately go to another broker or go direct.

In Summary

Let me summarize by saying that we certainly believe in our brokerage selling organization and I have tried to delineate some of the major points in our consideration to go brokerage as well as those major areas where a broker must perform in an outstanding way.

In making this move, however, we did realize our own obligations in making this a successful marriage.

To highlight our commitments we've —

Initiated a broker agreement with twelve month termination terms, for we feel no relationship of value should cease without opportunity to "work out differences."

We've implemented a two-way evaluation program, whereby the broker tells us where we have opportunities to improve... a "two-way street" with open candor and dialogue.

We've established a broker council to represent the most objective kind of two-way communication, to discuss problems and opportunities, and to "lay it on the table" when we have differences.

We've structured our marketing organization to meet the needs and demands of broker representation, with emphasis on the quality of sales personnel to supplement the broker's efforts.

Looking to the future, we intend to be creative and innovative in our broker partnership.

We intend to make investments and to take calculated risks, and we expect our brokers to initiate the same types of commitments. We expect to establish a leadership in the brokerage fraternity beyond the fact that our total brokerage per year is the largest in the world.

In our judgment most of the perennial problems of the brokerage business can be turned into opportunities, but

this will have to be proven time and again through our combined actions.

We know a broker can grow through building and maintaining a hard core group of principals, or he can grow by adding principals over intervals of time.

I happen to know that many service organizations spend more time looking for new clients than in their concern for the success of their current representations.

I sincerely believe the most reasonable course of action is establishing a priority for the successful growth, development and continuity of one group of principals which in turn will automatically attract new clients.

For in the end analysis, success is extremely contagious!

The subject has been "Salaried Salesmen or Food Brokers."

As indicated by both our decision and my remarks, there should be no question of one versus the other.

The challenge to any broker should only be the competition of another broker doing a better job!

And I might add... the challenge to the food broker industry is to prove that I'm right!

Adding to Advertising's Effectiveness

Advertising's role has been indispensable to the efficient functioning of our economy. It is the prime mover of goods and services, as well as a major source of information for consumers concerning these goods and services, the Chamber of Commerce of the United States believes.

As an inseparable part of our marketing system, advertising is a primary contact between business and the consumer, enabling him to be the final arbiter of what is and is not needed, and of what is and is not wanted. The National Chamber adds.

Quality advertising is as vital to business as it is to consumer, the Chamber federation believes, and business can enhance the value of its messages to consumers by four methods which would upgrade the quality and value of advertising even more. These are:

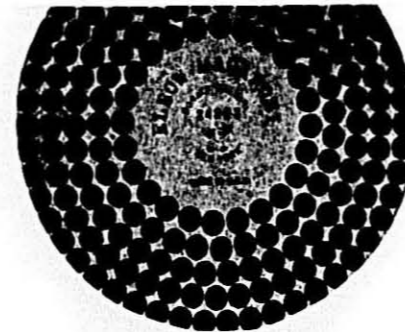
—Additional attention to truthfulness, accuracy and good taste

—More emphasis on product health and safety information

—Increased care in the execution of children's advertising

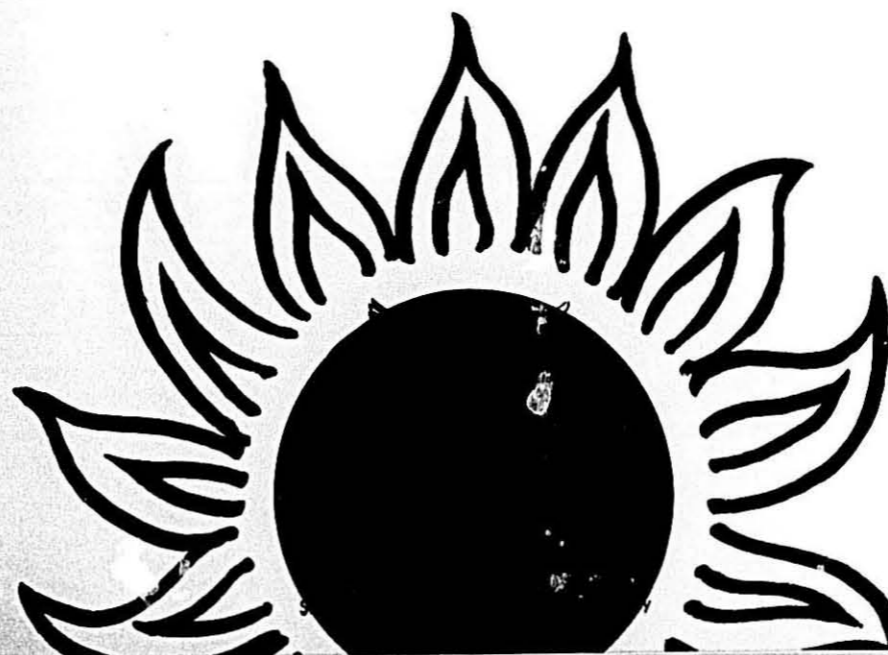
—Renewed vigorous self-regulation by the business community

