ABSTRACT

GRADES OR AGES: Secondary. SUBJECT MATTER: One of a series on consumer education. This particular guide concerns food--specifically, nutrition, labeling, prices, and money management. ORGANIZATION AND PHYSICAL APPEARANCE: The guide is divided into 24 sections, each containing a major knowledge objective and various minor ones. Each section also includes suggested pupil and teacher activities, and a list of sources. The guide is illustrated with various charts, cartoons, photographs, and drawings. OBJECTIVES AND ACTIVITIES: Objectives are listed for each section and suggested activities for both teachers and students are described. INSTRUCTIONAL MATERIALS: Listed for each section. STUDENT ASSESSMENT: No provision indicated. OPTIONS: None listed. (PB)
FOOD: FACTS AND FANCIES

-One of a Series in Expanded Programs of Consumer Education
THE UNIVERSITY OF THE STATE OF NEW YORK

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(with years when terms expire)

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FOREWORD

In 1967, the State Education Department published "Consumer Education — Materials for an Elective Course." This material has since been introduced into more than 500 of the New York State high schools. As a result of the interest in Consumer Education in the State and Nation, the Department has begun the preparation of a series of modules — Expanded Programs of Consumer Education. This module, Food: Facts and Fancies, is the 15th to be produced. Those already distributed are

Consumer Issues and Action
Education and the Consumer
The Consumer and Recreation
Consumer Problems of the Poor
The Consumer and His Health Dollar
The Consumer Looks at His Automobile Insurance
The Consumer and Transportation
Beauty Products and the Consumer
Taxes and the Consumer
Credit and the Consumer
Coping with the Problems of a Technological Age
Travel and the Consumer
Law and the Consumer
Cars, Cycles, and Consumers

Nothing touches the lives of the disadvantaged more than the constant struggle to stretch limited financial resources to meet the increasing costs of living. These modules are designed in the hope that they will help the poor to make better use of their income, as well as with the expectation that those of higher income will be more understanding of their own problems and of the problems of their fellow citizens.

Unlike the original syllabus, where 12 units covering various phases of Consumer Education were bound together, the modules in Expanded Programs of Consumer Education are being prepared as separate publications to provide greater flexibility. Each of the modules in the series may be used as a discrete unit or with other units in the series. The modules may be presented as a semester or part of a semester course or in conjunction with the original syllabus which covers such areas as the purchase of food; shelter; appliances; automobiles; and a consideration of credit; money management; fraud, quackery, and deception; banking and savings; life and health insurance; security programs; and consumer law.

It is hoped that the presentation of the modules as separate publications will tend toward flexibility in their use as mini-courses in such fields as social studies, business education, home economics, industrial arts, agriculture, and other areas of the curriculum.

The suggestions to the teacher found in "Consumer Education — Materials for an Elective Course," pages 1-4, apply equally to each of these modules. The reaction and suggestions of those using these materials in the field
will be helpful to the Department in planning further materials for Consumer Education and in making necessary revisions of the material.

The original material for this module was developed and written by Martha Kallinisch, home economics teacher, Mont Pleasant High School, Schenectady.

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CONTENTS

Foreword ................................................................. iii
Introduction ............................................................. 1
Why Study Food? ....................................................... 5
Why Is Nutrition of Special Importance to the Young? .... 7
Why Is Advertising Such a Potent Although Hidden Force? 10
What Are the Good and Bad Elements in Advertising? ... 12
How Does Advertising Influence Our Food Buying? ....... 16
What Are Some Deceptive Food Selling Practices? .......... 17
How Safe Are Food Additives? ..................................... 20
How Do Our Consumer Food Choices Affect Our Environment? 21
How Can We Cut the High Cost of Meat Buying? .......... 23
Can Unit Pricing Help the Consumer? ......................... 27
What Are Coded Prices on Packages? ......................... 31
How Can One Hold Down Food Bills? ......................... 32
How Can Information on Food Labels Help Consumers? ... 50
Why Is Good Nutrition So Important? ......................... 53
Who Has the Ultimate Responsibility for the Wise Use of the Food Dollar? ........................................... 63
What Would You Consider When Choosing a Food Store? ... 63
What Help Does the Government Furnish in the Field of Nutrition? ...................................................... 65
What Are New Foods? .................................................. 67
Why Has the Price of Food Gone Up So Much? ............. 69
In America, the Land of Plenty, Why Think About Nutrition? ............................................................. 71
Who Gets the Money We Spend for Food? .................... 72
What Guidelines Can Help Us Choose a Healthful Diet? .. 73
What Types of People Especially Must Watch Their Food Budget? ......................................................... 81
What Is the Food Stamp Program and How Does It Work? 89
Does An Abundant Food Supply Coupled With Affluence Bring Problems? .............................................. 93
How About Labeling and the Metric System? ................. 101
How Do You Decide How Much To Spend for Food? ....... 108
INTRODUCTION

The average American family spends about 20 to 25 percent of its income for food. Inflation has caused a 17-percent rise in food prices between 1972 and 1973, and another rise of 15 percent between 1973 and 1974. 49.9 percent of all purchases in supermarkets are unplanned or "impulse" purchases according to one survey. More young people are doing the food purchasing due to an increase in working mothers. Many people shop to satisfy psychological needs, to feel "creative," to feel power, or spite the money earner. Put this all together and you have consumers who need enough background information to make quick, but intelligent decisions on the spur of the moment, against the physical and psychological factors working for those "impulse" purchases.

