A CATEGORICAL ANALYSIS OF FOOD PAGE SECTIONS IN NEWSPAPERS OF 100,000 OR MORE CIRCULATION

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PREFACE

This pilot study is concerned with the development of an adequate profile of food information presented to readers by food editors. The categories developed for this study were based on the rhetoric of food section critics and food editors. Also, the Pillsbury Company had conducted a 1970 Reader Interest study that helped in formulation of food news categories.

This study was limited to newspapers of 100,000 or more circulation. A random sample of fifty newspapers was selected from this population and four randomly selected food sections from each paper, one for each of the four seasons, were chosen.

If one wishes to read this study without going in-depth into the methodology (Chapters II and III) or statistical analysis (Chapter IV), he is advised to read only the Introduction, Chapter I, and the Summary and Conclusions, Chapter V. The reader then, at his own discretion, may supplement his reading with material in the other chapters.

Hopefully, this profile of food information will aid interested individuals by providing a more meaningful base from which to work. The results were founded in actual observation, not individual opinion and/or limited experience.

My sincere appreciation goes to the Pillsbury Company, who funded this study for Food Editors across the United States, and my thesis advisory committee Dr. Walter J. Ward, Dr. James W. Rhea, and Mr. Lemuel

D. Groom. I would also like to acknowledge the excellent cooperation I received from the food editors who helped with this study.

I find it hard to express my appreciation to Dr. Ward for his help in this study. The encouragement he has given me throughout my masters program, his faith, along with the time-binding and experience, have far surpassed my expectations.

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CHAPTER I

INTRODUCTION

For the past few years, food editors and food section critics have been throwing generalizations and defensive rationalizations back and forth at each other on what seems to be a good-bad, either-orish, rhetoric with little base in actual observation of newspaper food section content structure. Very few, if any (none are known to the author), of the individuals or groups have observed even a quasi-random sampling of food section content. The purpose of this study is to provide involved individuals with a more meaningful base or profile of publicly disseminated food information.

Central tendencies in criticism and rebuttal can be isolated. Most of the dialogue seems to deal with what is not being printed rather than asking qualifying questions as what kind, which one, when, how much, to what extent, in what respect, under what conditions, etc. A graphic trip through this rhetoric may prove interesting to show these central tendencies in theme of criticism found in various speeches and articles. For example, Nicholas Von Hoffman stated in the Columbia Journalism Review: "American newspapers do their worst jobs on the topics most important to people--food, clothing, shelter and health--the areas the women's pages most often have responsibility for."[1] When writing about food editors in general, Richard Karp in a controversial Columbia

Journalism Review article--"Newspaper Food Pages: Credibility for Sale"--stated: "But all eagerness vanishes when the discussion turns to the more sensitive issue of journalistic responsibility."[2] Congressman Benjamin S. Rosenthal said to food editors at the 1972 Pillsbury Bake Off in Houston, Texas: "Your responsibility is to educate the public and give them information that is relative to the safety and health and economic well-being in this highly sophisticated technological society."[3]

The examples presented here are but a few examples of individual commentary. The preceding comments deal with the responsibility of food editors. With a research study, it would be virtually impossible for the authors to determine, or even define, the term responsibility for such a diverse population. The term would be evasive and probably dependent on endless individual situations. This pilot study attempted to define categories and quantities of food information printed across the United States, through a quasi-representative sample of that information. The critical rhetoric has aided categorical formulation as will be seen.

Congressman Rosenthal in his statement concerning responsibility has hinted at several areas that may be meaningful to content analysis. Those areas are (1) Safety, (2) Health, and (3) Economic interest areas, which seem to be the most controversial between critics and food editors.

The physiological interests of public health and safety were spoken of by many critics. Rosenthal stated at the 1972 Bake Off:

> The point that I'm trying to make is that in this technological day with pesticides, with chemicals, with all the other additives that are involved, many of the women that I speak

> to with sophisticated responsibility are worried when the Department of Agriculture says it's okay to sell cancerous chickens. In this day and age, of deep concern with these new involvements of chemicals, and additives and the fears that people have, continually writing about how many clams in clam chowder, becomes slightly irrelevant.[4]

Norman E. Issacs at the same Pillsbury Bake Off said that when he and his graduate student staff observed a majority of large newspapers available to them concerning "Botulism" articles during the botulism episode of 1971-72, only standard wire-copy articles were being printed, if any were printed at all. Mr. Issacs suggested that: "One of the major problems in preventing botulism is in the proper instruction of those who do home canning and preserving. Now this aspect, I'm sorry to say, was largely absent from your newspapers."[5]

Neglect of physiological interest information was also mentioned by several other speakers and writers. Criticism ranged from proper preparation techniques to balanced meals and proper diet. Most of the accusations had little base in systematic observation and were little more than value judgments on the part of individuals concerned.

Another category that receives critique concerns Economic Interest information. Issacs echoed the feeling of many critics on the subject of cost saving when he said: "Newspaper food editors should be doing much more experimenting with cheaper dishes like chicken and less expensive cuts of meat in order to make the newspaper more of a public servant."[6]

Congressman Rosenthal added during his speech that food editors have not taken into account cost saving material pertaining to low-income families, making food information relevant to the individual newspaper's readers.[7] This study attempts to present a profile of food

information. Cost saving material is pertinent to this study, due to its seeming reader appeal throughout economic income levels.

Congressman Rosenthal also suggests another neglected topic that may fall under economic interest information. That topic might be termed Time and/or Energy Saving, which leaves time or saves energy for other activities. Rosenthal stated:

> In the growth of our technological society, more and more are convenience foods, are pre-packaged, are frozen. One doesn't even have to be a cook anymore in our society to survive. And what most of you are doing, I surmise, is writing about conditions that existed 25 or 30 years ago, and never taking cognizance of where we are today.[8]

The economic interests of cost saving information and time and/or energy saving interest information seem from the critique of several sources to be lacking in food sections. These criticisms join the hypothesized absence of adequate information of physiological interest concerning public health and safety.

Sources of information printed in food sections also are under attack. One of the major contributors is Richard Karp. Karp's article states:

> The chief--and in many cases only--source of food news used by newspaper food editors is the food industry itself. On the average, more than 90 percent of the recipes and stories that appear in newspapers are releases supplied to food editors by vast corporate manufacturers, PR agencies, and trade associations . . . . One can almost make a game of trying to guess what company is the source of a newspaper recipe by looking at its ingredients.[9]

The sources of information seem to be one of the larger criticisms. Critics imply that the food editor in the United States is <u>only</u> a tool for the Food Industry. Congressman Rosenthal, at the 1972 Pillsbury Bake Off, stated: "I do think you have problems with conflicts of interest that you're going to have to deal with . . . . You ought not to

be a partner in the selling process of the food of your advertisers . . . ."[10]

Issacs, while speaking to food editors at the 1972 Bake Off and in reference to food industry material used by food editors, said: "If you're going to act like professionals, I agree you ought to put an end to the automatic passing into print of the handouts just because they come from big name advertisers."[11]

These individuals seem to be suggesting the most prevalent source of information in food sections is food industry rather than non-food industry sources, such as the newspaper staff or non-profit agencies. The critics say there <u>is</u> a conflict of interest, rather than, there seems to be, or this warrants further investigation, etc.

Much criticism also seems to center on recipes as a major portion of the food information printed by food editors. Richard Karp summed the feeling expressed by many critics when he wrote: "The job of the food editor is clearly to fill the odd-shaped spaces around food ads with copy interesting to food shoppers--mostly recipes and an occasional 'human interest' story with a food angle."[12]

How many food information articles on the average do food editors print? What percentage of the total food information printed deals with what categories of news? What type recipes? Do they deal with cost saving, time saving, health, etc.? There are many questions that might be asked, and could be answered.

These introductory comments and examples of trends in rhetorical criticism are grounded on the substantiated belief that dialogue similar to that at the 1972 Pillsbury Bake Off and the articles printed about food editors--rich in personal views, but starving for systematically

gathered data--can only prolong any needed changes in the food editor's policies and resulting output. The present output must be described adequately before such judgments are rendered and recommendations made. This study may be used by interested parties to aid in attaining that goal.

Approaching the Problem

To replace individual opinion as a reference for dialogue, interested parties need a descriptive profile of food section content, based upon at least a quasi-representative sample of food section content. For the reasons mentioned, based on the criticism flowing back and forth between involved individuals, a categorical content analysis of food sections across the United States was conducted, which included 50 randomly selected newspapers. The purpose then was to determine what kinds of food information are provided to the public by food sections. The first step in this categorical study was to form categories into which a broad, exhaustive spectrum of food news could fall. These categories might be indicated by the trends in criticism already discussed and studies that already have been conducted.

A search of literature uncovered very little in the way of meaningful research in the food news area. The Pillsbury Company provided an unpublished reader interest study--the only study discovered of research importance. This 1970 study was quite useful in efforts to establish reliable categories of information.[13] Nineteen food topics were rated by respondents on a six-point summated scale, ranging from Extremely Interested (6) to Not at All Interested (1). Table I shows the mean interest score of the 75 respondents for each topic,

accompanied by each topic's mean interest rank position.

TABLE I

MEAN INTEREST SCORES AND RANK POSITIONS ASSIGNED TO FOOD NEWS TOPICS BY RESPONDENTS IN THE PILLSBURY COMPANY 1970 SURVEY

Topic Number	Topic Description	Mean Interest Rating	Rank Position
1.	Stretching Your Food Dollar	5.0	1.0
2.	Time Saving or Jiffy Cooking	4.7	3.0
3.	Cooking With Ground Beef	4.7	3.0
4.	"Make Ahead" Cooking	4.7	3.0
5.	Ideas for Entertaining	4.6	6.0
6.	What's in the Food You Eat?	4.6	6.0
7.	Foods for Calorie Counters	4.6	6.0
8.	New Foods on Grocer's Shelf	4.5	8.5
9.	Creative Ways to Use Convenience or Packaged Foods	4.5	8.5
10.	Prize-Winning Recipes	4.4	10.5
11.	Foods, Ideas of the Season	4.3	13.0
12.	New Dessert Ideas	4.3	13.0
13.	New Cookbook Samplings	4.3	13.0
14.	Today's Balanced Meals	4.2	15.0
15.	Barbeque or Outdoor Cooking	4.0	16.0
16.	Gourmet Cooking	3.5	17.0
17.	Gifts From the Kitchen	3.3	18.5
18.	Cooking With Foreign Flair	3.3	18.5
19.	Foods Children Can Make	3.3	18.5
	Grand Mean Interest	4.3	

The grand mean interest in Table I indicates the readers were quite interested in the average topic submitted for judgment. Readers were very interested in articles dealing with stretching the food dollar and tended to be very interested in other topics dealing with mostly

health and/or safety and time and cost savings.

The nineteen topics in the 1970 study obviously did not exhaust topics found on food pages. Nor were the topics mutually exclusive. For example, "stretching the food dollar" overlaps with the "cooking with ground beef" topic. Also, without a measure of variance between the respondents' ratings, one is not able to determine if raw interest score differences exceeded chance expectations. However, the findings were useful as trend indicators in providing category content components in this content analysis.

Judging from written and oral dialogue by critics of newspaper food sections--especially those at the 1972 Pillsbury Bake Off--food information seems to fall into basic categories that would lend themselves to statistical analysis. Therefore, it was proposed that:

> Food information printed in a representative sample of newspaper food sections across the United States will tend to fall into three basic categories (1) Economic Interest information, consisting of cost saving and time-energy saving, (2) Physiological Interest information consisting of health and safety news and (3) Information Source consisting of food industry, non-food industry and unidentifiable sources.

It was further proposed:

> Food information containing recipes or general food information in the representative sample of newspaper food sections for the majority will tend to fall into the Economic Interest and Physiological Interest categories with either a non-food industry source or unidentifiable source, rather than in categories concerned with elements outside these categories.

If these propositions are invalid, the critics generally would have well-founded claims. If the categories do contain a majority of food information articles printed in our sample, some review of opinion may be in order. At any rate, for the first time, a profile of food information will exist.

FOOTNOTES

[1]Nicholas Von Hoffman, "Women's Pages: An Irreverent View," Columbia Journalism Review (July/August, 1971), p. 52.

[2]Richard Karp, "Newspaper Food Pages: Credibility for Sale," Columbia Journalism Review (November/December, 1971), p. 38.

[3]Benjamin S. Rosenthal, "Should Food News Be Separated From Consumer News in a Newspaper Organization?" (unpub. transcript, Food Editors Seminar, University of Houston, February 25, 1972), p. 4.

[4]Ibid.

[5]Norman E. Isaacs (unpub. transcript, Food Editors Seminar, University of Houston, February 25, 1972), p. 11.

[6]Ibid., p. 13.

[7]Rosenthal, p. 3.

[8]Ibid.

[9]Karp, p. 39.

[10]Rosenthal, p. 5.

[11]Isaacs, p. 13.

[12]Karp, p. 37.

[13]Lynda Anderson, "Consumer Interviews Concerning the Food We Eat," (unpub. study, The Pillsbury Company, 1970).

CHAPTER II

METHODOLOGY: DESIGN AND ANALYSIS

Charges and counters to charges at Houston on at least two major aspects of service to the public involved: Physiological Interests (Health and Safety) and Economic Interests (Cost and Time-Energy Saving). Another major variable (quantifiable in content analysis), inferred to have a bearing on public interests, was the food editor's source of information, as observed by the lay reader.

This three-category schema then enabled the investigators to compare the amount of economic and physiological interest information by source. "Amount" in this study represents the number of stories and column inches as percentages of total food news.

The over-all analysis contains 48 combinations of the variable categories and levels of these variables. The major variables and their sub-levels are listed below:

A. Economic Interest

   a-1 Cost Saving

   a-2 Time-Energy Saving

   a-3 Combined Cost Time-Energy Saving

   a-4 No Economic Interest

B. Physiological Interest News

   b-1 Health Interests

   b-2 Safety Interests

b-3 Health-Safety Interests

b-4 No Physiological Interests

C. Sources of Information

c-1 Food Industry Source

c-2 Non-Food Industry Source

c-3 Unidentifiable Source

These three major categories of food news cannot be expected to include all food information printed. For this reason, each major category contains a place for stories with no interest in the category or for stories that seem to have a source that is unidentifiable: No Economic Interest; No Physiological Interest; Unidentifiable Source. The categories, then, are mutually exclusive and cover all stories of food interest.

Whether the 48 possible combinations of food news characteristics would provide an adequate profile of food sections through our sample of food page content was of primary concern. The adequacy of the variable categories, of course, depended greatly on the reliability of variable definitions. It does little good to establish categories under which some topics cannot be included. Some optimal range in the definitions was required. If they were too specific, an uncontrollable number of categories and levels would be needed. (For example, if one more two-level variable were added, say, under Types of Information, to include recipes and general food news, the analysis automatically would expand to ninety-six different combinations of characteristics to code and analyze.) If they were too inclusive, much needed information for an adequate profile would be lost.

Operational definitions for the categorical levels were constructed

partly from topics used in the 1970 Pillsbury study of food news interests[1] and from comments made at the 1972 Houston Conference.[2] They do not include every possible topic the investigator encountered in the actual content analysis; however, definition specificity apparently did comprise breadth sufficient to encompass unforseen subject matter. A substantial body of unforseen subject matter was encountered, and due note was made in the conclusion to present a more adequate food news profile.

At the outset, this study of food section content involved only information relevant to the purchase, preparation, and content of food products heretofore legally offered for public consumption. Information regarding real estate, clothing, flower gardening, sewing, and other irrelevant topics was not considered, though it may have appeared adjacent to food news. For each story in a category, the column inches were recorded to be added for the total and a "one" was added to the number of stories for the particular category. Column inches were measured from the beginning of the article, not to include the "head" or title of the article, down the side of the article. Articles of less than one column inch were not categorized. Illustrations such as pictures or displays were not measured unless they were illustrative of a specific procedure of preparation (see Figure 1, page 14).

Operational Definitions

The following operational definitions of each category level were used when categorizing food information articles:

A. Economic Interest

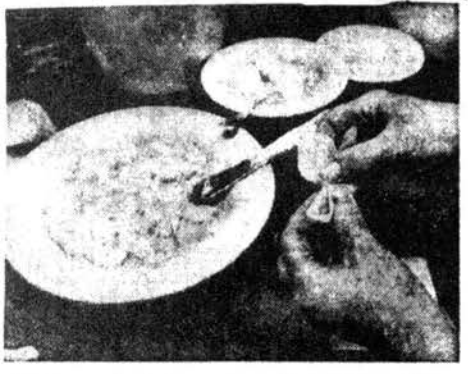
a-1 Cost Saving: Those articles and illustrations dealing

Chinese Delights Greet the Year of the Rat

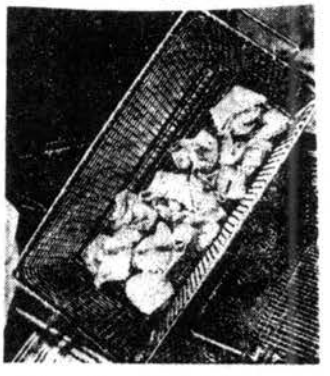
An egg yolk is added next to help bind the mixture. It is important to blend well.