By increased efforts and attention in these four areas, the business community can further strengthen the role of advertising and its function which is the heart of our competitive enterprise system, the National Chamber declares.



HOT IDEA:

Start the day off right. Send your food extrusion dies to Maldari for reconditioning, repair, modifying, re-building or even re-designing for a better product and better production results. Then the sun will really shine.



LENTEN OPPORTUNITIES

ASH WEDNESDAY falls on February 16, and Lent is still the time to sell meatless dishes, even though the religious dietary restrictions have been eased. It was because of these restrictions on the use of meat that consumption of fish traditionally climbed during Lent. But seafood has overcome this difficulty and has been promoted to become popular all year round. Nevertheless, this is a particularly good time for promoting macaroni with seafood.

Similarly, combinations of macaroni foods with eggs and cheese products fulfill the old tradition of meatless meals during this period.

Basic Macaroni Cheese Salad, making eight servings, is given below, followed with variations.

Basic Macaroni Cheese Salad With Variations (Makes 8 servings)

- 2 tablespoons salt
- 4 to 6 quarts boiling water
- 4 cups elbow macaroni (1 pound)
- 2 cups (8 ounces) shredded Cheddar cheese
- 1 cup chopped green pepper
- 1 cup chopped celery
- 2 teaspoons each: salt and grated onion
- 1½ cups mayonnaise
- 2 teaspoons vinegar
- 1½ teaspoons dry mustard
- Dash pepper

Add 2 tablespoons salt to rapidly boiling water. Gradually add macaroni so that water continues to boil. Cook uncovered, stirring occasionally until tender. Drain in colander. Rinse with cold water; drain again. Toss macaroni with remaining ingredients.

Variations: Use a different dressing. Omit the mayonnaise and vinegar and use instead one of the following:

1. One pint (2 cups) dairy sour cream and 2 tablespoons lemon juice. Add 1 teaspoon dill weed.
2. One cup bottled salad dressing.

Vary the ingredients. Omit the green pepper and use instead one of the following:

1. ½ cup sliced pimiento stuffed olives.
2. ½ cup sliced pitted ripe olives.
3. 1 can or jar (4 ounces) pimiento.
4. ½ cup sliced sweet gherkins.

Serve it differently:

1. Serve on a platter, ringed with sliced tomatoes.
2. Serve in salad bowl lined with crisp greens of any kind.
3. Serve in avocado half shells.



Macaroni and Cheese goes with everything!

4. Serve individual portions in lettuce cups.

Basic Macaroni and Cheese Casserole With Variations (Makes 4 servings)

- 1 tablespoon salt
- 3 quarts boiling water
- 2 cups elbow macaroni (8 ounces)
- ¼ cup chopped onion
- 3 tablespoons butter or margarine
- 3 cups milk
- 1¼ teaspoons salt
- ¼ teaspoon dry mustard
- ¼ teaspoon pepper
- 1 teaspoon Worcestershire Sauce
- 2½ cups grated sharp Cheddar cheese

Cooking Instructions

Add 1 tablespoon salt to rapidly boiling water. Gradually add macaroni so that water continues to boil. Cook uncovered, stirring occasionally, until tender. Drain in colander.