All the answers to the consumer's questions about food won't be found within the pages of this module, but it is a start; and if you give your students the tools to search out the answers for themselves, they will be independent enough to find answers to questions the future may bring.

Try to get as much reality into the class as possible. Bring in real problems to solve, have students do the same. If someone is dissatisfied with a food purchase don't just talk about it; write a letter of complaint, or go with a student to the store where it was purchased to complain. Have the class go on a shopping trip to a supermarket with a list the students have made from reading the food ads. Have the students suggest activities and plan them together when possible. Such activities make the class more exciting for both teacher and student.

Use as many resource people as possible to bring the "outside world" to the students. Within your class you probably have students who work with food — in supermarkets, short-order restaurants, in nursing homes or hospitals. Perhaps relatives of your students are in the food field. Within the walls of the school other teachers, the school nurse, the cafeteria manager, the school district doctor, can bring expertise from some are related to food. Outside the school you might have the county cooperative extension home economist, local utility company home economist, representative of the consumer protection agency in your area, supermarket manager or customer relations aide, social services or welfare worker, meat cutter or butcher, and Food and Drug Administration representative.

In place of written tests try evaluation devices that are created by the students. Have them develop educational materials to teach others the principles they have learned about food; some suggestions are made within each area of the module. They might include skits, TV tapes, puzzles, or games, such as "Market Maze," shown in the previous module, "Consumer Problems of the Poor." "Market Maze" enumerates some of the possible pitfalls to good shopping in a supermarket; each student could develop his own game and show how much he has learned by the number of good and bad choices incorporated into the game.
Since food is a topic of interest to many people, each day new resources for teaching can be found in the media. A news article about prices or new products, etc., a TV show, a new book, a regular weekly column in your newspaper about "Best Buys of the Week," something appears almost daily. Have students bring in news of what's happening; ask your librarian to keep a watchful eye for new books or articles in magazines that are of interest to your subject. Put your name on the government publications mailing list, ask your senator or congressman for some recent free government booklets. Every 10 years there is a Yearbook of Agriculture devoted to food, another devoted to consumers. An inexpensive library can be created with paperback books; several very good ones on food buying have been published recently. Most food companies have public relations departments that send out free information about their products. There is such a wealth of material on food that soon you will be worrying about where to store it all.

Although the purchase of a home is considered to be the most important single purchase a consumer will make in a lifetime, the day-to-day, week-to-week purchase of food will equal and likely outweigh it in the total amount of money spent. In fact the purchase of food may exceed $80,000 in a lifetime, an amount not to be scoffed at, even by the affluent among us. When food purchasing is viewed in this more dramatic light it then becomes an area to be studied and viewed more precisely.

Recently the subject of food has received increased attention because of the apparent rapid rise in prices, controversy over international trades in foodstuffs, headlines about supposed health-threatening additives used in food production, and debates over "organic" vs. "other" foods. Many TV shows and newspaper and magazine articles receive our attention when the subject matter deals with topics dear to our hearts, such as "no-effort" reducing diets, congressional investigations of breakfast cereals, or the banning of questionable hormones in cattle feed; all are part of the consumer's concern over his food dollar, as well as his health.

Hopefully, the distress expressed by consumers over their inability to cope with decisions in an area that touches their life so regularly can be reduced by appropriate understandings and learnings covered in this module. For instance, it is worth understanding that, although food prices never seemed so high, incomes have never been so high, and that farmers and ranchers, food processors and distributors have to live at the same inflationary level as do other consumers. It may not make it easier to pay the money for meat, but at least we'll have an idea where the money went. In another vein, Americans who are paying high prices for food with their high income level, can comfortably compare with Europeans and Asians who are paying inflated food prices with their low incomes. This module may make American consumers aware that they are living in the country with a reputation as the most efficient food producer in the world at a time when all the world's people are demanding higher standards of living and eating. An easy lesson on the Law of supply and demand can be taught when you use soybeans, beans, rice and wheat as the commodities at stake in the 1970's, and watch what happens to the prices of these articles in a time of scarcity.
The study of foods can be conducted from many consumer aspects depending of the interest of the teacher or students; for example:

- **the scientific** — the effects of processing and chemicals in food production, nutrition needs of different groups, unit pricing, and comparing food value vs. cost, ecology of packaging, ecology of food production

- **the consumer activist** — FDA restrictions and rulings, new labeling laws, effects of meat boycotts, boycotts on non-union produce, future packaging laws

- **the social sciences** — effect of food on family living, attitudes toward weight and shape through history, aspect of food in male and female roles, food consumption patterns in other cultures

- **the humanities** — enhancing of life by home production of foods for our own use, food in the arts, the fellowship of eating together.