About one teaspoon filling is placed in the center of each wonton wrapper.

Fold wrapper in half diagonally and place folded edge towards you. Then dab center with egg white.



Make a pleat in each angled side so the folds meet in the center. The egg white secures the fold.



Drop the Crab Rangoon into hot oil for about a minute until browned.

Source: The Detroit Free Press, February 9, 1972, Page 8-C (includes only a portion of the article)

Figure 1. Example of Instructional Diagram Measured for Column Inches

with "dollar stretching." Cooking with cheaper cuts of meat, utilizing left-overs, waste of food in preparation, gifts made in the kitchen, etc. Articles must be reasonably clear by declaration or implication that utilization of the product, idea, method, recipe, etc., is of comparative cost advantage. Mere "filler" rhetoric will not qualify.

a-2 Time-Energy Saving: Articles relevant to saving of time and energy in household management that have even an indirect bearing on food preparation. Jiffy cooking, "make-ahead" cooking, new products, creative ways to use convenience or packaged foods, foods children can make, efficient use of appliances, preventative maintenance, etc.

a-3 Combined Cost-Time-Energy Saving: Articles comporting to a combination of characteristics outlined in a-1 and a-2.

a-4 No Economic Interest: Articles fulfilling no characteristic of a-1, a-2, or a-3.

B. Physiological Interest

b-1 Health Interest: Articles and illustrations pertaining to the public's physical health stability or improvement. Topics on food ingredients, foods for calorie counters, balanced meals, vitamins, minerals, etc. Articles must carry a "maintenance or improvement of health" theme, overtly or by implication, rather than the negative "red-light" warning theme, as the b-2 Safety Interest articles below.

b-2 Safety Interest: Articles alerting or advising readers, directly or indirectly, of potentially harmful product ingredients, food preparation procedures, etc. Normally, these articles would refer to products, methods, etc., of which the public was unsuspecting.

b-3 Combined Health-Safety Interest: Articles and illustrations combining characteristics of b-1 and b-2.

b-4 No Physiological Interest: Neither Health nor Safety Interests as outlined in b-1, b-2, or b-3.

C. Sources of Information

c-1 Food Industry Source: Articles clearly or by implication originating from a source who has a vested economic interest in the message. Originating sources are identified by corporate and/or proper names, trademarked brands, etc.

c-2 Non-Food Industry Source: Articles clearly originating from a non-profit agency (excepting trade associations) or from the newspaper's own initiative. These would include, for example, government agencies, universities, in-newspaper testing results, local in-depth reporting, etc.

c-3 Unidentified Source: Articles in which identifying cues in c-1 and c-2 are not discernible by the lay reader, as judged by the analyst.

While categorizing food information for the major analysis, the column inches and number of stories for one other category was noted. That category is "Types of Information," containing two levels: (1) Recipe and (2) General Food News. Their operational definitions follow:

D. Types of Information

d-1 Recipe: Articles with a set of instructions denoting the combination of at least two ingredients in the making of an edible product, or ingredient for a larger recipe.

d-2 General Food News: Food information without a recipe.

The "Types of Information" category was not part of the major analysis, but is referred to from time to time indicating trends in the amount of Recipe and General Food News information contributed by each of the other categories.

Examples of most of the categorical combinations are presented in the following portion of the text. More discussion of each operational definition and examples follow:

Economic Interests

Cost Saving--Figure 2 (page 18) is an example of Cost Saving information with No Physiological Interest or only cost saving information present. The source in this case is the United States Department of Agriculture. The source is determined indirectly, observing the USDA seal, and categorized as a Non-Food Industry Source. This article mentions package foods that may be time and energy saving to the consumer (column 2), but seems only to mention them as cost saving or plentiful. A recipe also accompanies this article.

Time-Energy Saving--Figure 3 (page 19) shows a "human interest" story containing Time-Energy Saving information and recipes. "Human interest" articles usually contain local or regional interest including either a formal group (such as the Chamber of Commerce), or a family or an individual. Most of the "human interest" articles also contain

Pork, pears plentiful foods list for November

There is such a long list of good items on the Plentiful Foods list for November, menu planning should be no problem.

Watch for special prices on these foods, and plan your shopping in advance to take advantage of the peak quality as well as cost of these commodities.

Pork and rice head the list of plentifuls, and every homemaker no doubt has a repertoire of faored recipes for these two.

Other plentifuls include canned pears, eggs, broiler-fryers, potatoes and potato products, cranberries and cranberry products such as sauce and juice, prunes, prune juice, pitted prunes, apples, applesauce and apple juice, fresh pears and turkeys.

Today's recipe features plentiful canned pears kebobed with lamb cubes, served over fluffy rice, another plentiful.

At other times, serve gingered pears with pork roast or chops, cranberry glazed pears with fried chicken, bubbly cheese-topped pears with meat loaf.

PEAR KABOBS

1 (1 pound 13 ounces) can Bartlett pears
2½ pounds boneless leg or shoulder of lamb
½ cup oil
¼ cup lemon juice
¼ cup wine vinegar
½ teaspoon salt
¼ teaspoon freshly ground pepper
1 clove garlic, crushed
1 bay leaf
½ teaspoon marjoram
½ teaspoon dried mint
1 large green pepper, seeded and cut in squares

Drain pear halves. If extra large, cut in half. Cut lamb in 1½-inch cubes. Place lamb and pears in shallow glass container. Combine oil, lemon juice, vinegar, salt, pepper, garlic and herbs. Pour over lamb and pears. Marinate two to three hours. Remove lamb and pears from marinade and alternate with green pepper on skewers. Place on broiler pan. Broil four inches from the source of heat until the lamb is of the desired doneness, brushing from time to time with the remaining marinade. Makes six servings.

Source: The Arizona Republic, October 27, 1971, Page 68

Figure 2. Cost Saving/No Physiological Interest/Non-Food Industry Source

It's easy to pretend you know what you're doing in the kitchen

By CYRILLA RILEY
News Household Editor

When bachelors entertain, the smartest thing they can do is throw a brunch.

Bachelor Ernie Winstanley tells why: "It's a late morning meal—relaxed, unhurried—a terrific device for entertaining."

Nonchalant elegance is to be maintained at all times, he says. Get the messy stuff done before the doorbell rings. Pretend you hardly turned a hand to produce that sophisticated entree. Pretend it's easy.

Manage the menu so you can spend the time with guests instead of pots and pans in the kitchen.

Food must be delicious and at the same time appear to be simple to create. Careful planning and homework a day ahead helps make that fiction believable.

"Remember too that brunch is a combination of breakfast and lunch and people eat accordingly," says Ernie.

Meet everybody at the door with a Pina Colada . . . that's what Ernie does. Then he trots out generous portions of a substantial entree, Chicken Hash Au Gratin, for instance, and plenty of coffee.

Detroiter Ernie Winstanley has long been associated with broadcasting and commercial audio-visual activities as actor, announcer, producer and director. He has had a hand (or voice) in literally thousands of presentations going back to the radio days of "The Lone Ranger," "The Green Hornet" — both national network Detroit originations. He presently heads his own production company. Here are his two favorite brunch recipes.

Pina Colada

5 ounces dark or light Jamaican rum
1 can (6 ounces) pineapple juice
½ cup water
½ cup prepared Pina Colada cocktail mix
Ice cubes
Long sticks of fresh pineapple, optional

Pour into blender rum, pineapple juice, water and Pina Colada cocktail mix along with several cubes of ice. Turn blender to medium speed and blend until ice cubes are crushed. Serve in tall 8-ounce glasses over ice cubes. Serve with sticks of fresh pineapple, if desired. Makes 6 servings.

Chicken Hash Au Gratin

4 cups cubed, cooked chicken (about 3 pounds breasts and thighs)

6 tablespoons chicken fat or butter
6 tablespoons flour
3 cups chicken broth
1 cup half and half
3 tablespoons sherry wine, optional
Parmesan cheese

Simmer chicken breasts and thighs in a small amount of water until tender. (Chicken will be sweeter and fuller flavored in this poaching method.) Let chicken remain in pot until cool; remove skin and cut into small pieces.

Using a wire whisk, combine chicken fat or butter and flour. Add hot chicken broth and cook until thick. Add half and half and bring to a near boil (but do NOT boil.) Add sherry, if desired. Combine sauce and chicken pieces and pour into shallow greased casserole or pan. Sprinkle with Parmesan cheese. Place in a 325-degree oven to heat through. Then place under broiler unit briefly to brown the top. Makes 6 to 8 servings.

NOTE: Be sure to use a shallow casserole so that flavors of chicken and sauce are blended.

Source: The Detroit News, November 10, 1971, Page E-1

Figure 3. Time-Energy Saving/No Physiological/Non-Food Industry Source

recipes which are specialties of the featured guest, as this one does. Figure 3 (page 19) indicates make-ahead items that will save time during entertainment. Figure 4 (page 21) suggests an easy-to-prepare menu utilizing convenience foods. Figure 5 (page 22) indicates that time will be saved on traditionally long and exotic meals of "Sweet and Sour Pork" and "Chicken Manicotti" with the addition of convenience foods to their respective recipes. Articles of this type were categorized as Time-Energy Saving if their recipes contained convenience or packaged foods as the predominantly main ingredients, whether or not the article mentioned Time-Energy Saving.

Combined Cost Time-Energy Saving--Figure 6 (page 23) is an example of a syndicated article. The majority of the articles on Combined Cost Time-Energy Savings seems to contain more column inches than the single characteristic stories. This one is approximately 25 inches in length. Although this article contains only a small portion of what may be termed Time-Energy Saving, the mere hint of a statement in column 3 is enough to place the article in this category.

No Economic/No Physiological--The stories that would be placed in the No Economic Interest category would be either of Physiological Interest only or the No Economic/No Physiological Interest category, which seems to have comprised a large amount of the food information. These articles were of many varieties. Figure 7 (page 24) shows a "Let's try it" article on bean dishes. "Let's try it" articles made up the majority of food news which contained No Economic or Physiological Interest news. This type of article may not save time-energy or money, and it may not be concerned with health or safety, but let's try it because it's there. Figures 8 and 9 (pages 25 and 26) are also examples

Dinner for Dad

Father's Day is the time to show the man of the house how much he means to all the family. It's the day for special expressions of love — gifts, family gatherings and a royal feast. For the king of Dads, make it the king of roasts — Beef Rib Eye!

Beef rib eye is a deluxe special-occasion roast that is cut from the center and most tender part of the rib section. It can be envisioned as a beef standing rib roast with the outer fat covering and outside muscle as well as the rib bones removed, thus creating a very elegant cut of meat. In addition to its tenderness and delectable beef flavor, Dad will appreciate the fact that it is especially easy to carve.

As a matter of fact, anyone can carve a beef rib eye roast, so why not let Dad relax while you or some other member of the family take over the carving detail.

This roast is as easy to prepare as it is to carve. A slightly higher roasting temperature is recommended as the beef rib eye is smaller in diameter than most roasts. Set the oven at 350 degrees so the roast will be deliciously browned on the outside while still rare or medium, as desired, within.

FATHER'S DAY MENU
Vichyssoise
***Beef Rib Eye Roast**
Stuffed Mushrooms
Fresh Asparagus with Hollandaise Sauce
Tossed Garden Salad
Crescent Rolls
Butter
Chocolate Mint Mousse
*** Recipe given**

Make the festive menu easy to prepare by taking convenience-food shortcuts. The vichyssoise can come from a can of frozen potato soup and the crescent rolls from a refrigerated tube. A stuffing mix and hollandaise sauce mix will further simplify dinner preparation. A delightfully light and refreshing Chocolate Mint Mousse can be made the day before to await in the refrigerator the meal's finale.

With the most regal of roasts, elegant vegetables and a dream of a dessert, Dad will feel truly royal on his day of days.

BEEF RIB EYE ROAST

4 to 10-pound beef rib eye (Delmonico) roast

Place the roast, fat side up, on rack in an open roasting pan. Insert meat thermometer so the bulb reaches the center of the thickest part, being sure it does not rest in fat. Do not add water. Do not cover. Roast in a moderate oven (350 degrees) to the desired degree of doneness. The meat thermometer will register 140 degrees for rare; 160 degrees for medium; 170 degrees for well done. For roast weighing four to six pounds, allow 18 to 20 minutes per pound for rare; 20 to 22 for medium; 22 to 24 for well done. For a 7- to 10-pound roast allow 15 to 17 minutes per pound for rare; 17 to 19 for medium; 19 to 21 for well done.

NOTE: To roast a beef rib eye on a rotisserie, insert rod lengthwise through center of the roast. Balance roast and tighten spit forks. Roast must turn with rod. Insert a roast meat thermometer so the bulb is centered in thickest part but not touching rotisserie rod. Cook at moderate temperature over ash-covered coals to desired degree of doneness. Allow 1½ to 2½ hours for roasting a 4- to 6-pound roast, depending upon size and degree of doneness desired; 2½ to 3 hours for a 7- to 10-pound roast.

Source: St. Louis Globe-Democrat, June 14, 1971, Page 4-c

Figure 4. Time-Energy Saving/No Physiological/Unidentifiable Source

LOTS OF people are becoming intrigued by foreign cookery. If done from scratch, many of the dishes would have to be set aside for entertaining times only. Shortcuts make it possible to make a version of sweet and sour pork and chicken manicotti any time.

Country Ribs Sweet 'n' Saucie

4 pounds country ribs of pork
Salt and pepper
1 can (1 pound or 2 cups) sweet and sour sauce
1 can (13¼ ounces) pineapple chunks, drained
¼ cup chopped green pepper
½ cup maraschino cherries, optional

Arrange country ribs in heavy casserole or skillet. Sprinkle with salt and pepper. Place uncovered in a preheated 350-degree oven for 1 hour. Remove from oven and pour off any fat. Pour sweet and sour sauce and fruit over ribs. Cover and return to oven, continue to cook until meat is fork tender, about 1 hour.

Golden Chicken Manicotti

8 manicotti macaroni (about ¼ pound)
2 cups (16 ounces) dry cottage cheese
1 egg, slightly beaten
⅓ cup grated parmesan cheese
¼ cup chopped onion
½ teaspoon basil leaves, crushed
2 tablespoons butter or margarine
2 cans (10½ ounces each) condensed golden mushroom soup
½ cup water
2 cans (5 ounces each) boned chicken or turkey, cut up
3 slices (about 3 ounces) provolone cheese, cut in half

Cook manicotti in boiling salted water as directed until tender; drain.

Combine cottage cheese, egg and parmesan; fill manicotti. Arrange manicotti in shallow baking dish (12 by 8 by 2 inches). In saucepan cook onion with basil in butter until tender. Stir in soup, water and chicken. Pour over manicotti. Bake in preheated 350-degree oven for 35 minutes. Top with provolone. Bake until cheese melts. Makes 6 servings.

Source: The Cincinnati Enquirer, March 15, 1972, Page 10

Figure 5. Time-Energy Saving/No Physiological/Unidentifiable Source

Surprise - - convenience foods can be bargains!

By MARGARET DANA

It may surprise you to learn that some convenience foods cost less to serve your family than the same foods cooked fresh at home. This will be good news to the many women who are trying to keep their budgets down, but need extra time and energy for outside jobs or for the almost endless demands made on them by family or civic duties.

Here are some of the figures provided by the U.S. Department of Agriculture's (USDA) "Family Economics Review" last fall. Potatoes, for example, in convenience form can save you money. Mashed potatoes, home prepared, cost 3.8 cents per ½ cup serving, based on a price of 13 cents per pound for raw potatoes. But the dehydrated type, if bought in the large 32-ounce package, will cost only 2.9 cents per ½ cup serving. The smaller packages bring the cost up to the same level as homemade mashed potatoes — 3.8 cents per serving.

MARGARET DANA

OR TAKE FRENCH-fried potatoes. Fix them at home, starting from scratch, and the ½ cup serving will cost 6.4 cents, based on average store prices. Buy the big 32 ounce package of frozen French fries at 50c and the cost per serving is only 4.3 cents. Even the nine-ounce package brings you a serving of ½ cup for 5.8 cents.

And, of course, packaged prepared potatoes are easier to store compared with a couple of bushels of potatoes. Multiply these costs by the number of eaters in your family, and the number of times you serve potatoes a week. It often means a respectable saving — in both money and time.

ORANGE JUICE is another food which offers the buyer a choice in types and prices. The report in the Family Economics Review gives comparisons on four kinds of orange juice, based on a serving of ½ cup.

If the oranges are fresh, cost around 78 cents per 5 pounds, and are squeezed at home, a serving will cost 9.1 cents. If the oranges are squeezed at the store, and the 32-ounce container costs 44 cents, the cost per serving is 5.5 cents. When you get to the processed juices, canned orange juice—meaning straight undiluted orange juice, of course — brings the cost per serving down to 4.3 cents (based on an 18-ounce can at 19 cents). The larger can takes the price per serving even lower — 4.0 cents.