Meanwhile, cook onion in butter until crisp-tender. Quickly stir in flour; gradually add milk stirring constantly. Add seasonings. Cook, stirring, until sauce boils 1 minute. Stir in 2 cups of the cheese; continue stirring until cheese melts. Remove from heat; combine with macaroni. Turn into 1½ quart casserole. Sprinkle with remaining ½ cup cheese. Bake in 400° (hot) oven 20 minutes or until bubbling and lightly browned. Garnish with parsley, if desired.

Mix It Up

To this basic recipe may be added any of a number of ingredients, to vary the finished dish according to the fancy of the cook.

Here are eight suggestions for variations:

1. Add ¼ cup chopped or sliced pimiento-stuffed olives to cheese sauce.
2. Add 1 can (3 or 4 ounces) chopped or sliced mushrooms, drained, to cheese sauce.
3. Add ½ cup chopped green pepper to cheese sauce.
4. Add 1 can or jar (4 ounces) chopped or sliced pimientos, drained and diced, to cheese sauce.
5. Add two cups chopped chives to cheese sauce.
6. Add 1½ tablespoons caraway seeds to cheese sauce.
7. Add 2 tablespoons poppy seeds to cheese sauce.
8. Top macaroni and cheese with 2 medium tomatoes, sliced, before baking.

Crab, Noodles & Cheese

An outstanding main dish, especially good for Lent, begins with tender nuggets of crab meat, mellow Cheddar cheese, and egg noodles. It is convenient to serve unexpected guests, and a real treat for the family.

- 1 package (8 oz.) medium noodles
- 3 tablespoons butter
- 3 tablespoons flour
- ¼ teaspoon salt
- ¼ teaspoon pepper
- 3 cups milk
- 2 cans (7½ oz. each) crab meat, drained and flaked
- 2 cups (8 oz.) shredded Cheddar cheese
- 1 can (4 oz.) sliced mushrooms, drained
- ½ cup chopped pimiento
- ½ cup toasted slivered almonds
- ½ cup shredded Cheddar cheese

Cook noodles according to package directions; drain. In a saucepan melt butter; blend in flour, salt and pepper. Remove from heat; gradually stir in milk. Cook over medium heat, stirring constantly, until thickened. Cook 2 additional minutes. In a large bowl combine crab meat, 2 cups cheese, mushrooms, pimiento, almonds and noodles; turn into a 2½ quart buttered casserole. Pour white sauce over all; sprinkle top with ½ cup cheese. Bake in preheated 350° oven 40-45 minutes. Makes 8 servings.

School Lunch

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An Economic Strategy For the 70's

By Archie K. Davis, President
Chamber of Commerce of the
United States

An economic strategy for the seventies requires above all that we display the effective will to conquer our chronic inflation by getting and keeping the government's fiscal house in order. This means not higher taxes but less public and more private spending to meet both economic and social needs.

It requires that we muster the national will to face the fact of today's excessive union power in constructive labor law reform. It requires recognition of the need for government measures to stimulate research and capital investment in order to restore and maintain the comparative advantage of our sophisticated technology.

It requires a new examination of the need for society to bear some of the costs of adjustment which growth and change impose on particular people, industries and regions as we adjust our economy to meet tomorrow's demands.

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Getting Our Tax Dollar's Worth

By Dr. James E. Connor,
Senior Associate for Education
Chamber of Commerce of the
United States

To the question: "How much of the federal education dollar reaches the child in the classroom?" the Federal Government's Office of Education says it does not have the answer. This is perhaps the most damning admission of all, for if the Office of Education does not know, Congress, which must make hard decisions on how to allocate scarce resources, cannot know. Indeed, it is irresponsible to continue spending money in the absence of an answer to such a fundamental question.

Additional federal expenditures for education cannot be justified until there are some fundamental reforms. Reforms cannot be dictated from Washington; the states are best equipped to encourage the necessary changes in administration and management. But a state or local education agency cannot be expected to exert influence without the wherewithal to do so.

The Education Revenue Sharing Act of 1971, now before Congress, has the virtue of fostering initiative and plan-

ning, and reducing the Office of Education control to a minimum. The National Chamber feels this philosophy and intent of such a bill deserves support as the first of needed moves in returning responsibility and authority to the people.