No matter what the direction taken in the study of food, it is hoped that this module will open doors and shed light on areas of food that need clarification. A teacher hopes to give students sources and resources to find answers to questions and to inspire students to ask questions. If the student becomes motivated to search out areas that were introduced then the module will have served its purpose— for the study of any subject is never finished, information has not all been gathered, questions have not all been answered, ever.

As a result of the study of material in this module and independent study and discussion, students should be able to:

1. determine which convenience foods, if any, meet their needs
2. recognize the "best buy" for their particular needs in their food purchases
3. evaluate food advertising for truth and completeness
4. determine at which stores to shop for the best value for the dollar spent
5. find competent information about new food products
6. evaluate reducing diets for potential health hazards
7. make value judgments in planning and purchasing food based on personal values and goals
8. budget money to get the satisfaction expected from food purchases
. report deceptive food practices to the appropriate consumer protection agency

. determine the difference between gimmicks and real "bargains" in food purchases

. control the amount spent on food purchases by following good planning and shopping practices

. use unit pricing to get satisfaction from food purchases

. see the difference between eating for filling the stomach and good nutrition

. recognize and evaluate terms such as: "natural foods," "miracle diets," "special bargain," "wholesale meats," for their real meaning

. read labels intelligently and use the information to make wise decisions

. see themselves as consumers in a world market

. utilize grading systems for meat and other products for intelligent decision making.
SUGGESTED PUPIL AND TEACHER ACTIVITIES

WHY STUDY FOOD?

- Pupils have had many exposures to the problems of nutrition. Since they are young and presumably healthy, it is sometimes difficult to motivate them to further study. Try to help them to see why food is so important a consumer item that continuous study is in order. Such motivation as physical prowess and attractiveness may be meaningful.

- New information appears frequently in periodicals and newspapers.

- Why is it necessary to update our information about foods? What sources provide good information? Is all information equally reliable? Do unscrupulous promoters capitalize on the interest in food for their own ends?

- Proper nutrition is a major factor in maintaining good health.

- Discuss the quotation "We are what we eat." To what extent is that true?

SOURCE

"The food choice of civilized man is influenced by many factors, such as cultural background, habit, taste preference, susceptibility to advertising, family finances, economic situation, and many others. In the United States today a variety of good foods is available everywhere and within economic reach of most people. Nevertheless, many persons still consume inadequate or faulty diets which are likely to lead to poor or borderline health, and there is a continuing need to provide information on how to use this abundance of food to the best nutritional advantage."


"Why is it necessary to update our information about foods? What sources provide good information? Is all information equally reliable? Do unscrupulous promoters capitalize on the interest in food for their own ends?"

"From simple one-celled plants to highly complex human beings, all living things need food. Food is necessary to support growth, to repair constantly..."
Food is a major expense for an individual or family. It is the highest budget expense for low income families.

There is increasing criticism of farmers, middlemen, and store owners regarding the price of food. How justified is this criticism? What proportion of the family budget goes for food? (Be sure that pupils subtract the cost of nonfood items from their calculations.)

"A survey (by Kansas State University) reports that for every dollar taken in by store operators, 39.9 cents goes for raw products, 26 cents for labor, 22.6 cents for operating costs, 5.3 cents for transportation, 2.2 cents each for taxes and advertising. The amount left over for profits is put at only 1.8 cents."


"Supermarkets are developing into stores that go way beyond groceries. Nonfood items sold in supermarkets will amount to

SOURCE

wearing tissues, and to supply energy for physical activity. Unless the food consumed supplies all the elements required for normal life processes, the human body cannot operate at peak efficiency for very long. If an essential nutrient is missing from the diet over very long periods of time, deficiency diseases such as rickets, scurvy, or certain anemias may develop."

Even young people living at home spend sizeable amounts for food.

Have class members keep track of the amount of money each spends for food in the course of a week. In one study the average expenditure for food per week for students was $2.85. Boys spent almost a third of their income for food while girls spent somewhat less. How do the amounts spent for food of class members compare with the quoted figures?

Most young people are aware of the health problems of older people. They may have seen the health of their parents or grandparents fail. They watch middle-aged people struggling with diets to control weight, or avoiding foods that aggravate ulcers, or swallowing medicines or vitamins in the attempt to regain health. Yet the young person may appear to "get away" without ill effects from whatever he eats or drinks. He may feel that he will live forever. The problems of older people seem remote.

WHY IS NUTRITION OF SPECIAL IMPORTANCE TO THE YOUNG?

Latest nutritional findings underscore the deferred effects of malnutrition on health.

SOURCE

25 cents of each dollar spent in the store, according to a study at Iowa State University." Ibid.

"Take a Good Look," filmstrip, The American Dietetic Association

"Food Becomes You," Dolphin Books, Ruth Leverton, Doubleday, Garden City, N.Y.

"Nutrition for the Growing Years," Margaret McWilliams, Wiley, N.Y.