But when you check the frozen orange-juice concentrate, you really get a budget help. The six-ounce can, costing around 24 cents, brings the cost down to the four-cent level, and the larger 12 or 16-ounce containers give you a cost per serving of 3.7 cents. Compare this with the 9.1 cent cost of home-squeezed fresh oranges per serving, and it adds up to a bargain, especially if there are children who like orange juice with a snack.

The USDA reminds us, however, that these prices are only an indication of probable ratios of costs between the different types Costs vary around the country, and some stores will have lower prices or will offer "specials," or brands will differ in price. Moreover, there can be distinct differences in flavor.

YOU MIGHT like to take a look at what other families have been spending per week for all their food costs at home. The USDA's September report shows three different levels of spending for food. It is based on an average of food prices found in stores and a list of foods checked each time for the report. These were before the price freeze, but in spite of seasonal changes in prices for various fresh items, no wide change has occurred since last summer.

Using a typical family of four with two school children as the base, the report shows that under the "low-cost plan" the weekly food cost was $31.80; the "moderate cost plan" came to $40.50 a week, and the "liberal plan" showed an expenditure of $49.80.

Source: Independent, Press-Telegram, February 2, 1972, Page F-12

Figure 6. Combined Cost-Time-Energy Saving/No Physiological Interest/Non-Food Industry Source

Beans, but Not From Beantown

By Morrison Wood

Probably the most renowned bean dish in America is Boston baked beans. Lovingly prepared, slowly cooked, and served with hot brown bread, this is truly a magnificent meal. Navy beans are used and they are seasoned with brown sugar, salt pork, molasses, dry mustard and minced onion.

But in the Southwest, particularly in the days of the vast cattle ranches, cowboys scorned all beans with the exception of the pinto. The only bean worth eating was the pinto, that dotted pink bean of the western United States and Mexico. Almost every meal included meat or game, a plate of beans, sourdough biscuits, and for dinner a big hunk of pie made from dried fruit and, of course, steaming black coffee.

Delicious

One of the most delicious bean dishes I've ever had was Honey Bean Bake, with a flavor borrowed from wild Texas honey bees.

Wash and pick over 1 pound dried pinto beans and put in a mixing bowl. Cover beans with cold water; soak overnight. The next day cook the beans in water about 1 hour, or until beans burst. Drain and reserve the liquid. Place ¼ pound bacon, diced, and ½ medium onion, diced, in bottom of a 2½ - quart bean pot or casserole.

Add drained beans; top with 4 slices bacon, diced, and ½ medium onion, sliced. Combine 1¾ cups bean liquid, 1 cup honey and 1 teaspoon each salt, ground ginger and dry mustard; pour over beans. Cover and bake at 300 degrees for 3½ hours. Uncover and bake 1 hour longer stirring occasionally, until beans are of desired consistency. Serves 7 to 8.

Cowpoke

Another Texas ranch recipe is called Cowpoke Beans.

Wash and pick over 1 pound pinto beans. Cover with cold water; soak overnight. Next day, put beans and 2½ cups cold water into a Dutch oven; bring to a boil. Reduce heat, cover, and simmer for 1 hour. Stir in ½ pound salt pork, cut up, 1 red chili pepper, 1 medium onion, chopped, 1 clove garlic, minced, 1 6 - ounce can tomato paste, 1½ tablespoons chili powder, 1 teaspoon each salt and cumin seed, and ½ teaspoon dried marjoram. Cover and simmer 3 hours, or until beans are tender. Add more water if necessary during cooking. Serves 8.

Source: San Francisco Chronicle, December 1, 1971, Page 31

Figure 7. No Economic/No Physiological/ Non-Food Industry Source

Cheese Trio With Pasta

THREE CHEESES make this pasta dish tasty and satisfying. Rotini is the pasta used; you'll find this a pleasant variation from the usual spaghetti or macaroni shape.

ROTINI WITH THREE CHEESES

Twelve ounces enriched durum rotini macaroni
One-third cup finely chopped onion
One-third cup finely chopped green pepper
One-third cup butter
One-fourth cup enriched flour
One tablespoon seasoned salt
One tablespoon dry mustard
One-half teaspoon white pepper
Three cups milk
One cup (four onces) shredded Swiss cheese
One cup (four onces) shredded Cheddar cheese
One-fourth cup grated Parmesan cheese
One jar (two ounces) pimiento, drained and chopped
One and one-half tablespoons Worcestershire sauce

Cook rotini in boiling, salted water (three quarts water plus one and one-half tablespoons salt) until firm, but not quite tender, six to seven minutes. Drain. In large saucepan cook onion and green pepper in butter until tender. Blend in flour, salt, mustard and pepper. Gradually stir in milk. Cook over medium heat, stirring constantly, until mixture thickens.

Add remaining ingredients; continue cooking and stirring until cheeses melt. Mix in rotini. Pour into greased two-quart baking dish. Bake in preheated 350-degree oven 40 to 45 minutes, or until thoroughly heated. Makes six servings.

Source: Oakland Tribune, June 14, 1972, Page 7-A

Figure 8. No Economic/No Physiological/Unidentifiable Source

Why not a potato omelet?

If you're just plain hungry but tired of rich food, there's nothing better than an omelet.

But omelets can be more than eggs alone. Our recipe adds pimiento — that red goodness Latins have taught us to enjoy. Also onion, green pepper, and bacon — like the old Denver sandwich. But to round out the "meal," there is potato.

This hearty egg dish is the perfect Saturday supper or hearty luncheon. All you need to go along is a crisp tossed salad.

Country omelet

¼ cup butter

8 eggs

1 jar or can (4 ounces) pimientos, drained

¼ cup finely chopped onion

¼ cup finely chopped green pepper

6 slices bacon, crisp-cooked and crumbled

½ cup diced cooked potato

½ cup milk

2 tablespoons water

1 teaspoon salt

¼ teaspoon pepper

Dash bottled hot-pepper

Heat butter. Combine remaining ingredients, mixing well, and pour into hot skillet. Cook and stir through the top, letting uncooked mixture run to bottom by lifting edges. When set but top is shiny, fold in half and turn out of pan. Makes about 4 servings.

Source: Long Beach Press-Telegram, May 3, 1972, Page F-12

Figure 9. No Economic/No Physiological/Unidentifiable Source

of "let's try it" variations from the usual. Figure 10 (page 28) indicates a Food Industry Source article on cooking contests. This article was placed in the Food Industry Source category due to the use of a food industry association, the "Pineapple Growers Association" of Hawaii. Figure 11 (page 29) illustrates an example of an article "filler" used in most food sections. This example is also a "let's" recipe measuring only a little over one inch. "Filler" articles of this sort were common to the Time-Energy Saving category also. These articles usually gave helpful tips even though they were usually between one and three inches in length. The No Economic/No Physiological Interest articles also contained what might be termed "Oddity." Figure 12 (page 30) seems to explain itself.

Physiological Interests

Health Interest--This category deals with information such as the "Four Basic Foods," "Minimum Daily Requirement," etc. Figure 13 (page 31) is a recipe article which implies that with its use, essential vitamins will improve or aid health. Most of the health articles are concerned with the consumption of proper foods.

Safety Interest--The majority of Safety articles is concerned with procedures of preparation and improper handling of food that may cause serious illness or death. Figure 14 (page 32) shows a Safety Interest article on "Cooking Bags." Most Safety Interest articles not only notify the consumer of danger, but also offer suggestions on how to prevent the hazard (see column 2).

Combined Health-Safety Interest--This category deals with a combination of Health and Safety Interests. Figure 15 (page 33) is an

They're Off To Hawaii

When it comes to preparing salads and desserts, women cooks of this state don't take a back seat to anyone.

Evidence of this fact came with the announcement that five Washington homemakers had been selected to participate in the finals of the Pineapple Growers Association of Hawaii's National Pineapple Cooking Classic, Aug. 22 to 29, at the Royal Hawaiian Hotel in Honolulu.

They are Mrs. James Burke, Packwood; Mrs. Gene Johnston, Seattle; Mrs. Beth S. Yarbrough, Puyallup; Mrs. Betty Noel, Spokane, and Mrs. Robert J. Tovey, Bellevue.

In all, 40 men and women from coast to coast will compete in the inaugural presentation of the Classic, using canned pineapple in one of four recipe categories — main dishes, baking, salads and hot and cold desserts.

The winner in each category will receive $10,000. An over-all, best-of-contest award of $15,000 will be given to one of those winners, making a grand prize of $25,000. The first runner-up in each category will receive $1,000.

Mrs. Johnston, Mrs. Yarbrough and Mrs. Noel will compete in the dessert category, while Mrs. Tovey and Mrs. Burke will seek fame and fortune in the salad category.

The association said each recipe was thoroughly tested by a nationally-known judging organization prior to selection for the contest finals.

Each of the Washington finalists will be accompanied to Hawaii by her husband or another relative. These guests of the association will participate in activities planned throughout the week.

Source: The Seattle Post-Intelligencer, August 2, 1972, Page B-4

Figure 10. No Economic/No Physiological Interest/Food Industry Source

Hot Avocado Dip

Avocados make a good dip for pretzels, chips or spears of chilled fresh vegetables. Mash 2 very ripe avocados. Add 2 drops hot pepper sauce. Stir in ½ teaspoon salt, 2 teaspoons lemon juice, 2 tablespoons horseradish, and ½ cup sour cream. Mix well and chill for at least one hour.

Source: The San Francisco Examiner, July 19, 1972, Page 30

Figure 11. No Economic/No Physiological Interest/Unidentifiable Source

Steak Thief Clears $70,000 a Year

By MIKE ROYKO
Chicago Daily News

CHICAGO — An acquaintance of mine is a professional thief. Wait, this isn't another column about politics. I mean he is a straightforward, hard-working thief, the kind who grabs other people's property.

As a youth, he briefly tried stickups. But that's a good way to get shot. So he switched to burglary. That's risky, too, because of watchdogs and armed householders.

Now, after a couple of stays in prison, he has settled into shoplifting — "boosting," as the professionals call it. Nobody shoots boosters. Next to holding public office, it is one of the safest forms of larceny.

And after years of boosting all sorts of products, he has found an amazingly profitable specialty.

He steals steaks from supermarket meat sections.

I know it doesn't sound like much. That was my first reaction when I ran into him this week and he told me about it.

"You shoplift steaks?" I said. "How can you make a living stealing steaks?"

And he calmly said: "If I work at it, I can clear $70,000 a year."

Seventy-thousand? Even the great cattle rustlers didn't do that well. But he explained his operation:

"Remember when I got out of prison and told you I was going straight?"

I remembered. He learned a trade in prison and intended to work at it. No more stealing. I remembered, also, that he wore cheap, work clothes the day he told me that. Now he was wearing an expensive, mod suit.

"It didn't work out," he said, "I got a job, but the company cut back on hours. So to make ends meet, I went back to boosting a couple of days a week.

"I got the meat idea when I was shopping in a supermarket and saw how lousy their security is. I won't tell you exactly how I do it, but it's the easiest thing I've ever had going.

"I take the best steak — the strips or filets, the $4 packages, and I sell them for half-price. Finding customers is no problem. I've got more customers than I can supply. With prices the way they are, people are happy to get it. They load up their freezers.

"At first, I'd work at it maybe two days a week. I'd boost about $200 worth of meat a day. That's not hard. It only takes a few minutes to drive from one supermarket to another, and do you realize how many of them there are in the city and out in the suburbs? Now I'm boosting five or six days a week.

"If I make my first stop at nine, I'll have $200 worth of meat in my trunk by one in the afternoon. If I want to put in a full day, it's twice that much.

"In one place alone, so help me, I took about $200 worth out of there. I just kept going in and out.

"And the beauty of it is that if I do get caught, it's only petty larceny. What's a couple of packages of meat? Big deal. The only way they could nail me for more is if they got me in the car, with a trunk full of the stuff. But it would be hard to prove I stole it. What if I said I bought it from some guy. Can they prove I didn't?"

I admitted his operation was unlike anything I've ever heard of. Only a man who knows his trade well could see such a great potential in a piece of beef wrapped in cellophane.

But he said a problem has arisen. He has a girl friend and she is honest.

"I met this girl and we're serious. At first, I didn't tell her about it. But she figured I couldn't make the kind of dough I spend by working at my other trade. So I finally told her about it.

"Now she wants me to get into something straight, even if I can't make as much at it. So I got another idea.

"I know everything there is about boosting. This ought to be worth something, right? OK, I got in touch with the guy who runs security for one of the food chains. I didn't give him my name, but I told him my background and said I'd like to go to work in security. Not as a guard. As a consultant or something like that.

"I know more about boosting than any guards do. I know every trick and ways to prevent it. I could save them a fortune.

"You know what he told me? He said that they're cops and I'm a thief and he didn't think his men would like working with me.

"But I'd still like to try it. I can show them tricks they never heard of. Not just with meats, but anything else.

"If it was up to me, I'd just keep boosting. But I'm serious about this girl."

After we parted, I asked the supermarket institute how much Chicago-area food stores lose each year to shoplifters.

They said they couldn't be exact, but it could run as high as $20 million, and probably no lower than $10 million.

So if any food chain wants to hire an expert to cut their losses, while helping a man go straight and solve his romantic problems, I'll be glad to put them in touch with my thieving friend. If not, well, the last thing he said to me was:

"If I can't go to work in security, I guess I'll air condition my car trunk this summer."

"The trouble is, I don't know how to get through to the executives. If I talk to the security guys, they'll all say the same thing — they don't want to work with a thief. But the executives might have more sense. What do the security guys know? I do my best work in stores where there's a uniformed guard. The clerks relax with a guard there. I could walk out with a side of beef.

Source: The Evening Star, May 3, 1972, Page D-9

Figure 12. No Economic/No Physiological Interest/Non-Food Industry Source

Child Cook-Consumer

Candy or cookie— the choice is yours.

If you need an excuse to make and eat candy, remember that the wheat germ has Vitamin B and many minerals, especially iron.

Chocolate Candy Cookies

1 square (1 ounce) unsweetened chocolate
⅔ cup sweetened condensed milk
1½ cups chopped walnuts
½ cup wheat germ
¼ cup confectioners sugar
¼ teaspoon vanilla

Melt chocolate in saucepan. Remove from heat. Add milk, stirring well. Stir in all other ingredients. Mix well. Drop by rounded teaspoonfuls onto greased baking sheet. Bake at 350 degrees for 8-10 minutes. Cool on rack. Yield: 3 dozen cookies. Store in air-tight container.

Source: The Evening Star, August 30, 1972, Page E-3

Figure 13. Health Interest/No Economic Interest/Unidentifiable Source

Cooking Bags a Hazard?

BY PAULA BUCHHOLZ
Free Press Food Writer

Cooking bags, dubbed by manufacturers as a revolutionary new approach to oven cooking because they allow meat to brown while retaining juices and keeping the oven clean, are under study as a possible safety hazard.

The New York State Health Department's Burns Care Institute has received reports of 37 oven fires or exploding grease incidents and 6 burn injuries associated with use of the bags.

The bags were only recently introduced in Detroit. They've been available in New York since 1970. No complaints have been made to the Detroit Health Department, the Fire Department or the Food and Drug Administration or to the Michigan Consumer Council in Lansing.

Detroit Fire Marshal Bernard Decoster says the department plans to test the bags in their laboratories.

Controversy in New York over safety of oven bags started when a housewife wrote to the Albany Times-Union's "Contact" column explaining that her oven burst into flames while roasting meat in one of the new "Brown-In Bag" cooking bags.

That letter brought many others and a follow-up story. As a result of the complaints, Wednesday's New York Times quoted the Health Department as announcing, "Oven bags are under study as a potential burn hazard."

Most of the complaints cited Reynolds "Brown-In Bags." They were first on the market and the leading seller.

Reynolds officials maintain that fires won't start if the product's detailed instruction sheet is followed.

A company spokesman suggested that the fires could have been caused by first-time users who hadn't sufficiently familiarized themselves with the instructions, or by long-time users who became careless.

Instructions call for ventilating the bags, placing them in pans deep enough to contain leaking juices and maintaining an oven temperature no higher than 400 degrees (which Reynolds officials say provides a 100-degree leeway below their nylon film bags' 500-degree melting point).

They add that technicians haven't been able to duplicate the fires in their test kitchens. They did, however, acknowledge that they had received complaints about the bags — "about one in every five million uses."

Source: The Detroit Free Press, February 9, 1972, Page 3-C

Figure 14. Safety Interest/No Economic Interest/Non-Food Industry Source

Miracle Fruit--
Gentle Dynamite

By Raymond A. Sokolov

New York

One of the least frightening items in the United States Army's experimental arsenal is a small red berry the size of a Spanish peanut.

Not part of any biological warfare program, the "miracle fruit" (as it is referred to by the scientists doing research on it at the Army's labs in Natick, Massachusetts, and elsewhere around the country) is gentle dynamite.

Its white flesh is a noncaloric sweetener, a special kind of sugar substitute without apparent side effects. And it may eventually provide a safe way to appease the sweet tooth of millions of diabetics, dieters and other people who want to avoid ordinary sugar.