Unions Seek Added Protection

Organized labor is again putting its interests ahead of the nation in its staunch advocacy of a bill to restrict foreign trade, the Chamber of Commerce of the United States declares.

The bill, termed the Foreign Trade and Investment Act of 1972, would set up a system of quota imports at a time when the nations of the world are embarking on a growing flow of goods, capital, people and ideas that has benefited every nation, the National Chamber states. However, this proposed legislation, introduced by Sen. Vance Hartke (D-Ind.) and Rep. James Burke (D-Mass.) would have the reverse effects its sponsors and organized labor claim.

The bill would mean less economic growth, fewer jobs and world-wide conditions similar to those of the Smoot-Hawley era which played no little part in triggering the world-wide depression of the 1930's, the Chamber says.

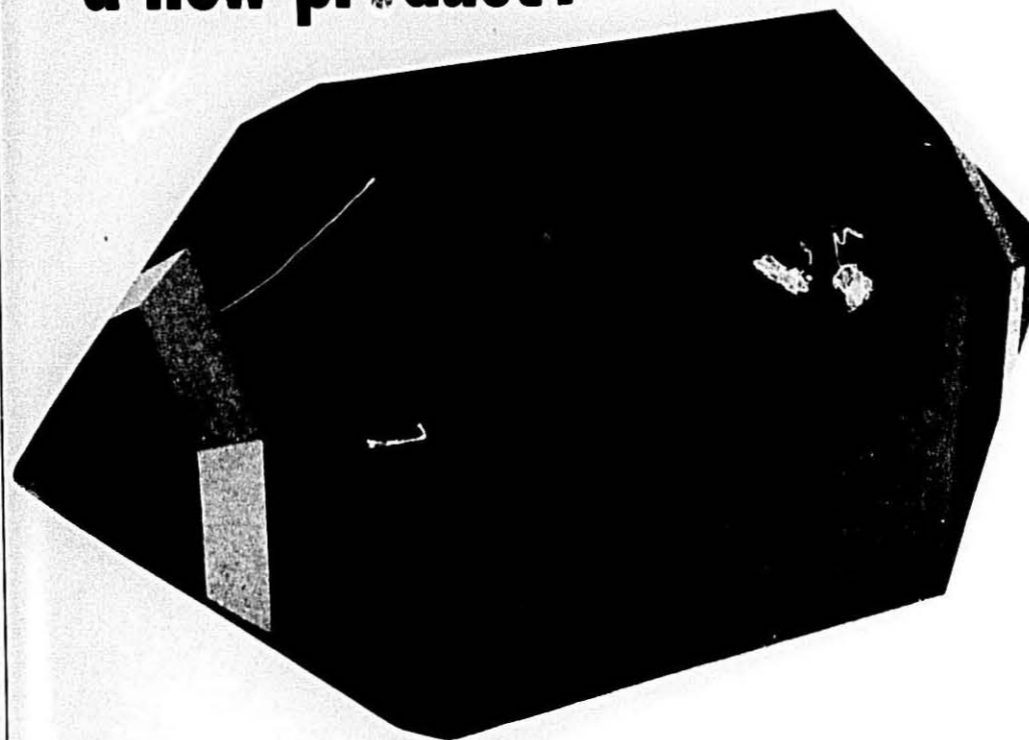
The "equality of sacrifice" labor leaders were so fond of urging during the wage-price freeze suddenly disappears as they endorse protectionist legislation as the Hartke-Burke bill, the National Chamber asserts. In urging enactment of a law which may initially be in the union's interest, labor leaders are ignoring the simultaneous adverse effects on the rest of the nation and the ultimate calamity such short-sighted and self-serving measures help effectuate.

Fires

On New Year's Eve, the St. Louis Macaroni Company building and contents were totally destroyed by a massive fire. The production equipment had not been used for several years but the building was being used as an extra warehouse to store our packages and supplies. All utilities had been disconnected for months. Several months ago the Fire Department was called by a neighbor. They found a small fire started near a basement doorway. The Fire Marshall seems to think that it is a case of arson.

The National Macaroni Manufacturers Association first met in Pittsburgh in 1904. It was incorporated in Illinois in 1921.

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