During prenatal life (before birth) and infancy, nutritional needs relative to size are greater than at any other time in our lives.

- Conduct a forum or assembly where doctors and nutritionists discuss the latest findings on the delayed effects of poor nutrition.

- What has been discovered about the effects of poor nutrition on the unborn child? How does malnutrition of the foetus affect both the physical and mental development of the child in later years? What are some of the cumulative effects of malnutrition?

- Why in an affluent society is the nutritional level as it is?

- Invite a representative of the Food and Drug Administration to discuss nutritional labeling. What actions are being taken by the FDA to insure that consumers will know the nutritional value of foods? How eager are pupils and their parents to have such information? Would they use it if it were furnished?


- "Diet Patterns and Coronary Heart Disease," National Dairy Council Digest. 35, No. 6, 30¢

- For more background on prenatal and infant nutrition, see Chapters 1 - 3 of "Nutrition for the Growing Years," by Margaret McWilliams.

- "Despite the American housewife's concern about serving her husband and children healthy, nutritious meals, she is not above sacrificing announced nutritive value for other advantages, according to a study reported in the current issue of Chain Store Age magazine. "The study, which checked the effects of nutritional labeling on food purchasing, revealed that while nutrition is a high priority among housewives, it is by no means the sole objective in food buying. The desire to show love and warmth to their children, as well as such factors as convenience and economy, are also important considerations in the selection process. "Most housewives are
UNDERSTANDINGS

. Each food contains certain nutrients but lacks others.

. The presence or absence of the required nutrients in our diet will affect our bodies now and later in life.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Have students read the pamphlets, "A Girl and her figure", and "A Boy and His Physique", by Ruth Leverton, available from the National Dairy Council.

. Have students become familiar with rich sources of each nutrient, e.g., protein from meats, eggs, dairy food, Vitamin A from dark green and yellow vegetables, etc.

SOURCE

"Nutrition labeling is a potential tool for improving the diet of the American people. In order for consumers to effectively use this tool to improve their diets, nutrition education is essential." Consumer and Food Economics Research Division, Agricultural Research Service, U. S. Department of Agriculture

"The American consumer is interested in nutrition. As Dr. Ruth Leverton noted at the November 1971 National Nutrition Education Conference, there is a 'recent outburst of enthusiasm for the subject of nutrition and food.' "Many consumers are concerned with the effect of what they eat on their bodies and their children's bodies." Times-Union, January 25, 1971
WHY IS ADVERTISING SUCH A POTENT ALTHOUGH HIDDEN FORCE?

Advertising makes people aware directly or indirectly of a product or commodity. It encourages mass consumption which in turn can lead to lower prices.

On the other hand advertising can encourage over-buying or buying on impulse.

See "Physical Health-Nutrition, Grade 10, 11, 12," University of New York, The State Education Department, for a number of interesting activities in which pupils can observe the results of faulty nutrition.

Inviting a commercial artist or advertising representative to the class to demonstrate and discuss techniques used in developing a successful advertisement.

Have students take a field trip to a TV station to watch the filming of commercials and discuss the financial side of advertising.

Have students write their own advertisements and video tapes for class discussion.

SOURCE

Ibid.

"Biography of the Unborn," Encyclopedia Britannica film

"Have a Healthy Baby," film, Churchill Films

10
SUGGESTED PUPIL AND TEACHER ACTIVITIES

. With assistance of home economics teacher, have students design an original package for a food product they produce for marketing in the school store.

. The most effective forms of advertising are those that appeal to family love, sex appeal, security, and thrift (bargain hunting).

. Develop rating charts and rate local stores on the effectiveness of their sales psychology.

. Consider the forms of advertising listed in the Source column. Have students identify instances of each type of advertising. Plan a skit in which the store manager discusses with his sales personnel each type of advertising.

. Have pupils bring to class examples of packaging which they feel are appealing or which "turn them off."

. Invite a store manager to discuss his promotional devices and sales psychology. How do pupils react to his ideas? What promotional devices would pupils use in increasing sales in the school store?

SOURCE

2. The type and nature of the media used: Television — watch for the time of day, day of week, type of audience used. What use is made of: radio, magazines, newspapers, flyers, billboards? Watch for indirect effect of news casts on buying practices; i.e., health hazards, shortages, legislation, etc.

3. Promotions include: displays, product demonstrators, coupons, rain checks, loss leaders, premiums, store flyers, consumer panels.

4. Sales psychology is concerned with: product location in store, location on shelf, pleasant cooking odors, music, cleanliness, unit pricing, product dating.
WHAT ARE THE GOOD AND BAD ELEMENTS IN ADVERTISING?

Advertising is both good and bad. It gives specific information about a product but to the unaware it can mislead, since a person's visual and audio perception is involved. "We see what we want to see; we hear what we want to hear."