Miracle fruit is now undergoiug long term toxicity tests in Natick and is being developed for commercial exploitation by the Meditron Company of Wayland, Massachusetts. And despite the fact that Ghanaians have been using it for hundreds of years and that it has the Agricultural Organization of the United Nations, it will not appear on supermarket shelves until 1974.

It is, nevertheless, a berry whose time has come. Cyclamates are now officially verboten. Saccharine is under suspicion, among other things as a cancer-causing agent, and it never tasted like real sugar to begin with. Real sugar, moreover — white, brown or raw — is under fire from the organic food world as a nutritionally depleted and depleting substance.

No Calories

Miracle fruit apparently has none of those problems. It is miraculous because it produces an absolutely authentic sugar taste and introduces, practically speaking, no calories into the body, according to studies done on human beings since 1966.

Oddly enough, the Marie Curie of miracle fruit is not a nutritionist, but a professor of psychology with a joint appointment at the Yale University Medical School and the Pierce Foundation, a private laboratory in New Haven specializing in work on environmental pollution. Mrs. Linda Summerfield (she publishes under her maiden name, Bartoshuk) began investigating the psychology of taste, with physiological methods, 10 years ago, as a graduate student at Brown.

"I scoured the anecdotal literature, folk medicine I guess you could call it, for anything having to do with taste," she said in a recent interview in her small lab. "Those sources are rarely correct, but they're almost never completely wrong."

Four Lemons

References to miracle fruit had been cropping up in explorers' reports and other places intermittently for 250 years. But Mrs. Summerfield located her first berry in 1966, through a rare plant buff in Miami.

"I got so excited the first time I tried it," she recalls, "that I ate four lemons and got dreadfully sick. You see the sourness is still there. You just don't notice it becouse the sensation of sweetness is so powerful."

Since then, Mrs. Summerfield has experimented carefully with hamsters, who got fat on sweetened sour foods, and with people, whose brain waves she measured while they contumed miracle fruit.

Meanwhile, biochemists at Florida State University discovered that the active principle in the berry was a glycoprotein — a protein with sugar groups attached — that coated the tongue in a very thin and persistent layer.

As a result of this persistence the sweetening effect lasts for about an hour after the miracle fruit, which is now made by Meditron in pink pills of quarter-berry dosage, is dissolved on the tongue.

Whole lemon quarters taste like lemonade. Green strawberries taste ripe and as if they were covered with powdered sugar.

Though Mrs. Summerfield continues to study her pet berry on her own time, most of the miracle fruit research activity is still centered in Massachusetts, especially at Meditron, a privately held corporation.

Trademark

Meditron's president, Robert Harvey, a former graduate student of Mrs. Summerfield, has given miracle fruit extract a trademark, Mirlin, and has instituted a full Food and Drug Administration certification program for it, as well as a program for developing an adequate supply of the fruit.

Meditron has already caused 100,000 shrubs to bloom in greenhouses in nearby Sudbury, Massachusetts, that simulate miracle fruit's native tropical West African growing conditions.

N.Y. Times Service

Source: San Francisco Chronicle, March 8, 1972, Page 23

Figure 15. Combined Health and Safety/No Economic Interest/Non-Food Industry Source

illustration of this level discussing "safety" for diabetics and aid to calorie counters on health. These articles were usually longer especially when coupled with Economic Interest levels.

Sources of Information

Food Industry Source--A Food Industry Source does not usually print a "by line" on an article. Most of the Food Industry Source articles were categorized due to the use of a brand name within the body of the article, and no "by line" present on the article (see Figure 16, page 35). The author realized that a considerable amount of food industry material is used by food editors in their food sections. This study is concerned with the "lay" reader's perception of the frequency of Food Industry Source material used by food editors.

Non-Food Industry Source--These articles usually contained a "by line" at the beginning or end (see Figure 3). The source is sometimes contained within the article (see Figure 2). If an article by implication was determined to be of local origin, i.e., clubs, groups, etc., the article was placed in this category.

Unidentifiable Source--If the article did not contain a "by line" and its origin could not be determined from within the body of the article, by the lay reader, it was categorized on this level (see Figures 9 and 11).

Figures 16 (page 35) through 22 (page 41) are examples of combinations of the three main variables. They represent most variable combinations of the Economic and Physiological Interest categories.

Careful Planning, Shopping Cut Costs

By JEANNE LESEM
UPI Food Editor

NEW YORK — Careful planning and shopping can cut home food expenses as much as 30 per cent, say family finance experts at a bank here.

Their announcement coincided with one from the Federal Price Commission that okayed price increases sought by several leading food companies.

Despite such increases, you can save money on home cooked meals in a variety of ways.

WHEN YOU PLAN meals, choose foods for the number of servings per pound instead of the cost per pound. For instance, pork spareribs command a somewhat lower price per pound than pork roast, but they can be more expensive on a cost per serving basis.

A roast with a moderate amount of bone provides two or three servings per pound, compared with only one per pound for spareribs.

Fryer chicken breasts at 60 cents per pound are a better buy than whole fryers at 33 cents a pound, says the U.S. Department of Agriculture (USDA), because the cost per serving works out at 15 cents for the breasts compared with nearly 25 cents for whole fryers. The USDA suggests ½ pound of ready-to-cook weight per serving when you buy chicken for roasting, frying, braising or stewing and ¼ to ⅓ bird per serving for broiling.

ANOTHER MONEY-SAVER is a shopping list, provided you stick to it and avoid impulse purchases, which tend to add luxuries such as snack foods, candy and soft drinks to the market basket.

Base your list on store advertisements in the papers and watch the papers for the USDA's monthly list of plentiful products. February's list is made up largely of fruits and vegetables, including fresh oranges, grapefruit, apples and pears, split peas, eggs, peanuts and peanut products and canned peaches and fruit cocktail.

Pork products are low in price now, so a ham is a good buy, especially if you use the bone to make split pea soup.

If you do a lot of home baking, it pays to buy extra eggs when prices are low. While their refrigerator shelf life is limited to a week or so for maximum nutrition and flavor, raw eggs freeze well and can be held safely for 6 to 8 months at zero degree Fahrenheit or lower.

WASH AND DRY each egg, break it into a cup or separate yolks and whites into a cup to check for freshness. Then empty the whole eggs or their parts into a bowl or freezer container that will hold the quantity you're apt to use in a single recipe. Cover whites, label with date and quantity, and freeze. Beat yolks or white eggs to mix thoroughly without incorporating air. As a preservative, stir ¼ teaspoon of salt or ¾ teaspoon of sugar or light corn syrup into each ¼ cup of yolks or ½ cup of whole eggs. Cover, label and freeze.

The USDA also has an easy method for figuring best buys in eggs according to size. If the price difference per size is less than 7 cents per dozen, the larger size is the more economical. Shell color makes no difference in quality or nutrition.

It pays to buy many foods in quantity, so you need shop less often. But don't overbuy perishables just because of low prices. Wasted food can cost more than items with a higher price tag.

Source: The Tampa Tribune, February 24, 1972, Page 8-E

Figure 16. Cost Saving/Health Interest/Non-Food Industry Source

Get Your Fruit Facts Straight

The following information was prepared by the U.S. Dept. of Agriculture to help you select canned and frozen fruits.

Knowing what types to use for specific purposes will help you make correct purchases. Shopping wisely also helps you keep the food budget under control.

• Canned fruit cocktail must contain definite proportions of peaches, pear, pineapple, grapes and maraschino cherries. This is one of a few fruit mixtures which is standardized by Federal law.

•

• The term "extra heavy syrup" found on the labels of some canned fruits, means the sweetest, thickest sugar syrup used in canned fruits. The heavier syrup, the sweeter the fruit.

• The U.S. grade name on a can or frozen package of fruit can help you decide how to use the fruit. Different qualities of fruits are suited to different uses.

Top quality, Grade A fruits have an excellent color and uniform size, weight and shape. They are a good choice for dessert of fruit salad for a company dinner.

Grade B fruits, only slightly less perfect than Grade A in color, uniformity and texture, have good flavor. They are suitable for everyday desserts, salads and fruit cups.

Grade C fruits, which are not as sweet or as uniform in appearance as the higher grades, are a thrifty buy. They are good for use in puddings, jams and frozen desserts.

•

• In selecting canned and frozen fruits, you should avoid bulging or swelling cans.

Small dents in a can will not harm the contents unless the dents have pierced the metal or loosened the can seam.

Frozen fruits should be frozen solid. If fruits in a package are not firm, it may mean they have been defrosted at some time during marketing and may have lost quality.

Stains on the package may also indicate defrosting.

• Canned fruits will retain their quality for a year or more. But, to do this, they must be kept at a temperature no warmer than 75 degrees Farenheit.

Canned fruits stored above this temperature for long periods of time may lose quality in color, flavor or texture. The fruit is still safe to eat, however.

Source: Los Angeles Herald Examiner, March 8, 1972, Page C-10

Figure 17. Cost Saving/Safety Interest/ Non-Food Industry Source

All additives aren't harmful

By ROBERT RODALE

Do you think all food additives are bad? Are you suspicious of any colorings, flavorings, preservatives and other supplements put in foods?

The truth is that not all additives are bad, as some people are likely to believe. Many can make important contributions to food quality, although the matter of long-term safety of some synthetic additives is a matter of serious concern.

Many additives are really natural foods that are higher in nutritional value than things you normally eat. Others combine high-nutrition with the ability to improve the flavor, color, and general attractiveness of a wide variety of prepared foods.

What is an additive, anyway? Defined simply, it's a food ingredient that you wouldn't care to eat plain, but which makes other foods better when it's included in a recipe. Here are some examples:

1. WHEAT GERM: It is separated from wheat grain during the milling of white flour and with the germ goes much of the B vitamins and vitamin E in wheat, as well as many minerals and much of the grain's protein.

Wheat germ adds a delightful, nut-like flavor to baked goods, casseroles, cereals and even soups and stews. Whenever you add almonds to vegetables or other foods, sprinkle on some wheat germ too and see how the flavor improves.

2. SOY FLOUR: Its high protein content makes it a frequent ingredient in reducing foods. Soy flour is blended by processors into a wide variety of foods — from candy to macaroni. Some cooks mix one cup of soy flour with every three cups of wheat flour, to give it more nutritional punch. The taste is bland.

3. SKIM MILK POWDER: A very low-cost source of protein and minerals.

4. BONE MEAL: A natural source of calcium, phosphorus and trace minerals. It can easily be mixed into baked goods and other foods to make them extra-nutritious. The Canadian Army has used it as a bread additive. You can do the same.

5. NUTRITIONAL YEAST: In powdered form, it is especially rich in B vitamins. You can put it in almost any mixed food.

6. DOLOMITE POWDER: Obtained from natural rock of the same name, dolomite is a rich source of the essential trace mineral, magnesium. Eleanor Levitt, author of "The Wonderful World of Natural-Food Cookery" (Hearthside Press), suggests adding a tablespoon of dolomite powder when you make halvah. Mix it right in with the sesame tahini, nuts and other regular ingredients; it won't alter the taste.

7. MAPLE SYRUP: Aside from its distinctive flavor, it's a good source of the trace mineral chromium, a mineral often depleted when food is refined.

(Chicago Tribune-New York News Service.)

Source: St. Louis Globe-Democrat, February 23, 1972, Page 12

Figure 18. Cost Saving/Combined Health-Safety/Non-Food-Industry Source

Whatever Happened To Breakfast?

Whatever happened to breakfast—that wonderful time in the morning when families gathered in a cozy, warm kitchen over platters of creamy scrambled eggs, crisp bacon and steaming homemade biscuits?

Just like so many other bits of Americana this institution has gone by the wayside. Now, with our hurry up pace, there are too may trains to catch and too many different schedules to meet. The family that's able to sit down together for breakfast in these times is an unusual one indeed.

The need still exists, though, for early morning nourishment that will carry your family member through busy mornings at work or school. To be sure that your family gets this all important meal, plan breakfast menus that can be made in individual servings to accommodate the different eating times of family members. Or prepare foods that can be held over a fairly long time that they can themselves do.

A most important thing to remember is that the meal should contain foods from each of the Basic Four Food Groups—the meat group; the milk group; the fruit and vegetable group; and the bread and cereal group.

Don't think the foods have to be "breakfast foods." If your youngsters balk at eggs prepared in the usual way, give them scrambled eggs in a sandwich with perhaps a bit of peanut butter spread on each bun half.

Or fix your own homemade instant breakfast. Use milk or juice for the liquid, blend in an egg and seasonings and you've got good nutrition in a glass made exactly to suit your taste.

Everyone thinks of eggs as being a conventional breakfast food and they are a convenience food, too. Most methods of egg cookery require just a few minutes and they're so easy to prepare that even the young school age member of the family can fix their own.

Make a special effort to see that your family starts each and every day with a good breakfast.

Source: The Atlanta Journal, July 26, 1972, Page 16-F

Figure 19. Time-Energy Saving/Health Interest/ Unidentifiable Source

Missing enchiladas lately? Recipe rushed to rescue

"No one should have to miss out on enchiladas for lack of a recipe—here's mine. I think in the original recipe the tortillas were filled and rolled up individually and laid in a rectangular pan. But this is the recipe as my California-raised mother always made it. Delicious and easy, too."

Mrs. Mildred Wood
Minneapolis

ENCHILADA SAUCE

¼ cup oil
1 med. onion, chopped fine
1 clove garlic, peeled and mashed
1 sprig fresh parsley, minced
1 (6-oz.) can tomato paste
1½ cups water
1 tsp. vinegar
½ tsp. salt
1 tsp. sugar
⅛ tsp. cayenne
2 tsp. chili powder
½ tsp. oregano

Combine oil, onion, garlic, parsley and tomato paste. Simmer 3 minutes. Add remaining sauce ingredients. Bring to a boil. Simmer 15 minutes.

ENCHILADAS

1 doz. frozen corn tortillas
1 small can pitted sliced ripe olives
8 oz. mild Cheddar cheese, grated
¾ lb. ground beef, browned
1½ cups finely shredded lettuce

Thaw tortillas at room temperature. Fry lightly, one at a time, in a few tablespoons oil. (Only a few seconds on each side to keep tortilla soft and pliable.) Dip each into prepared sauce and stack them in a round casserole dish, sprinkling each layer with the meat, cheese, olives and lettuce. Cover casserole and heat about 20 minutes in a 325-degree oven.

Mrs. Gerald G. Debing, Minneapolis, shared an enchilada recipe also.

* * *

In answer to the request for grasshoppers made with ice cream from Mrs. W.D. Hasser, Minneapolis, comes this recipe from Mrs. Michael White, Minneapolis:

GRASSHOPPERS

¼ cup milk or cream
2 jiggers white creme de cacao
2 jiggers green creme de menthe
1 pint vanilla ice cream

Put all ingredients into a blender and blend.

Other Minnesota readers sharing a similar recipe include Mrs. A. A. Patrias, Hutchinson; Lynn Gagnon, Anoka and Gert Bednarczyk, Brooklyn Center.

* * *

"I am enclosing a recipe (ginger beer from Nan Wiley's column). We followed the recipe exactly and bottled the liquid in heavy green wine bottles. As an extra precaution, we placed the bottles on their sides. On the 9th and 10th fermentation days, the bottles all exploded, sending glass fragments in all directions. Because of the danger involved, I feel this information should be passed on to your readers."

Mrs. William Gerlach
Apple Valley

* * *

"For Mrs. William Groat, Minneapolis, here is a recipe from 'way back' for Pearl Tapioca Pudding. I didn't think anyone ever made this anymore. My husband and son are so fond of it that I always make twice as much as one would normally make for three people!"

Mrs. A. M. Spany
Minneapolis

PEARL TAPIOCA PUDDING

1 cup pearl tapioca
1 qt. milk
1 tsp. butter
¾ cup sugar
¼ tsp. salt
3 eggs
1 tsp. vanilla

Soak tapioca in cold water for at least 3 hours. Drain; add milk and butter and cook in a double boiler until transparent (or until there are no hard centers remaining), about 1 hour. Add sugar and salt to beaten egg yolks. Add to tapioca mixture. Place over low heat. Bring to a boil and cook 3 minutes, stirring constantly. Cool. Beat whites of eggs and fold in. Serve warm or cold with cream or whipped cream. Serves 6 or more. (For half recipe, use 2½ cups milk and 2 eggs.)

Other Minnesota readers sharing similar recipes include Mrs. V. L. Sandberg, Minneapolis, and Glenyce Sievers, Bloomington.

* * *

Source: The Minneapolis Star, June 7, 1972, Page 12-C

Figure 20. Time-Energy Saving/Safety Interest/Non-Food Industry Source

Fowl: Serve One, Save One

It's fortunate that there are almost an infinite number of ways to prepare chicken, since it is most definitely a bargain meat these days. As nutrition-wise homemakers know, it's also a bargain in protein.