On the positive side, advertising:
- informs consumers of available products
- provides information about those products
- provides information about new products
- stimulates competition
- makes possible mass production and mass consumption through mass markets

On the negative side, advertising:
- adds to the consumer's costs
- advertising adds nothing to the product's value
- may whet an appetite for unnecessary goods
- may stifle competition
- may deceive consumers.

Have the class report on deceptions they or their families have noticed in the media, or seen in the marketplace, i.e.; bottles that look like pint bottles but hold only 14 ounces, cooking oil ad that uses only 1 tablespoon for frying meat without considering natural meat fat addition to quantity, manufacturer's "cents off" label which is not always honest when you know the original price.

Have the class develop a deceptive food advertisement for a well known product.

Choose one television commercial and analyze for deceptive qualities. Decide whether it is audio or visual deception.

"Consumers Cannot Escape from Advertising — The typical consumer is exposed to 1,600 advertisements every day! From the moment one turns on one's radio or television set for the morning news until one turns off the television set after the late, late movie one is subjected to exhortations to buy, buy, buy. Newspapers and magazines are filled with ads. Buses and subway cars carry advertising cards. The mail carrier brings 1,500 pieces of direct advertising letters to the average family in a year. Retail stores are filled with advertising messages and displays. Even the packages on the shelves silently plead to be picked up. "One of the many analysts of advertising believes that the prevalence of advertising is proof that people would rather be influenced than make up their own minds."

Economics for Consumers, Gordon and Lee, American Book Co.
FOCUS ON THE FOOD MARKETS

Cooperative Extension, New York State
Cornell University, State University of New York
U.S. Department of Agriculture

Reproduced from issue of November 20, 1972

FOOD ADVERTISING

Food ads can help shoppers make wise food purchases provided the information in them is accurate, truthful, and not deceptive or misleading. To protect consumers against fraudulent advertising, the federal government has empowered such agencies as the Federal Trade Commission and the Food and Drug Administration to regulate food advertising.

Watchbird over unfair advertising

A few years ago, the Federal Trade Commission conducted a pricing survey in food stores operated by leading food chains in three major cities of the country. The survey showed that a substantial proportion of advertised items were unavailable or, if available, were overpriced. Stores located in low income areas had unavailable, or overpriced products twice as often, on the average, as stores located in higher income areas. Low income areas often lack the competition that comes from the pressure of supermarkets from more than one chain.

Rule on unavailability and mispricing

To guard against unfair or deceptive methods of competition, a Federal Trade Commission ruling, effective on July 12, 1971, requires sufficient stock of advertised food items and prohibits selling these items at higher than advertised prices. Advertised items must be readily available unless a clear notice states that they are in stock and may be obtained upon request.

There are exceptions to the rule, since circumstances beyond the advertiser's control happen from time to time. One exception would be if the demand for an item exceeded the store's reasonable expectations. Another exception might be failure of delivery on the item, providing the retailer kept records to show that he ordered the advertised products in ample time for delivery. It would not be sufficient for the retailer to give the shopper a "rain check." If the shopper finds an advertised item out of stock periodically and the retailer continues to give a "rain check," chances are that he is not complying with the F.T.C. rule. Exception, limitations, or restrictions with respect to store, product, or price within the advertisement must be clear, specific, and conspicuous.

Guide on "free" offers

A Federal Trade Commission guide on use of the word, "free," went into effect last December 16, 1971. The guide applies to all offers of "free" merchandise and services and includes such terms as "buy and get one free," "two for one sale," "50 percent off with purchase of two," and "1 cent sale."
The guide requires the seller or advertiser to sell the article or service at the regular price in order to give the other one free. Regular price means the price charged locally for the same quality and quantity and for the same service for the last 30 days. The "free" item must be free. The retailer cannot cover the cost of the "free" item by charging higher prices for the other item. This would be an unfair and deceptive sales practice in violation of the Federal Trade Commission Act.

All terms, conditions, and obligations for the "free" offer must be set forth clearly and conspicuously at the beginning of the offer so that there is no misunderstanding about it.

A single size of a product or a single kind of service should not be advertised with a "free" offer for more than six months of any 12-month period. Also, such offers are limited to three per year with a lapse of at least 30 days between promotions.

"Cents off" labels must be clearly marked

The Food and Drug Administration and the Federal Trade Commission have issued regulations on the use of "cents off," "introductory offer," and "economy size" claims on food packages. To qualify for "cents off" labels, items must have been recently or regularly selling at a customary price in the promotion areas. As with "free" offers, promotions may not occur more than three times a year, with at least 30 days between promotions. Any single size item may not be sold with "cents off" labeling for more than six months in any 12-month period. Since June 30, 1972, when the law became effective, packages must be clearly marked, such as: "Priced marked is ___ cents off the regular price."

Under these rules, consumers can now determine from the label the actual savings being offered. The rules put an end to perpetual promotions that are based on artificial "regular" prices.

As of December 31, 1971, introductory offers can last no longer than six months and may be used for products that are new, substantially changed, or being introduced for the first time in the marketing area.

The regulations also require that packages labeled "economy size" be sold at a price that is at least 5 percent less than the lowest price per unit of weight, volume, or measure of all other sizes of the same product sold at the same time.

Government aims to correct food ads

The Federal Trade Commission has long been concerned with food advertising that might be deceptive or misleading. In the past, the F.T.C. would require a halt to an advertising campaign deemed to be deceptive. Last spring, the U.S. Supreme Court broadened the Commission's power to move against unfair or deceptive advertising. Recently, in a few test cases, the Commission has ruled not only that deceptive or misleading ads be discontinued, but also that corrective information be issued by advertisers. The Federal Trade Commission wants corrective advertising to offset allegedly false claims of nutritional superiority or uniqueness with regard to other qualities over other brands of the product.
Ads on children's TV shows under scrutiny

The Commission will be particularly protective of such groups in the population as children, parents of children, the poor, the handicapped, and the elderly whom it considers especially vulnerable to deceptive advertisements. Ads that play upon the naivete, frustrations, or lack of information within a particular target group can be designated as deceptive.

For example, beginning January 1, 1973, nonprogram material will be limited on children's television programs. New weekend limitations will allow 12 minutes per hour between 7:00 a.m. and 2:00 p.m. instead of the 16 minutes that are permitted now.

Children receive a distorted picture of nutrition from the majority of television food commercials. The predominant foods advertised are cereals, soft drinks, candies, gum, and snacks. These heavily advertised foods on children's television shows are high in saturated fats, refined sugars, and calories. The appeal is repeatedly a sweet one.

The effect of advertisements for vitamin pills toward children has also been questioned. Vitamins have been advertised as candy and as a substitute for a balanced diet. Many companies misuse nutrition appeals.

The Commission is operating to inform the public of inaccuracies and also to provide consumers with correct information that might help them make more informed food purchases.

"I think I would rather make an investment in the children's health through nutritious food."
HOW DOES ADVERTISING INFLUENCE OUR FOOD BUYING?

- Advertising can be of help to consumers by comparing prices or availability of goods in several stores.

- Advertising makes possible mass production, which in turn permits goods to be sold at a lower cost than would otherwise be possible.

- Children become pawns of advertisers by picking up cereals, drinks, cookies, etc., they have seen on TV, and putting them in mommy's cart while shopping, or whining until mother buys the products to quiet them.

- Bring in local newspapers showing food ads. Usually they appear on Wednesday or Thursday. See how much comparison shopping may be done. Are ads specific enough about sizes, grades, etc. to make valid comparison?

- Check local newspapers to find out the cost of a page of advertising.

- Discuss: Who pays for advertising?

- If the average supermarket profit is one cent on a dollar of sales, how much dollar volume of sales is necessary to pay for one page of advertising?

- Find out the cost of radio and TV ads.

- Inventory foods at home or in local stores. How many did not exist a few years ago?

- Ask a local supermarket manager how many different products are on his shelves.

- Shopping carts with seats for young children encourage mothers to shop with their youngsters, who may whine to get their favorite cereal, while mother knows that another may be better.

SOURCE

"Seventeen to twenty percent of all advertising in the U.S. is for foods and food products...a total of about 3 billion dollars." Ads Add Up, filmstrip, Michigan State University

Average costs for a page is from $350 to $750, depending on circulation.

Brand name foods usually cost more than store brands because of the cost of ads to keep the name in the public eye and ear. However, the demand created by advertising allows mass production, lowering costs.

"Most modern supermarkets stock 8,000 to 10,000 different items, compared to 3,000 just two decades ago." 1969 Yearbook of Agriculture: "Food For Us All."

"Shopping carts with seats for young children encourage mothers to shop with their youngsters, who may whine to get their favorite cereal, while mother knows that another may be better."
UNDERSTANDINGS

- Advertisers may appeal to emotion, which may not coincide with the most logical or economical choice.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Have students interview small children about ads, singing, visual, etc., they know by heart from TV children's shows.

- Collect samples of ads which appeal to our emotional needs for love, acceptance, fear of rejection, desire for beauty, and status.

- View and discuss filmstrip "Ads Add Up - a Look at Food Advertising," from local County Extension Office.

SOURCE

- Many low-income homemakers repeatedly pick brand name products over equal quality but lower-priced store brands because to do so makes them feel more important. Like the upper income families, they assume "all" buy the highly advertised product.

WHAT ARE SOME DECEPTIVE FOOD SELLING PRACTICES?

1. Displays at ends of food aisles appear to be low-price "specials."
2. Use of large or colorful signs that have words connoting low price or special price to push certain items; (e.g. "now only", "check this", etc.)
3. Placement of high profit items on shelves at eye level, better buys on harder to see, or reach, level
4. Not having sale items readily available - shelf

- Ask students to survey parents about ways they have been deceived in food shopping.
- Send student observers to local supermarkets to observe placement of displays of "specials." Those class members who work in markets should note number and placement of colorful signs and displays. Note number that are really special, compared to those at regular or higher prices.

- Local consumer protection office staff can talk about deceptive practices they have been called in to investigate.