So it's a good idea to buy two chickens at a time. Cook one and serve it; simmer the other and cut the chicken meat into pieces for later use — in salads as well as such dishes as curried chicken, chicken a la king, chicken Tetrazzini, chicken divan and any number of casserole variations.

To cook chicken for later use, place a broiler-fryer chicken, whole or cut in serving pieces, in a kettle. Add 2 cups water, 1 sliced onion, 3 celery tops, 1 bay leaf, 1 teaspoon salt and ¼ teaspoon pepper. If you like, also add a carrot, quartered.

Bring to a boil, then cover tightly. Reduce heat and simmer 30 to 40 minutes or until tender. Remove from heat; strain broth. Refrigerate chicken and broth at once.

When chicken is cool, remove meat from skin and bones. Cut into chunks (cut the breast meat into slices for some dishes). Reserve broth for use in recipes that call for chicken broth.

Now you're all set to use the cooked chicken in such dishes as this cool salad.

SUMMER CHICKEN SALAD: Mix together 2½ cups cubed cooked chicken, 1 cup sliced celery, ½ cup seedless grapes, ½ cup sliced pimiento-stuffed olives and ⅛ teaspoon salt.

Fold ½ cup real mayonnaise into ½ cup heavy cream, whipped. Lightly toss with chicken mixture. Garnish with parsley or additional grapes. Makes four to six servings.

Source: San Francisco Examiner, July 19, 1972, Page 31

Figure 21. Combined Cost-Time-Energy Savings/Health Interest/Unidentifiable Source

??? Questions on the Table ???

Q. From Mrs. R.G.H., Alexandria: How do you hard cook an egg so that the shell comes off easily?

A. It's not how you cook the egg that affects the removal of the shell but the age of the egg. Day-old eggs will give you trouble. Hard-cook eggs two days or more old. As soon as they are cooked, run cold water on them until they are cooled.

Q. From Mrs. C.K.L., Washington: A neighbor told me that she recently read it was dangerous to cook certain foods in aluminum and she had thrown away all her aluminum pots and pans. Is that true?

A. Absolutely false. It's unbelievable in this day and age that such canards are still making the rounds.

It is true that certain foods will turn aluminum pots black but not only isn't the food affected by this, the black can be removed from the pot by boiling water in it which has been acidulated with vinegar.

Q. From Mrs. A.K., Silver Spring: I would like to make a crust for a cheese cake like Lindy's. My husband and I don't like graham cracker crusts. Do you think you could possibly get it for me?

A. Here it is, right from the horse's mouth.

Lindy's Cheese Cake Crust

1 cup sifted flour
¼ cup sugar
1 teaspoon grated lemon rind
¼ teaspoon vanilla
1 egg yolk
¼ cup butter

Butter a 10-inch spring form. Combine flour, sugar, lemon rind and vanilla. Make well in center and add yolk and butter. Work mixture with hands until well blended. Chill for about one hour. Roll dough ¼ inch thick. Place in bottom of spring form. Line sides with remaining dough which has been rolled and cut to fit.

Then proceed with your own filling and baking directions.

Q. From Mrs. R.H.M., Mt. Airy: Directions on a supermarket turkey said to roast one, unstuffed, weighing 18 to 20 pounds at 300 degrees for 5 to 5¾ hours. After 4½ hours I pricked the thigh and "red-bloody juice gushed out." I cooked it for 8 hours and it wasn't one bit dry. How can a store give such lousy advice?

A. Without commenting on your question, most turkey roasting charts recommend 325 degrees for uncovered roasting, but allow 4¼ to 5 hours for a 16 to 20 pound unstuffed turkey. Actually the additional cooking time recommended on the chart you used should have compensated for the difference in temperature. I strongly suspect that your oven is not working properly and should be checked.

Since turkeys are a pretty good buy, perhaps the holiday time roasting chart would be useful.

Timetable for Roasting Stuffed Turkey
Internal Temperature 185 Degrees

Ready-to-cook Weight	Approximate Total Cooking Time*
6 to 8 pounds	3 to 3½ hours
8 to 12 pounds	3½ to 4½ hours
12 to 16 pounds	4½ to 5½ hours
16 to 20 pounds	5½ to 6½ hours
20 to 24 pounds	6½ to 7 hours

**This timetable is based on chilled or completely thawed turkeys at a temperature of about 40 degrees and placed in preheated oven.*

For unstuffed turkey, reduce cooking time 5 minutes per pound.

Q. From Mrs. S.E., Washington: Do you have a good recipe for crab or lobster Norfolk?

A. Would this old Virginia version do?

Crab Meat Norfolk

1 pound crab meat
½ cup butter (no substitutes!)
1 tablespoon vinegar
Salt and pepper to taste
Dash cayenne pepper, optional

Mix seasonings lightly with crab meat. Place in greased casserole and dot with butter. Bake at 375 degrees until sizzling hot, about 15 minutes.

READERS COMMENTS: That's what makes horse racing: In the last Questions on the Table a reader wrote that she loved the recipe for Quick Saucepan Cookies so much that she would like another like it for sending off to children away at school. Shortly thereafter a letter arrived from Miss B.E.S., Arlington, who said: "I was very much disappointed in this recipe because they became very hard and dry almost immediately. Is there anything wrong with the recipe?"

There is nothing wrong with the recipe as evidenced by the lady who wanted another like it. But perhaps Miss S. didn't store the cookies properly — in an airtight container.

Send questions and comments to: Marian Burros, Washington Star, Washington, D. C. 20003.

Source: The Evening Star, May 3, 1972 Page D-6

Figure 22. Combined Cost-Time-Energy/Safety Interest/Non-Food Industry Source

Sample: Newspapers and Food Sections

Sampling may be defined as taking any portion of a population or universe as representative of that population, or universe. Without scores of content analysts, a study of a representative sample of food pages across the country from 1760 daily newspapers would be almost impossible. In this study, the author was dealing with food sections of daily newspapers having a circulation of 100,000 or more. Using the 1971 Ayer Dictionary of newspapers, magazines, and trade publications, according to the prerequisites of this study, 115 of the United States newspapers were found to have a circulation in excess of 100,000.[3] A random sample of 50 newspapers was drawn from the 115-newspaper universe.

Random sampling is that method of drawing a portion (or sample) of a universe so that each member of the universe has an equal chance of being selected. Since this sample was randomly drawn, the 50 newspapers selected should represent a quasi-normal distribution of the universe of 115. The sample was statistically analyzed and found to fall within the limits of chance expectations (see Randomization Check of Sample, page 44), and judged to be representative of the universe.

Limitations

There were several limitations set on the selection of newspapers to form the universe. All newspapers with 100,000 circulation or more were selected if they met the following criteria, which were set prior to selection and strictly adhered to during the selection:

1. Food Editors: The newspapers must have a food editor listed

in Editor and Publisher Year Book. In this study, the author was interested in food sections. If a food editor was not listed, it was assumed that the newspaper did not have a food section. The food editor could conceivably have been listed under a different category; however, for this sample those without listings for food editors were ruled out.

2. Daily Newspapers: Only daily circulation figures were used, excluding Saturday and Sunday circulation figures. If a newspaper was printed only on Saturday, only on Sunday, or both, it was not used in the sample.

3. Morning and Evening Editions: If a newspaper had a morning and evening edition, the two editions were combined for a total circulation figure. Morning and evening editions with different names, but owned by the same company in the same city were selected as follows:

   a. If both papers had over 100,000 circulation and each had a food editor, each paper was used in the sample.

   b. If both papers had over 100,000 circulation, but only one food editor, the circulations were combined, but they were only counted as one newspaper.

   c. If one paper was less than 100,000 circulation and both had food editors, only the larger edition was retained in the sample.

   d. If one paper was under 100,000 circulation and there was one food editor for both papers, the smaller paper was eliminated from the sample.

Random Selection of Newspapers

Using the limitations mentioned above, 115 newspapers were selected, forming the universe of this study. From this universe, a sample of fifty newspapers was randomly chosen. Each of the 115 newspapers was numbered 1 through 115. An arbitrary starting point was chosen in a table of random numbers. Using the first three columns of the table, numbers between 001 and 115 were chosen. When a number occurred in the table twice, the second repetition was not used. This process was repeated until fifty newspapers had been selected and a sufficient number of alternates were chosen. The alternates were selected in their rank order one at a time. If for some reason a newspaper either refused to cooperate, or was unable to cooperate, the first alternate was chosen and assigned the food sections allocated to its predecessor.

Randomization Check of Sample

To determine whether the final sample was representative of the population, the daily circulation figures of sample newspapers were used. The average mean or average sample circulation was approximately 215,000. Circulation variations on either side of the sample average formed a quasi-normal distribution of the population spread.

Random Sample of Food Sections

There were four food sections randomly selected for each newspaper, one food section for each of the four seasons. The first day of each season and the number of days in each season follows:

Autumn: September 22, 1971 through December 20, 1971
90 days

Winter: December 21, 1971 through March 19, 1972
90 days

Spring: March 20, 1972 through June 20, 1972
93 days

Summer: June 21, 1972 through September 21, 1972
93 days

In order to select a random sample of food sections for each newspaper, each day of each season was numbered. For example, Autumn was numbered from one to ninety. An arbitrary point was chosen in a table of random numbers. Using the first two columns of figures, fifty numbers were randomly drawn from the table for each season. Repetitions of the same number for any one season were not used. After assigning the first season, the next season was started until all four seasons were completed. The random numbers were chosen between zero and the last number of each season. Those numbers over the size of the season were not used.

Food sections are printed on different days by different newspapers. One newspaper may print its food page on Monday while another newspaper prints its food section on Friday. For this reason, the Sunday of the week a number fell in was taken as the representative for that week. The first food page printed by the newspaper on that Sunday or after that Sunday was used in this sample. If the Sunday represented a week with days falling outside of the season, the closest food section after the first day of the season was used, or the closest food page before the last day of the season without exceeding the last day of the season was used. With this process, the food sections were contained within each season.

Randomization Check of Food Sections

Each season was statistically analyzed to determine whether the sample was reliable. In order to accomplish this analysis, each season was separately analyzed as to the frequency of numbers falling into each third of its range. For example, Spring comprised a range of numbers from one to ninety-three. This range was broken into three separate but equal units, each containing thirty-one numbers from which to choose. The groups then would contain the numbers A-1 through 31, B-32 through 62 and C-63 through 93. Each of these groups with probability contains 16.5 selected numbers, which is one-third of the sample of fifty numbers. In the case of Spring, the groups contained A-16, B-18, and C-16. The other seasons followed suit. Statistically, the deviation from 16.5 for each of the three groups and for each of the seasons was much less than could be considered significant. Statistical testing of the odd and even numbers also indicated that the deviation was less than significant.

Judging from this statistical analysis, the sample seemed adequate and tended to be a quasi-normal distribution over the sample universe of newspapers and seasonal dates. A list of the newspapers used in this study is contained in Figure 23 on page 47. If a newspaper was able to help in this study, but unable to supply the representative food sections, an asterisk appears next to the date of the food section actually received.

Analysis

Operational definitions for this study were crucial in determining

No.	State	City	Newspaper	1971 Autumn	1971-72 Winter	1972 Spring	1972 Summer
1.	Alabama	Birmingham	News	Oct 27	Mar 1	May 17	Aug 9
2.	Arizona	Phoenix	Arizona Republic	Oct 27	Mar 1	May 10	Sept 6
3.	California	Long Beach	Independent	Sept 22	Feb 2	May 3	July 26
4.		Los Angeles	Herald Examiner	Nov 3	Mar 8	May 31	Sept 6
5.		Los Angeles	Times	Dec 2	Feb 17	May 11	Aug 24
6.		Oakland	Tribune	Nov 10	Mar 29	June 14	June 21
7.		San Diego	Union	Oct 7	Jan 27	Mar 30	July 6
8.		San Francisco	Chronicle	Dec 1	Mar 8	June 21	Aug 30
9.		San Francisco	Examiner	Sept 29	Feb 9	Apr 5	July 19
10.		San Jose	Mercury	Dec 1	Dec 27-71	June 14	July 5
11.	Colorado	Denver	Post	Oct 3	Jan 16	Mar 19	July 9
12.	District of Columbia	Washington	Post	Oct 28	*Feb 3	*May 4	*Aug 24
13.		Washington	Star	Oct 27	Feb 2	May 3	Aug 20
14.	Florida	Tampa	Tribune	Nov 22	Feb 24	Apr 20	Sept 9
15.		Miami	Herald	Oct 21	Jan 27	Apr 13	June 22
16.	Georgia	Atlanta	Journal	Oct 24	Feb 9	June 21	July 26
17.	Hawaii	Honolulu	Star-Bulletin	*Dec 8	Jan 26	*June 21	July 26
18.	Illinois	Chicago	Daily News	Nov 4	Feb 3	June 8	July 27
19.		Chicago	Sun-Times	Dec 3	Jan 7	Mar 17	Sept 20
20.		Chicago	Tribune	Oct 8	Feb 25	May 11	Aug 3
21.	Indiana	Indianapolis	Star	Nov 21	Jan 23	May 28	Sept 10
22.	Iowa	Des Moines	Register	Nov 10	Jan 12	*Mar 22	*July 26
23.	Kentucky	Louisville	Times	Oct 28	Feb 24	May 18	*Aug 10
24.	Louisiana	New Orleans	Times-Picayune	Oct 7	Feb 17	*Apr 16	Aug 24
25.	Massachusetts	Boston	Globe	*Oct 3	*Mar 13	*Apr 3	*Aug 22
26.		Boston	Record-American	*Feb 17-72	Mar 16	Apr 6	Aug 24
27.	Michigan	Detroit	Free Press	Nov 17	Feb 9	May 10	July 12
28.		Detroit	News	Nov 10	Feb 23	Mar 29	Aug 2
29.	Minnesota	Minneapolis	Star	Nov 3	Mar 15	June 7	June 28
30.	Missouri	St. Louis	Globe-Democrat	*Feb 23-72	*Apr 12	June 14	Sept 20
31.		St. Louis	Post-Dispatch	Oct 6	Mar 1	Apr 5	July 5
32.		Kansas City	Star	Nov 24	Jan 5	Apr 26	Aug 2
33.	New York	Buffalo	News	Dec 6	Dec 27-71	May 30	July 10
34.		Garden City	Newsday	Dec 13	Dec 17-71	Mar 27	July 9
35.	Ohio	Cincinnati	Enquirer	Oct 20	Mar 15	June 7	Sept 13
36.		Cleveland	Press	Nov 10	Feb 2	May 10	Aug 16
37.		Toledo	Blade	Oct 11	Mar 8	June 14	Sept 6
38.	Oregon	Portland	Journal	Oct 4	Feb 14	May 15	July 3
39.	Pennsylvania	Philadelphia	Inquirer	Dec 12	Jan 9	Jan 12	Aug 9
40.		Philadelphia	Bulletin	Dec 15	Mar 15	May 17	July 12
41.		Pittsburg	Post Gazette	Dec 21	Feb 17	Mar 22	July 26
42.	Rhode Island	Providence	Bulletin	Dec 9	Dec 23	Apr 20	Aug 10
43.	Tennessee	Memphis	Commercial Appeal	Oct 22	Dec 31	Jun 9	Aug 18
44.		Nashville	Tennessean	Nov 28	Dec 20-71	Mar 23	Aug 20
45.	Texas	Dallas	Times-Herald	*Dec 1	Jan 5	May 3	July 19
46.		Houston	Post	Oct 7	Jan 27	Apr 6	July 20
47.	Utah	Salt Lake City	Tribune	*Oct 3	*Jan 30	*Mar 6	Aug 27
48.	Virginia	Richmond	Times-Dispatch	*Dec 2	Jan 9	May 28	Aug 6
49.	Washington	Seattle	Post-Intelligencer	Nov 17	Dec 28	Jun 28	Aug 2
50.	Wisconsin	Milwaukee	Journal	Dec 1	Mar 1	May 31	July 12

(* indicates food sections that were out of the original sample asked for)

Figure 23. Sample: Newspapers and Food Sections

the amount of Economic and Physiological Interest news from the three information sources as seen by the "lay" reader: Food Industry, Non-Food Industry, and Unidentifiable. No effort to determine the actual source was made or is implied by this study.

"Amount" in this study represented the number of stories and column inches expressed as raw figures and as percentages of contributions of each type of food news by each type of information source.

As each story was read, its column inches were recorded and the story was added to the total number of stories in its respective category.

The tables of this study show a composite of all the possible categories of news by each type of information source. The subcategorical designations beside the cells of the tables indicate from which information source the categories of news originated. For example, the upper left-hand cell of Table II contains the amount of news involving Cost Saving and Health Interests, contributed by the Food Industry Source.

The figures at the bottom of Tables II, III, and IV tell the reader the number of column inches, stories, and/or what percentages of the total sample of food news fell into each subcategory of Economic and Physiological Interest news, as well as the number of column inches, stories, and percentages contributed by each Information Source.