- School psychologist and art teacher might talk on how bright colors and strong positive connotation words push us subconsciously to buy.

- Supermarket manager or customer relations representative can give store policy in regard to sale items. It may also be published in ads.

- Excess packaging, bag inside box, etc., can appear to contain more than real weight reveals.
UNDERTANDINGS

empty, must ask for product; not offering "rain check" for missing specials

5. Odd size and shape of packages to make cost comparison difficult.

6. Use of trading stamps given "free" with purchases. Extra stamps with some items, usually those on sale at other stores.

7. Stores in poor neighborhoods often have poorer quality of meats, produce, dairy items than same chain store in richer neighborhood.

8. "Free" gifts or "low-cost" household goods, available with minimum purchase of other goods; shopper gets hooked into completing collection even though she may not need it.

9. Freezer deals - offering unbelievably low prices on meat or varieties of food to keep your "free" freezer full.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

Find out the policy of local supermarkets in regard to sale items not available. Is an article of equal value substituted or a rain check given?

Collect samples of odd sized or shaped boxes; note weight or contents.

Compare prices on some standard items in stores offering "free" trading stamps with those not giving them.

Survey stores in both poor and better neighborhoods, checking for cleanliness, quality, choices available.

Check area supermarkets to see what "free" offers are being made; e.g., dishes, silverware, towels, recipe sets. Check quality, total price to consumer.

Check newspapers for ads for sides or quarters of beef at unbelievably low prices. Check the fine print for words like "hanging weight" (purchaser is charged for waste), lack of grade (low grade meat offered), mail solicitation for freezer plans.

SOURCE

Purchaser must spend $120 to fill a stamp book worth $3. Most items offered could be bought at discount cheaper than offered in the trading stamp catalog. Trading stamps cost grocer 2 percent of gross sales so he passes the cost on to consumer.

Supermarkets try to keep customer loyalty so they need not spend so much on advertising to get her to come in every week; collecting stamps, sets of dishes, etc., is one device.

Deals that seem to be "too good to be true" usually are. Bait and switch tactics are used for "cheap" sides or quarter of beef. Freezer plans that include "buy now - pay later" involve buyers in high interest charges. Often the consumer does not receive the appealing choices offered when the plan was being sold.
UNDERSTANDINGS

10. Coupons in newspaper, sent in the mail, or in a purchased product with claims to fantastic and unreal "bargains"

11. Incorrect weight on prepackaged foods such as meat or produce

12. "Reduced for Quick Sale" items. These may be overripe produce items, dented cans, damaged packages, or meats several days old in meat case

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Collect samples of coupons. Evaluate when they are worthwhile and when they are not. Compare prices of product that has a coupon with comparable brands.
- Check local supermarkets as to availability of scales for customer use.
- Locate items reduced in price in local supermarkets. How much reduction is given? Does the saving make up for any waste? Is the product safe to use? Find out the dating code for perishables such as meat, dairy, bread items; this may indicate "pull date," the last day product is to be sold, or date it was packed - such as fresh cut meats.

SOURCE

- Coupons may be offered to promote lagging sales in a too high-priced item, promote a new product, or to meet the competition.
- The law requires scales to be available to customers to check weights of meats, etc. Report lack to Bureau of Weights and Measures locally, or Consumer Protection Agency.
- Baked products unsold after the pull date are usually acceptable to most consumers. However meat that is slimy does not taste as good anymore. Milk and cheese have a shelf life about one week after pull date, although the flavor may have deteriorated. Severely dented cans from which the product has leaked or air has entered are unsafe to use. Rusted or bulging cans are unsafe - they may indicate botulism presence.

- Some supermarkets raise the price of an item before it goes on sale so when it is "reduced" it is really back to its original price.
15. High priced "organic" or "natural" food that contains as much pesticide or chemicals as its lower priced "regular" equivalent.

HOW SAFE ARE FOOD ADDITIVES?

- Chemicals have been used in foods since the practice of salting, smoking, and canning of foods was begun.
- Salt is sodium chloride; sugar is made of carbon, hydrogen and oxygen; vinegar is acetic acid.
- Without food additives many of our common foods would not be available or would spoil readily, or be more expensive.
- The FDA provides safety controls on the use of additives. The 1958 Food, Drug and Cosmetic Color Additives Amendment states

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Compare prices on foods in supermarket and same food in "Natural Food" store. What are the price differences? Watch for articles in the press discussing the values of "natural" foods. What do reputable scientists and nutritionists say about the value of "health" foods?
- Enumerate ways of food preservation: canning, drying, freezing, salting, freeze drying, smoking, pickling, fermenting.
- Collect packages listing chemicals in food ingredients. What percent of the total food available has additives added?
- Read and discuss the booklet, "Food Additives, Their Role Today," available through local County Cooperative Extension office.
- "A recent survey turned up a higher rate of pesticide residue in 'organic' food products than in ordinary supermarket foods. (Pesticide residues in air and soil make growing pesticide-free food almost impossible.) National Wildlife Magazine, April 1973

SOURCE

- Many food faddists and proponents of "health" foods and "organic" foods have attempted to scare the public out of use of "chemicals" although allowable in foods. Actually all food is chemical in nature...so is the human body!
- "Food additives improve or protect food in flavor, color, texture, keeping quality and nutritive value". Food Additives - Their Role Today, New York State Cooperative Extension pamphlet.
- Some typical additives and their uses: BHA, BHT - antioxidants (keep food fresh) Calcium or sodium propionate - inhibit...
UNDERSTANDINGS

that no food or color additive causing cancer in any degree in any living species is allowed. Manufacturers must prove the safety of food and color additives prior to use in food.