Using probability estimates (P), the author determined how the observed number of stories and column inches of various types of food news from different types of sources compared with what was expected by mere chance. A complex Chi Square was used for the larger cross break paradigms to include a Coefficient of Contingency (C) and a simple Chi

TABLE II

NUMBER OF STORIES AND COLUMN INCHES CATEGORICALLY
(ECONOMIC INTERESTS)

ECONOMIC INTEREST	PHYSIOLOGICAL INTEREST		INFORMATION SOURCE: Food Industry Source Inches	Food Industry Source Stories	Non-Food Industry Source Inches	Non-Food Industry Source Stories	Unidentifiable Source Inches	Unidentifiable Source Stories	Total Inches	Number of Stories
No Economic Interest		Health	112	11	1,644	109	482	88	2,238	208
		Safety	0	0	165	15	25	5	190	20
		Health-Safety	0	0	799	44	72	7	871	51
		Nc Physical Interest	334	30	4,698	316	2,445	414	7,477	760
Combined Savings Cost-Time-Energy		Health	122	7	1,454	48	352	30	1,928	85
		Safety	17	1	133	4	0	0	150	5
		Health-Safety	0	0	272	12	0	0		
		No Physical Interest	64	6	1,967	90	727	60	2,758	156
Time-Energy Savings		Health	70	8	1,107	63	542	44	1,719	115
		Safety	0	0	79	4	16	1	95	5
		Health-Safety	0	0	10	1	0	0	10	1
		No Physical Interest	775	67	4,159	203	2,481	324	7,415	594
Cost Savings		Health	39	4	1,511	86	300	25	1,850	115
		Safety	0	0	37	3	0	0	37	3
		Health-Safety	0	0	190	9	13	1	203	10
		No Physical Interest	5	1	1,926	123	508	70	2,439	194
			1,538	135	20,151	1,130	7,963	1,069	29,652	2,334

TABLE III

NUMBER OF STORIES AND COLUMN INCHES CATEGORICALLY (PHYSIOLOGICAL INTERESTS)

PHYSIOLOGICAL INTERESTS	ECONOMIC INTERESTS		INFORMATION SOURCE: Food Industry Source Inches	Food Industry Source Stories	Non-Food Industry Source Inches	Non-Food Industry Source Stories	Unidentifiable Source Inches	Unidentifiable Source Stories	Total Inches	Number of Stories
No Physiological Interests		Cost Savings	5	1	1,926	123	508	70	2,439	194
		Time-Energy	775	67	4,159	203	2,481	324	7,415	594
		Cost-Time-Energy	64	6	1,967	90	727	60	2,758	156
		No Economic	334	30	4,698	316	2,445	414	7,477	760
Health-Safety Interests		Cost Savings	0	0	190	9	13	1	203	10
		Time-Energy	0	0	10	1	0	0	10	1
		Cost-Time-Energy	0	0	272	12	0	0	272	12
		No Economic	0	0	799	44	72	7	871	51
Safety Interests		Cost Savings	0	0	37	3	0	0	37	3
		Time-Energy	0	0	79	4	16	1	95	5
		Cost-Time-Energy	17	1	133	4	0	0	150	5
		No Economic	0	0	165	15	25	5	190	20
Health Interests		Cost Savings	39	4	1,511	86	300	25	1,850	115
		Time-Energy	70	8	1,107	63	542	44	1,719	115
		Cost-Time-Energy	122	7	1,454	48	352	30	1,928	85
		No Economic	112	11	1,644	109	482	88	2,238	208
			1,538	135	20,151	1,130	7,963	1,069	29,652	2,334

TABLE IV

PERCENTAGE OF STORIES AND COLUMN INCHES CATEGORICALLY

ECONOMIC INTERESTS	PHYSIOLOGICAL INTERESTS		Food Industry Source		Non-Food Industry Source		Unidentifiable Source			
			Inches	Stories	Inches	Stories	Inches	Stories	Inch	Story
No Economic Interest		Health	.38	.47	5.54	4.67	1.63	3.77	7.55	8.91
		Safety	0	0	.56	.64	.08	.21	.64	.86
		Health-Safety	0	0	2.70	1.89	.24	.30	2.94	2.19
		No Physical Interest	1.13	1.29	15.84	13.54	8.25	17.74	25.22	32.56
Combined Savings Cost-Time-Energy		Health	.41	.30	4.90	2.06	1.19	1.29	6.50	3.64
		Safety	.06	.04	.45	.17	0	0	.51	.21
		Health-Safety	0	0	.92	.51	0	0	.92	.51
		No Physical Interest	.22	.26	6.63	3.86	2.45	2.57	9.30	6.69
Time-Energy Savings		Health	.24	.34	3.73	2.70	1.83	1.89	5.80	4.93
		Safety	0	0	.27	.17	.05	.04	.32	.21
		Health-Safety	0	0	.03	.04	0	0	.03	.04
		No Physical Interest	2.61	2.87	14.02	8.70	8.37	13.88	25.01	25.45
Cost Savings		Health	.13	.17	5.10	3.68	1.01	1.07	6.24	4.93
		Safety	0	0	.13	.13	0	0	.12	.13
		Health-Safety	0	0	.64	.39	.04	.04	.68	.43
		No Physical Interest	.02	.04	6.50	5.27	1.71	3.00	8.23	8.31
			5.19	5.78	67.96	48.41	26.85	45.80		

Square for individual cells. Any observed differences in the types of food news, to be significant, had to be large enough to exceed chance expectations 95 times in 100 ($p > .05$). Actually, most of the differences found exceeded chance more than 99 times in 100 ($p > .01$). Chance expectations constitute a situation in which there is no difference between the number of stories and column inches of various types of food news. When the author says that the amount of a certain type of food news exceeds another type, 99 times out of 100 he means that a difference as large as that observed would occur in 99 out of 100 repeated samples of food page news--samples similar to the one studied by the author.

Tables II, III, and IV give the readers an overview of the major analysis of food news. Table II, for example, shows the number of stories and column inches of news that was contributed by the Food Industry, the Non-Food Industry, and Unidentifiable Sources. Economic news is headlined in Table II. Table III gives essentially the same information, except Physiological Interest news is emphasized. Table IV shows the percentage of total food news in each of the Economic and Physiological Interest categories, as well as the <u>percentage</u> contributed by each of the Information Sources. The percentages are for total stories and column inches.

Analysis of the major tables showed that differences did exist among the various types of Economic and Physiological Interest food news. Also, the different sources contributed different amounts of food news and there was some evidence that some types of news were attributed more to one source than another.

FOOTNOTES

[1]Lynda Anderson, "Consumer Interviews Concerning the Food We Eat," (unpub. study, The Pillsbury Company, 1970).

[2]Food Editors Seminar (unpub. transcript, University of Houston, February 25, 1972).

[3]1971 Ayer Dictionary of Newspapers, Magazines and Trade Publications, Ayer Press (Philadelphia, 1971), pp. 1261-1361.

CHAPTER III

FINDINGS

A more specific breakdown of the major tables is explained in Tables V through X of this chapter. The first breakdown in tables determined if the various types of Economic Interest news depended on the source of such news. The second breakdown in tables determined if the types of information source had anything to do with the amount of various types of Physiological Interest news (Health, Safety, or both). The third breakdown in tables determined if the amount of Economic Interest news depended on its combination with one or more types of Physiological Interest news.

A Comparison of Economic Interest News by Type of Information Source

This and the following analyses have the purpose of determining if the number of column inches and number of stories under one category of food news is determined by its combination with one or more aspects of the other category of food news, or with the source of food news.

In other words, does the amount of various types of Economic Interest news depend on their combination with one or more aspects of Physiological Interest news or with particular Information Sources? Or, are the amounts of Economic Interest news about the same regardless of its origin?

Tables V and VI indicate that the number of column inches and actual stories dealing with various aspects of Economic Interests did differ, but this depended somewhat on the type of Information Source.

Column Inches of Economic Interest News

Analysis of Table V tended to indicate that significant differences did exist ($p < .01$) and that there was significant, but little correlation between the variables Economic Interest and Information Source ($C = .188$). Only four cells within the paradigm were not significantly separated. The Non-Food Industry Sources seemed to contribute as much Cost Saving information as they did combined Cost, Time and Energy Saving Information ($p > .05$). The Unidentifiable Sources contributed as much Time-Energy Saving information as they did information of No Economic Interest ($p > .05$).

With these limitations of significant differences expressed by the tests, the percentages in Table VI seem to indicate that more than two thirds of the nearly 30,000 column inches of food news came from the Non-Food Industry Source (67.96%), compared to less than six percent from the Food Industry Source. Unidentifiable sources accounted for nearly 27 percent of food news.

Furthermore, Table VI indicates that nearly two thirds of the total food news dealt with Economic Interests. Cost Savings accounted for 15.27%; Time and Energy Savings, 31.16%; and a combination of all three, 17.23%. A little more than one third of the column inches involved none of the above Economic Interests.

More than half the column inches of news from Food Industry Sources dealt with Time and Energy Savings (2.85% out of the 5.19%), as shown in

TABLE V

COLUMN INCHES AND NUMBER OF STORIES; INFORMATION SOURCE X ECONOMIC INTERESTS*

INFORMATION SOURCE	ECONOMIC INTEREST: Cost Saving	Time-Energy Saving	Cost and Time-Energy	No Economic Interests		
Food Industry	44	845	203	446	1,538	
	5	75	14	41		135
Non-Food Industry	3,664	5,355	3,826	7,306	20,151	
	221	271	154	484		1,130
Unidenti-fiable	821	3,039	1,079	3,024	7,963	
	96	369	90	514		1,069
	4,529	9,239	5,108	10,776		
	322	715	258	1,039		

*Column Inches = top number; Number of Stories = bottom number.

TABLE VI

PERCENTAGE OF COLUMN INCHES AND NUMBER OF STORIES;
INFORMATION SOURCE X ECONOMIC INTERESTS*

INFORMATION SOURCE	ECONOMIC INTEREST: Cost Saving	Time-Energy Saving	Cost and Time-Energy	No Economic Interests		
Food Industry	.15 / .21	2.85 / 3.21	.68 / .60	1.50 / 1.76	5.19	5.78
Non-Food Industry	12.36 / 9.47	18.06 / 11.61	12.90 / 6.60	24.64 / 20.74	67.96	48.41
Unidentifiable	2.77 / 4.11	10.25 / 15.81	3.64 / 3.86	10.20 / 22.02	26.85	45.80
	15.27 / 13.80	31.16 / 30.63	17.23 / 11.05	36.34 / 44.51		

*Column Inches = top number; Number of Stories = bottom number.

Table VI and over-all, more than 70% of the column inches of Economic Interest News from Food Industry Sources involved Cost Savings, Time and Energy Savings, or a combination of all three.

Though Non-Food Industry and Unidentifiable Sources contributed much higher percentages of column inches of food news, their percentages across Cost, Time and Energy Savings information were less than that from the Food Industry.

Again, from Table VI, of the 67.96% of column inches contributed by Non-Food Industry Sources, about 64% of that was devoted to Cost, Time and/or Energy Savings. A similar trend was seen from Unidentifiable Sources. Of their 26.85% of the total inches contributed, 62% dealt with Cost, Time and/or Energy Savings.

Though the percentages of column inches in Table VI can be deceiving, due to differing amounts of news from the three sources, the Food Industry contributed a larger proportion of its news to Time and Energy Saving than did Non-Industry and Non-Identifiable Sources. Non-Food Industry sources, on the other hand while contributing Time and Energy Saving news, tended to give a larger proportion of its news to Cost Savings and a combination of Cost and Time Savings.

Other analyses were conducted on smaller paradigms, of column inches, and number of stories holding various categories constant in order to determine the degree of relationship or covariance between these categories. A high, or at least substantial, relationship between categories or levels was not found. For example, estimating from observations, especially of Table III, one would have expected a relationship between information printed by the Food Industry and Unidentifiable Sources. The degree of relationship was significant, but slight. All

other tests with smaller column-inch and number-of-story paradigms indicated only slight degrees of relationship between variable combinations.

Number of Economic Interest Stories
by Type of Source

As previously mentioned, analysis of the number of stories in the major analysis indicated that significant differences did exist in the number of stories with varying characteristics ($p < .01$), but only a slight degree of relationship between variables ($C = .229$). Similar tendencies were discovered when Economic Interests and Information Source were compared in Table V.

On further investigation of Table V, there was no significant difference between the number of stories printed by the Non-Food Industry Sources (1,130) and Unidentifiable Sources (1,069). Table VI indicated that 67.96% of the column inches were attributed to the Non-Food Industry Sources while significantly less, 26.85%, were attributed to the Unidentifiable Source.

Testing of the Non-Food Industry and Unidentifiable Sources across Economic Interests indicated that the Unidentifiable Sources did not contribute more Cost Saving stories (8.98% of its total) than they did Cost and Time Saving (8.42% of its total) and that the Unidentifiable Sources were credited with approximately the same amount of No Economic Interest news (22.02% of all stories) as did the Non-Food Industry Source (20.74% of all stories). Symmetrical interaction was indicated within the cells causing no difference to be shown between the totals of the two sources.

In other words, the Non-Food Industry Source seemed to contribute

significantly more Cost Saving (19.56%) and Combined Cost Time Energy Saving stories (13.63%). Unidentifiable Sources contributed significantly more time and Energy Saving stories (34.52%). These differences in categories balanced the totals when added, even though the significant differences existed.

The Food Industry Sources, then, were attributed with 5.78% of the total number of stories, the Non-Food Industry Sources with 48.41%, and Unidentifiable Sources with 45.80%. Cost Saving stories comprised 13.80% of the total number of stories; Time and Energy Saving, 30.63%; Combined Cost Time and Energy Saving, 11.05%; and No Economic Interest, 44.52%. Time and Energy Savings, and No Economic Interest stories amounted to 75.15% of the number of stories printed. The relatively smaller number of stories originating from the Food Industry (135 of the 2,300 total) involved mostly those stories dealing with Time and Energy Savings (55%).

Time and Energy Saving stories and stories involving No Economic Interest seemed to comprise the majority of both the number of stories and column inches. When the average story of each of these category levels was checked, these levels had two of the lowest average length stories.

Table V, page 56, dealing with actual column inches and number of stories of Economic Interest by type of Information Source, tells essentially the same story, as does Table VI, which deals with percentages. The minor discrepancies that appear are due to varying length of stories.

If placed in order from lowest to highest, the column inch average length of story would approximate the following: (1) No Economic

Interest, 10.37, (2) Time and Energy Saving, 12.92, (3) Cost Saving, 14.07, and (4) Combined Cost Time and Energy Savings, 19.80. Categories of stories printed the most also tend to have the least average length. This tendency is evident when these categories are compared with the percentages in Table IV.

From Tables V and VI we see that the Non-Food Industry Source was by far the largest contributor of food news, followed by Unidentifiable Sources, with the Food Industry Source trailing far behind.

The largest percentage of column inches of Economic Interest news dealt with the combination of Time and Energy Savings (over 31%) followed by the combination of Cost and Time-Energy Savings (17.23%) and Cost Saving news, alone (over 15%).

A Comparison of Physiological News (Health and/or Safety Interests) by Types of Information Source

From Tables VII and VIII, one can determine if Physiological food news concerning Health, Safety and/or both could be attributed more to one information source than another. That is, in terms of percentage of stories and column inches, as well as in terms of total stories and column inches.

Column Inches of Physiological (Health and/or Safety) News

Analysis of Table VII, dealing with actual column inches and number of stories, indicate that significant differences among the observed frequencies exist ($p < .01$) and that there is very little covariance

TABLE VII

COLUMN INCHES AND NUMBER OF STORIES; INFORMATION SOURCE X PHYSIOLOGICAL INTERESTS

INFORMATION SOURCE	PHYSIOLOGICAL INTEREST: Health Interest	Safety Interest	Health-Safety	No Physical Interests		
Food Industry	343 / 30	17 / 1	0 / 0	1,178 / 104	1,538	135
Non-Food Industry	5,716 / 306	414 / 26	1,271 / 66	12,750 / 732	20,151	1,130
Unidentifiable	1,676 / 187	41 / 6	85 / 8	6,161 / 868	7,963	1,1069
	7,735 / 523	472 / 33	1,356 / 74	20,089 / 1,704		

*Column Inches = top number; Number of Stories = bottom number.

TABLE VIII

PERCENTAGE OF COLUMN INCHES AND NUMBER OF STORIES;
INFORMATION SOURCE X PHYSIOLOGICAL INTERESTS*

INFORMATION SOURCE	PHYSIOLOGICAL INTEREST: Health Interest	Safety Interest	Health-Safety	No Physical Interests		
Food Industry	1.16 / 1.29	.06 / .04	0 / 0	3.97 / 4.46	5.19	5.78
Non-Food Industry	19.28 / 13.11	1.40 / 1.11	4.29 / 2.83	43.00 / 31.36	67.96	48.41
Unidentifiable	5.65 / 8.01	.14 / .26	.29 / .34	20.78 / 37.19	26.85	45.80
	26.09 / 22.41	1.59 / 1.41	4.57 / 3.17	67.75 / 73.01		

*Column Inches = top number; Number of Stories = bottom number.

between the variables of Information Source and Physiological Interests ($C = .164$). The Information Source, then, had somewhat of an affect. One source seems to have printed significantly more in some Physiological Categories than another; however, the amounts printed in each category by each source did not seem to be proportionate or to vary equally in each subcategory.

On investigation, all the subcategories of each food news category were found to be significantly separated ($p < .01$).

Non-Food Industry Sources were the heaviest contributors of Health Interest news (5,716 column inches) followed by Unidentifiable Sources (1,676 inches) and, lastly by the Food Industry Source (343 inches).

Of the 472 inches of Safety Interest and 1,356 inches of combined Safety and Health Interest news, the Food Industry and Unidentifiable Sources contributed from none to very little. The Non-Food Industry contributed 414 of the 472 inches of Safety news and 1,271 of the 1,356 column inches of combined Health and Safety news.

The Physiological Interest levels of Health, 26.09% and No Physiological or Economic Interest news 67.75% comprised a total of 93.84% of the categories. These percentages are expressed in Table VII. Food Industry Sources contributed 4.43% of the Health Interest level and 5.89% of the No Physiological Interest level. Non-Food Industry Sources contributed 73.90% of the Health Interest level and 63% of the No Physiological Interest level. The Food Industry Source was the lowest contributor in all Physiological categories in terms of column inches.

Number of Physiological (Health and/or Safety) Stories

Table VII indicates that significant differences were present in the number of Physiological Interest stories and the Information Source ($p < .01$), with these categories covarying to only a slight degree ($C = .198$). In other words, there were significant differences in the number of Physiological stories attributed to the different information sources and there was only a slight relationship between the proportionate number of stories printed by each source.

Further analysis indicated that the number of stories with Safety Interests and Combined Health and Safety Interests were equally contributed by Food Industry Sources and Unidentifiable Sources. Safety Interest and Combined Health-Safety Interest stories only comprised 4.58% of the total number of stories across all three Information Sources.

The small difference between the number of stories attributed to Non-Food Industry Sources (1,130) and Unidentifiable Sources (1,069) seems to be due to the symmetrical interaction observed between the Economic Interest subcategories. Non-Food Industry Sources seem to be responsible for significantly more stories in the Physiological Interest levels than the other sources.

In essence, all three sources contributed more Health Interest stories than they did Safety Interest or the combination of Health and Safety stories.

Contributions to Safety Interests or to a combination of Health and Safety Interests were practically nil among all three sources.

Stories under each of the types of Physiological Interest news probably depended on only the Non-Food Industry Source. That is, all three sources contributed about the same amount, percentage-wise, to the various types of Physiological Interest news. One exception tended to be the Non-Food Industry Sources. They tended to provide more Health, Safety and the Health-Safety Interest combination, and less Economic Interest stories than did the other sources.

That is, the Food Industry and Unidentifiable Sources showed that about the same percentage of their total contribution to food news involved Safety Interests or Combined Health-Safety news. This percentage was near zero. The Non-Food Industry Sources, on the other hand, contributed a larger percentage of their total to these categories, but the percentage was much less than that contributed to Health Interests.

Table VIII, page 63, indicates that approximately 22.41% of the total number of stories were of Health Interest, 73.01% were of No Physiological Interest, which places 95.42% of all stories studied in these two categories.

A Comparison of Economic and Physiological Interest News

Does the amount of Economic Interest news vary according to whether the stories also have a Physiological Interest angle? Or, do Cost Saving, Time and Energy Saving and a combination of all three tend to stand on their own, regardless of Physiological Interest aspects?

Column Inches of Economic
and Physiological News

Table IX, which lists the number of stories and column inches for various combinations of Economic and Physiological Interest news, approaches the above questions. Analysis of Table IX indicates that significant differences exist in both column inches ($p < .01$) and the number of stories ($p < .01$). Economic Interest news and Physiological Interest news and their different levels had an affect on the totals for the other. This affect is due mainly to the physiological level of Health and the absence of other Physiological Interest information.

To begin, recall that 64% of the food news in this study dealt with Cost Saving, Time-Energy Saving, and a combination of all three. And nearly 19,000 of the 30,000 inches of food news dealt with the above Economic Interests.

Only 9,563 of the total inches of food news dealt with the Physiological Interests of Health, Safety, or a combination of both, while 18,876 of the Economic Interest column inches dealt with Cost Saving, Time-Energy Saving, or a combination of both.

Economic Interest news, then, far outweighed Physiological Interest, and ranked from high to low: Time-Energy Saving; Cost and Time Energy Saving; and Cost Saving, alone. Cost Savings outranked the combination of Cost, Time and Energy Savings in number of stories (322 versus 258) but not in column inches (4,522 versus 5,108). Physiological Interest news, from high to low usage, contained: Health news; Combined Health and Safety news; and Safety news, alone. Each subcategory of each Physiological category was found to significantly

TABLE IX

COLUMN INCHES AND NUMBER OF STORIES; ECONOMIC X PHYSIOLOGICAL INTERESTS*

PHYSIOLOGICAL INTEREST	ECONOMIC INTEREST: Cost Saving	Time-Energy Saving	Cost and Time-Energy	No Economic Interests		
Health	1,850	1,719	1,928	2,238	7,735	
	115	115	85	208		523
Safety	37	95	150	190	472	
	3	5	5	20		33
Health-Safety	203	10	272	871	1,356	
	10	1	12	51		74
No Physical Interest	2,439	7,415	2.758	7,477	20,089	
	194	594	156	760		1,704
	4,529	9,239	5,108	10,776		
	322	715	258	1,039		

*Column Inches = top number; Number of Stories = bottom number.

differ ($p < .01$). In other words, Health Interest news significantly differed from the other levels of Physiological Interest and represented 26.09% of the news. These percentages are indicated in Table X.

Health Interest information alone comprised 28.93% of Health Interest news, and was significantly separated from the other levels ($p < .01$). Health Interest information combined with Cost Saving and Time Energy Saving were not significantly different ($p > .05$), each containing approximately the same amount of news. Time and Energy Saving information alone and No Physiological or Economic Interest information represented 50.23% of all food information categorized. No Physiological or Economic Interest news comprised 25.22% of the total. Time and Energy Saving comprised 25.01% of the total.

Safety news contributed only 1.59% of all food column inches. Noteworthy is that 2.94% of all combined Health and Safety Interest information seemed to be printed alone without mention of Economic Interest. The major analysis paradigm (Table II, page 49) seems to indicate that 93.73% of the news contributed to Combined Health-Safety Interest news may be attributed to the Non-Food Industry Sources. Another interesting point is that the majority of the combined Health and Safety subcategory tends to be made up of General Food News rather than Recipe.

It seems then that the Economic Interest category makes up the majority of the column inches printed by food editors. The column inches of the subcategories Cost Saving, Time-Energy Saving and their combination tend to stand alone, or are not aided by the Physiological Interest Category. The Physiological Interest category is slight and adds most to the article column inch totals when Health Interest alone is used in connection with the subcategories of Economic Interest news.

TABLE X

PERCENTAGE OF COLUMN INCHES AND NUMBER OF STORIES;
ECONOMIC INTERESTS X PHYSIOLOGICAL INTERESTS*

PHYSIOLOGICAL INTEREST	ECONOMIC INTEREST: Cost Saving	Time-Energy Saving	Cost and Time-Energy	No Economic Interests		
Health	6.24 4.93	5.80 4.93	6.50 3.64	7.55 8.91	26.09	22.41
Safety	.12 .13	.32 .21	.51 .21	.64 .86	1.59	1.41
Health-Safety	.68 .43	.03 .04	.92 .51	2.94 2.19	4.57	
No Physical Interest	8.23 8.31	25.01 25.45	9.30 6.68	25.22 32.56	67.75	73.01
	15.27 13.80	31.16 30.63	17.23 11.05	36.34 44.51		

*Column Inches = top number; Number of Stories = bottom number.

Economic and Physiological

Number of Stories

Analysis of the number of stories in Table X, page 70, indicated that significant differences did exist ($p < .01$) and that there was little relationship or covariance between the number of Physiological Interest and Economic Interest stories ($C = .211$). In other words, at least the highest and lowest of each subcategory of Physiological and Economic Interest were significantly separated; however, there was only slight commonality between the number of stories printed in each variable combination.

Further investigation of the Physiological Interest revealed that two of these subcategories, Safety and Combined Health-Safety Interests, contributed only 4.58% of the total number of stories. Combined Health-Safety Interest supplied 3.17% of the 4.58%, indicating that less than 1.5% of the stories categorized in this study dealt with Safety Interest news alone.

The Health Interest subcategory contributed 22.41% of the number of stories and Economic Interests 73.01%, amounting to 95.42% of all stories. The Economic Interest subcategory, Time-Energy Saving, contributed 25.45% of the number of stories and No Physiological or Economic Interest news contributed 32.56%. Significantly more of the No Economic or Physiological Interest stories were contributed by the Unidentifiable Source.

Recipe and General Food News

Each type of food information was broken into two groups. The

first group, Recipe, is expressed in Table XI, page 73. The second group, General Food News, is expressed in Table XII, page 74.

These tables indicated little variation from the analysis of the types of food information. Most of the critics indicated that most food news articles contained recipes of No Economic or Physiological Interest. In this study, recipes did not make up a specific portion of food information while General Food News made up another. These tables (XI and XII) seem to show that Recipes were generally spread over all levels of food information and that substantially more column inches were concerned at least in part with a recipe (21,364 column inches or 72%), but they are distributed across the spectrum of food information. General Food News comprised only 8,288 of the more than 29,600 column inches or 28%, most of which (81%) were attributed to Non-Food Industry Sources.

Recipe column inches were compared with General Food News column inches across the Economic and Physiological Interest categories in Table XIII, page 75. This table indicates that in most categories, recipes were used significantly more than General Food News.

It is interesting to note that while Safety column inches with No Economic Interest contributed only .64% of the total column inches, it was the only type of information that was composed of significantly more General Food News than Recipe.

There were also several types of information that contained as many column inches of Recipe as they did of General Food News. One of these types of information was Cost Saving. Cost Saving column inches across all Physiological Interest types of news tended to have as much Recipe as General Food News. The only other area with no difference was Health

TABLE XI

RECIPE COLUMN INCHES AND PERCENTAGE OF THEIR TOTAL BY CATEGORIES

ECONOMIC INTERESTS	PHYSIOLOGICAL INTERESTS		INFORMATION SOURCE: Food Industry Source Inches	%	Non-Food Industry Source Inches	%	Unidentifiable Source Inches	%	Inches	%
No Economic Interest		Health	69	.32	707	3.31	329	1.54	1,105	5.17
		Safety	0	0	17	.08	0	0	17	.08
		Health-Safety	0	0	104	.49	19	.09	123	.58
		No Physical Interest	188	.88	3,376	15.80	2,020	9.33	5,584	26.14
Combined Savings Cost-Time-Energy		Health	115	.54	1,117	5.22	314	1.47	1,546	7.24
		Safety	17	.08	133	.62	0	0	150	.70
		Health-Safety	0	0	168	.79	0	0	168	.79
		No Physical Interest	51	.24	1,599	7.48	692	3.24	2,342	10.96
Time-Energy Savings		Health	65	.30	755	3.63	513	2.40	1,333	6.24
		Safety	0	0	51	.24	16	.07	67	.31
		Health-Safety	0	0	0	0	0	0	0	0
		No Physical Interest	608	2.85	3,792	17.75	2,298	10.76	6,698	31.35
Cost Savings		Health	33	.15	621	2.91	246	1.15	900	4.21
		Safety	0	0	20	.09	0	0	20	.09
		Health-Safety	0	0	91	.43	0	0	91	.43
		No Physical Interest	5	.02	896	4.19	319	1.49	1,220	5.71
			1,151	5.39	13,447	62.94	6,766	31.67	21,364	

TABLE XII

GENERAL FOOD NEWS COLUMN INCHES AND PERCENTAGE OF THEIR TOTAL BY CATEGORIES

			INFORMATION SOURCE							
			Food Industry Source		Non-Food Industry Source		Unidentifiable Source			
			Inches	%	Inches	%	Inches	%	Inches	%
ECONOMIC INTERESTS	No Economic Interest	Health	43	.52	937	11.31	153	1.82	1,133	13.67
		Safety	0	0	148	1.79	25	.30	173	2.09
		Health-Safety	0	0	695	8.39	53	.64	748	9.03
		No Physical Interest	146	1.76	1,322	15.95	425	5.13	1,893	22.84
	Combined Savings Cost-Time-Energy	Health	7	.08	337	4.07	38	.46	382	4.61
		Safety	0	0	0	0	0	0	0	0
		Health-Safety	0	0	104	1.25	0	0	104	1.25
		No Physical Interest	13	.16	368	4.44	35	.42	416	5.02
PHYSIOLOGICAL INTERESTS	Time-Energy Savings	Health	5	.06	352	4.25	29	.35	386	4.66
		Safety	0	0	28	.34	0	0	28	.34
		Health-Safety	0	0	10	.12	0	0	10	.12
		No Physical Interest	167	2.01	367	4.43	183	2.21	717	8.65
	Cost Savings	Health	6	.07	890	10.74	54	.65	950	11.46
		Safety	0	0	17	.21	0	0	17	.21
		Health-Safety	0	0	99	1.19	13	.16	112	1.35
		No Physical Interest	0	0	1,030	12.43	189	2.28	1,219	14.71
			387	4.67	6,704	80.89	1,197	14.44	8,288	

TABLE XIII

PERCENTAGE OF COLUMN INCHES ECONOMIC/PHYSIOLOGICAL INTERESTS X RECIPE/GENERAL FOOD NEWS

ECONOMIC INTERESTS	PHYSIOLOGICAL INTERESTS	Recipe Information		General Food News			
		Inches	%	Inches	%	Inches	%
No Economic Interest	Health	1,105	3.73	1,133	3.82	2,238	7.55
	Safety	17	.06	173	.58	190	.64
	Health-Safety	123	.41	748	2.52	871	2.94
	No Physical Interest	5,584	18.83	1,893	6.38	7,477	25.22
Combined Savings Cost-Time-Energy	Health	1,546	5.21	382	1.29	1,928	6.50
	Safety	150	.51	0	0	150	.51
	Health-Safety	168	.57	104	.35	272	.92
	No Physical Interest	2,342	7.90	416	1.40	2,758	9.30
Time-Energy Savings	Health	1,333	4.50	386	1.30	1,719	5.80
	Safety	67	.23	28	.09	95	.32
	Health-Safety	0	0	10	.03	10	.03
	No Physical Interest	6,698	22.59	717	2.42	7,415	25.01
Cost Savings	Health	900	3.03	950	3.20	1,850	6.24
	Safety	20	.06	17	.06	37	.12
	Health-Safety	91	.30	112	.38	203	.68
	No Physical Interest	1,220	4.11	1,219	4.11	2,439	8.23
		21,364	72.04	8,288	27.93		

Interest column inches with No Economic Interest.

Average Story Length

The average length of stories for each source of information across Economic and Physiological Interest types of information are expressed in Table XIV, page 77.

The average food section was 148.26 column inches long with 11.67 stories contributing an average story of 12.70 inches in length. Non-Food Industry Sources contributed the longest average story (17.83 column inches). The Food Industry Sources were next with an average story of 11.39 column inches and Unidentifiable Sources contributing an average story of only 7.54 column inches in length.

The longest articles were those that were combinations of different types of news. For example, Combined Cost Time-Energy Safety articles comprised the longest average story of 30 column inches. Combined Cost and Time-Energy articles across Physiological Interest categories had the largest average stories (19.80 column inches). The smallest average stories were both five column inches, Unidentifiable Source/Safety/No Economic Interest and Food Industry Source/Cost Saving/No Physiological Interest.

Summary

Of the more than 2,300 items and nearly 30,000 column inches of food news analyzed, an overwhelming percentage was contributed by Non-Food Industry Sources (68% of the total column inches), followed by contributions from Unidentifiable Sources (27%). Contrary to frequent claims, the Food Industry contributed a relatively minute portion

TABLE XIV

AVERAGE LENGTH OF STORY

ECONOMIC INTERESTS	PHYSIOLOGICAL INTERESTS	INFORMATION SOURCE: Food Industry Source	Non-Food Industry Source	Unidentifiable Source	
No Economic Interest	Health	10.18	15.08	5.48	10.76
	Safety	0	11.00	5.00	9.50
	Health-Safety	0	18.16	10.29	17.08
	No Physical Interest	11.13	14.87	5.91	9.84
Combined Cost-Time-Energy Savings	Health	17.43	30.29	11.73	22.68
	Safety	17.00	33.25	0	30.00
	Health-Safety	0	22.67	0	22.67
	No Physical Interest	10.67	21.86	12.12	17.68
Time-Energy Savings	Health	8.75	17.57	12.32	14.95
	Safety	0	19.75	16.00	19.00
	Health-Safety	0	10.00	0	10.00
	No Physical Interest	11.57	20.49	7.66	12.48
Cost Savings	Health	9.75	17.57	12.00	16.09
	Safety	0	12.33	0	12.33
	Health-Safety	0	21.11	13.00	20.30
	No Physical Interest	5.00	15.66	7.25	12.57

A. ECONOMIC INTERESTS
- a-1 Cost Savings 14.07
- a-2 Time-Energy Savings 12.92
- a-3 Combined Cost-Time-Energy Savings 19.80
- a-4 No Economic Interest 10.37

B. PHYSIOLOGICAL INTERESTS
- b-1 Health Interests 14.79
- b-2 Safety Interests 14.30
- b-3 Health-Safety Interests 18.32
- b-4 No Physiological Interests 11.79

C. SOURCES OF INFORMATION
- c-1 Food Industry Source 11.39
- c-2 Non-Food Industry Source 17.83
- c-3 Unidentifiable Source 7.45

Total Number of Stories 2,334
Total Number of Column Inches 29,652
Average Story 12.70

(5.19%) of the column inches of food news information.

About two-thirds of all food news dealt with Economic Interests (64% of column inches), mostly of the combined Time and Energy Savings type (31% column inches). Articles dealing with a combination of Cost, Time and Energy Savings comprised about 17% and Cost Savings, alone, 15%.

The giant contribution from the Non-Food Industry dealt mostly with Cost Savings or a combination of Cost, Time and Energy Savings. From the Food Industry and Unidentifiable Sources, the combinations of Time and Energy Saving news comprised the bulk.

Physiological news took a quantitative back seat to Economic news (32% of total column inches), most of which was news of Health Interest contributed by the Non-Food Industry Source. Safety news and a combination of Health and Safety news did not fare well. The Food Industry and Unidentifiable Sources contributed practically nothing to these categories, topped only slightly by the Non-Food Industry Sources.

The heavy contribution of Economic news had very little to do with whether news of Physiological Interest also was involved.

Of utmost relevance to contemporary criticisms, the readers, at this point, should be reminded that 64% of the total column inches of food news analyzed contained news of Economic and/or Physiological Interest, and of that, the Non-Industry Source was the overwhelming contributor.

Three-fourths of the food information printed by food editors seems to contain a recipe. The other fourth was made up of General Food News column inches, which was for the majority contributed by Non-Food Industry Sources (81%). Cost Saving articles and Health Interest articles

alone seemed to contain the same amounts of Recipe and General Food News column inches in their respective categories.

The largest articles were attributed to Non-Food Industry Sources and the smallest to Unidentifiable Sources. The larger stories were usually a combination of several types of information.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Recent rhetoric among newspaper food section critics and food editors has had little basis in actual observation of food section content structure. Accusations and counters to the accusations have been based on individual opinion and/or limited systematic investigation. This study attempted to replace individual opinion with a descriptive profile of food pages, based upon a quasi-representative sample of content. Fifty randomly selected newspapers of at least 100,000 circulation were chosen from across the United States representing twenty-seven states and the District of Columbia. From each newspaper, four food sections were randomly selected, one from each of the four seasons; totaling 200 newspaper food sections.

Taking cues from transcripts of "discussion" at the Houston Bake Off, the author decided to classify food page content into three basic categories. The first was Economic Interest, covering items involving Cost Savings, Time and Energy Savings, and/or a combination of all three.

The basic Cost Saving news contained items involving cooking with cheaper cuts of meat," dollar stretching" ideas, utilizing leftovers, etc.

The other basic level of Economic Interest news--Time-Energy Saving--contained information about jiffy cooking, "make-ahead" cooking,

creative ways to use convenience foods, etc.

A third level included news which seemed to have a combination of Cost Time-Energy Saving information.

The second major classification of food news involved Physiological Interests, divided basically into Health Interest or Safety Interest information.

Health Interest news involved the public's physical health stability or improvement. The articles involved diet information, balanced meals, food for calorie counters, etc.

Safety Interest articles alerted or advised readers, directly or indirectly, of potentially harmful product ingredients, food preparation procedures, etc., of which the public was unsuspecting.

Another category of Physiological Interest news contained articles involving a combination of Health and Safety Interests.

The third major category was Information Source, as observed by the "lay" reader. News in this category would have a Food Industry Source, a Non-Food Industry, or an Unidentifiable Source.

Food Industry Sources are identified either from a "by line" or internally with a brand name, advertiser, etc.

Non-Food Industry Sources were usually indicated with a "by line" of a staff writer, press association, local group within, etc.

An unidentifiable Source included those articles without a detectable origin.

If food section critics had voiced a <u>well-founded</u> argument, the majority of food information, using these operational definitions, would be attributed to the No Economic/No Physiological Interest category. The majority of that information would contain recipes from Food

Industry Sources.

Percentage of Content

In contrast, this content analysis tended to indicate that the Food Industry contributed only 5.19% of the information printed by food editors in this sample population. That is substantially less than seemed to be predicted by food section criticism. The majority of these articles were in part about Health Interests and Time-Energy Saving which comprised 55% of all articles attributed to Food Industry Sources.

While this amount was small, food editors did tend to print a heavy amount of Food Industry information at certain times. This was especially evident after a food editor had attended a seminar, conference, "Bake Off," etc., sponsored by a representative of the food industry.

Blatant use of food--industry--supplied information was not evident in the majority of the food sections observed in this study. There were several, for lack of a better term and drawing from Mr. Issacs' speech at the Pillsbury Bake Off of 1972, "Harlots" in the sample. These food editors might fall under the grinding heel of Mr. Richard Karp's article in the Columbia Journalism Review, "Newspaper Food Pages: Credibility for Sale."[1]

For the majority of newspapers used in this study, food editors were not the Harlots at which critics seem to be pointing an accusing finger. Non-Food Industry sources were identified as printing 67.96% of the column inches and Unidentifiable Sources contributed 26.85%. Food editors and other sources defined as Non-Food Industry or sources that were Unidentifiable contributed approximately 95% of all food information observed in this study.

Number of Stories and Sources

The number of stories printed change the definite separation indicated by the number of column inches. Unidentifiable Sources contributed approximately the same number of stories as Non-Food Industry Sources.

Upon further investigation, the Unidentifiable Source contributed significantly less Cost Saving and Combined Cost-Time-Energy Saving stories; but used significantly more Time-Energy Saving information.

In the author's opinion, most of the Unidentifiable Source's Time-Energy Saving information was used as "filler" by the food editors. That is not to say this information was useless to the reader. Its use and placement oftentimes served to balance the food section. These articles were usually short, with an average story length of 7.66 column inches.

Food Industry Sources were attributed with only 5.19% of the column inches and 5.78% of the number of stories categorized in this study. The critics have stated that the majority of food information is contributed by the food industry. This study indicated that, as far as the "lay" reader could detect, less than 6% of the number of stories and column inches could be attributed to the food industry. Again, blatant use of food industry material by food editors was not evident.

The Big-Eight Categories

Eight categories of food information consumed 93.84% of the column inches and 95.42% of the food page articles. These categories are rank ordered in Table XV, page 84.

TABLE XV

PROFILE OF THE EIGHT MOST USED CATEGORIES

Rank-Order Column Inches	Cell	Column Inches and % of Total		Number of Stories and % of Total		Percentages Contributed (Column Inches)					Average Story
		Inches	%	Stories	%	Food Industry Source	Non-Food Industry	Unidentifiable Source	Recipe	General News	
1	No Physiological/ No Economic Interests	7,477	25.22	760	32.56	1.13	15.84	8.25	18.83	6.38	9.84
		NS									
2	No Physiological/ Time-Energy Saving	7,415	25.01	594	25.45	2.61	14.02	8.37	22.59	2.42	12.48
3	No Physiological/ Combined Cost-Time-Energy Saving	2,758	9.30	156	6.68	.22	6.63	2.45	7.90	1.40	17.68
				(.05)							
4	No Physiological/ Cost Saving	2,439	8.23	194	8.31	.02	6.50	1.71	4.11	4.11	12.57
				NS					NS		
5	Health/ No Economic Interest	2,238	7.55	208	8.91	.38	5.54	1.63	3.73	3.82	10.76
									NS		
6	Health/ Combined Cost-Time-Energy Saving	1,928	6.50	85	3.64	.41	4.90	1.19	5.21	1.29	22.68
		NS		(.05)							
7	Health/ Cost Saving	1,850	6.24	115	4.93	.13	5.10	1.01	3.03	3.20	16.09
		(.05)		NS							
8	Health/ Time-Energy Saving	1,719	5.80	115	4.93	.24	3.73	1.83	4.50	1.30	14.95
	Grand Totals	27,824	93.84%	2,227	95.42%	5.14%	62.26%	26.44%	69.90%	23.92%	12.50

Note: NS = No significant difference; .05 = significant difference, but not as great as others observed.

The first of these categories is No Physiological or Economic Interest. This is the category that food section critics seem to indicate contain the majority of food information. This category contained 25.22% of the column inches with a high number of stories with a low average length of 9.84 inches. The majority of these articles were "let's try it" recipes and "human interest" stories. The No Physiological or Economic Interest category contained the second largest number of recipe column inches with 18.83%.

The majority of what might be termed "new product" information was contained in this "no interest" category, dealing for the most part with new cookbooks which could not be deemed of Physiological or Economic Interest. These articles usually were short and, for the most part, used to fill space in the food section. Judging from the Pillsbury 1970 readership study, these areas seem of interest to the reader, and could not be harshly attacked by the author.

There were as many Time-Energy Saving column inches printed as those of No Physiological or Economic Interest. Congressman Rosenthal stated at the 1972 Bake Off that food editors print information suitable for 25 or 30 years ago, leaving out information that was concerned with the new packaged and convenience foods. This analysis indicates that one-fourth of the articles dealt with Time-Saving information alone. Most of these articles were recipes utilizing convenience foods as their major ingredients. Time-Saving information contained the largest percentage of recipe column inches with 22.59% of all column inches being of this type.

The critics seem terribly off-base in two ways, then. Time-Saving information <u>is</u> being printed for the reader and recipes are not <u>all</u> just

"let's try it because it's there" types. Time-Saving recipe column inches comprised 31.35% of all recipe column inches. With No Economic Interest or Physiological Interest news comprising 26.14% of the column inches, both were attributed with 57.49% of the total recipe column inches. These stories were often short and used as "fillers" by the food editors. In the author's opinion, these fill articles served the end of the editor with the most parsimony. While they provided a balance to the food section pages, they also aided the reader.

The Cost Time-Energy Saving articles were the third most used by food editors. This category had an average story of 17.68 column inches, most of which were recipes. A large number of the articles designated as recipes only contained a short recipe tag. In other words, their central theme was not the recipe. The articles that combined several categories of news were usually longer than the articles in which only one category was represented.

This Cost Time-Energy Saving news and the fourth most-used category--Cost Saving, alone--again indicate that the criticism of food sections may be unfounded. The Cost Saving articles were concerned with cooking with cheaper cuts of meat, utilizing leftovers, waste of food, etc., which were specific areas of criticism. In the author's opinion, the above two categories would pertain to the food budget of families at all levels of the economy, including those of low income.

These first four most-used categories represent 67.76% of all column inches utilized within this study. The next four most-used categories, contained at least in part, Health Interest information. Congressman Rosenthal at the 1972 Bake Off suggested that Health Interest was another area where food editors had "failed miserably."[2]

Articles containing Health Interest information comprised 26.09% of all column inches, and made up the last four most-used categories. Health Interest articles, alone, were the most used by food editors, while Health Interest information, in connection with the following Economic Interest levels, formed the following order: (1) Combined Cost-Time-Energy Saving; (2) Cost Saving; and (3) Time-Energy Saving information. The last two levels showed little difference in their column inches or number of stories, approximately the same amounts being printed in each category.

Critics have stated many arguments that seem to have had little basis in fact. Food editors, for the most part, are not blatant "harlots," and have printed much food information of Economic Interest. For the most part, food editors have tried to inform the public in Health Interest areas. The recipes printed in food sections were not just "let's try it" types with little aid to the reader, but were distributed across several food news categories (22.59% of all column inches concerned with Time-Energy Saving recipes). These findings were hypothesized by the author and each hypothesis tended to be substantiated.

The least amount of food information printed by food editors concerned Safety or combined Health and Safety Interests. Lack of Safety news was heavily criticized. Congressman Rosenthal stated at the 1972 Bake Off:

> The point that I'm trying to make is that in this technological day with pesticides, with chemicals, with all other additives that are involved, many of the women that I speak to with sophisticated responsibility are worried when the Department of Agriculture says it's okay to sell cancerous chickens. In this day and age, of deep concern with these new improvements of chemicals, and additives and the fears that people

> have, (to) continually write about how many clams in clam chowder, becomes slightly irrelevant.[3]

The data tended to indicate that only 6.16% of the food information in the sample concerned Safety Interests or the combination of Health and Safety Interests. Most of the articles in these categories were attributed to Non-Food Industry Source (92.21%), and usually were syndicated rather than originating from the food editors. In the Safety Interest area, criticism tends to be more correct than in the other categorical areas. Table III on page 50, seems to show this trend best.

Food editors, then, generally print food news in four main areas with almost 25% of their information falling into each category and the four categories totaling 93.84% of all food news. These areas follow:

1. No Physiological/No Economic Interests (25.22%)
2. Time-Energy Saving (25.01%)
3. Combined Cost Time-Energy Saving and Cost Saving information (17.53%)
4. Health Interests (alone and in combination with economic levels--26.09%)

Food editors tend to print only a small amount of Safety information that alerts or advises readers of potentially harmful product ingredients, food preparation procedures, etc., of which the public is unsuspecting.

Problems

Most research studies encounter a certain number of problems. The main problems confronted in this study concerned categorization of (1) syndicated articles, (2) Food Industry material mentioned in articles

which also carried a "by line," (3) food information in areas of a newspaper other than the food section, (4) the operational definitions.

Syndicated articles by many different sources often contained material not relevant to the purchase, preparation or content of food products legally offered for public consumption. Some syndicated articles would carry, for example, information pertaining to gardening, sewing, and a short paragraph concerning Time-Energy Saving in the kitchen. When syndicated columns of this type were encountered by the author, the entire article was measured and placed in the Time and Energy Saving category. Future studies may be able to eliminate this problem. One solution may be the categorization of only the food news portion of the article.

Unfortunately, food editors use articles that mention Food Industry products and use a Non-Food Industry "by line." The author is not referring to the mere mention of products by brand name, but the reference to products in a most favorable manner.

"Harlot" articles, so to speak, are those which, in the author's opinion, food editors presented a prostituted position in reference to the product or manufacturer. Only a few of these articles were printed, and the amount did not seem large enough to justify another category of news when this study was conducted.

One food section in particular presented a problem. This food section comprised one article 219 column inches long, due to a composite of homogeneous sections. Sub-parts received by the newspaper staff at the 1972 Pillsbury Bake Off were incorporated over the food editor's "by line." One solution to this problem, involving some 10% of the food editors in this study, may be the addition of a new category.

Food information is sometimes carried in sections of the newspaper other than in the food section. In this study, only observation of actual formal food sections was requested. If the study is replicated, the entire newspaper should be perused for food news. The author suspects that the Health and especially Safety Interest categories would be considerably larger if the entire newspaper had been observed instead of only the food section.

The operational definitions generally were adequate and in line with the purpose of this pilot study. In the author's opinion, Health and Safety definitions should be more explicit. Oftentimes it was difficult to separate the two within an article. The main distinctions that should be expressed are: (1) Health Interest--pertains strictly to maintenance of health, (2) Safety Interest--pertains strictly to a situation that may be fatal to the person(s) involved and (3) a combination of Health and Safety Interests--would pertain, for example, to the maintenance of health to avoid a fatal situation such as heart disease. In future studies, these distinct differences in operational definitions should be stressed.

Recommendations for Further Study

This pilot study has presented what seems to be a fairly accurate profile of food information presented in newspapers with 100,000+ circulation across the United States. There are many questions that could not be answered without further study. Some of these questions were: How do food editors select their news? What sources actually represent material that is molded by food editors for use in their food sections as Unidentifiable and Non-Food Industry source articles? How well does

the food editor try to ascertain the needs of newspaper readers in individual areas? Etc.

These questions need to be answered through in-depth interviews with food editors across the United States in a quasi-random sample of that population. This is not to say that further work should not be conducted in the categorical structure presented in this pilot study. The large amount of No Economic and/or Physiological Interest information (25.22% of column inches, 32.56% of the number of stories) raises a few questions in itself.

All of the questions, then, have not been answered. Many questions still and always will remain. Research is a continuous search for truth, in which tentative answers lead to refinement of the questions to which they apply and of the procedures by which they are obtained. This study is the starting point of an endless but potentially fruitful journey. Etc.

FOOTNOTES

[1]Richard Karp, "Newspaper Food Pages: Credibility for Sale," Columbia Journalism Review (November/December, 1971), pp. 36-44.

[2]Benjamin S. Rosenthal, "Should Food News Be Separated From Consumer News in a Newspaper Organization?" (unpub. transcript, Food Editors Seminar, University of Houston, February 25, 1972), p. 4.

[3]Ibid., p. 4.

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