HOW DO OUR CONSUMER FOOD CHOICES AFFECT OUR ENVIRONMENT?

. Use of some pesticides has reduced bird populations.
. Increasing population demands more food.
. Use of hormones for rapid growth of beef and poultry may be injurious to humans.
. Overfishing in some areas depletes fish population to a point dangerously low for adequate reproduction.
. Need for highways and housing removes farm acreage from production.
. Fertilizers made from petroleum are needed for high yield from croplands.
. Use of disposable and "attractive" containers for food wastes depletes natural resources of metal and paper made from wood.
. Use of plastics in packaging increases need for petroleum.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. View filmstrip, "Food Additives" available through local County Cooperative Extension office.
. List some common problems related to ecology and food:
  - Strong pesticides are needed to keep crop losses low.
  - Air pollution is changing weather patterns - high lead concentrations cause photo-chemical changes in air which give us more cloudy days.
  - National Wildlife Magazine estimates that water pollution killed 41,000,000 fish in 1973.
  - Make a booklet of hints for home-makers to help our ecology and fight the energy crisis:
    e.g.,
    - When cooking prepare two meals at the same time, serve one, freeze one to serve later - this saves fuel.

SOURCE

growth of micro-organisms.
Propylene glycol - prevents drying out of foods.
Gum tragacanth, gum arabic - stabilizers and thickeners.

"To Save the Soil," Naomi Talley, Dial Press, N.Y. 1965

Local utility company may have booklet on energy saving hints or may have speaker.
UNDERSTANDINGS

(Plastics are made from petroleum.)

Preferences for meat proteins require increasing need for land to grow animal feed as well as to raise the animals.

Pet foods use large amounts of food that would otherwise serve human nutrition.

Waste of food in homes puts greater pressure on production of more food.

Many packaging materials are difficult to dispose of.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Plan a meal using only the oven for cooking; e.g., roast meat, baked potatoes, vegetable in casserole, baked dessert.
- Investigate how microwave cooking saves up to 75 percent of electricity normally used in cooking.
- Pressure cookers save fuel, time, and nutrients by cooking in steam under pressure; e.g., chicken or beef soup in under 20 minutes.

- Recycle containers - aluminum, glass, paper bags.
- Write to manufacturers to demand less packaging materials which waste resources and overburden waste disposal areas.
- Discuss the feasibility of home gardening to raise own food and of composting for food wastes.

SOURCE

It takes 8 lb. of grain to yield 1 lb. of beef, two pounds of grain to yield one pound of chicken.

Polyvinyl chloride (PVC), a plastic used in wrapping and packaging, and styrofoam, do not decompose in landfills. When they are disposed of by incinerating, they create a noxious gas, detrimental to our air.
HOW CAN WE CUT THE HIGH COST OF MEAT BUYING?

- Meat takes the largest share of the food dollar. Americans spend about 26 percent of their food dollar for meat.

- Knowing how to identify meat cuts by appearance and name can help the consumer make more intelligent meat choices.

- Knowing how to prepare the less costly cuts of meat in an appetizing manner can satisfy the family's desire for meat at a lower cost.

- Meats that are less well known, or take longer to prepare, are less in demand and therefore cheaper.

- New meat labeling laws help consumers make knowledgeable choices; fancy names like "family steak," "Kansas City steak," which misled consumers

- Collect register tapes. Circle meat purchases, and note what percentage of the total was for meat. (Many non-food items are purchased in the supermarket; subtract these before calculation.)

- Study meat charts to learn names and locations of cuts of meat. Charts are available from National Livestock and Meat Board, 36 South Wabash Avenue; Chicago, Illinois 60603.

- Find some famous or popular recipes of foreign countries that start out with cheaper, less tender cuts of meat such as: Boeuf Bourguignon, Goulash, Sauerbraten, Shish Kebab, Osso Buco, etc.

- Invite a local chef, or Home Economics teacher, to demonstrate a recipe using less popular meats.

- Collect meat labels from fresh meat packages; locate the area each cut comes from on meat chart. Give suggestions for preparation.

- Pamphlets, charts, and visual aids for teachers and students are available from National Livestock and Meat Board. Ask for "Lessons on Meat", and "Teaching About Meat."

- Tough meat can be tenderized either before cooking or by cooking in moist heat, (stewing, braising, pressure cooking). To tenderize meat: use meat tenderizer (an enzyme from papaya), marinate, pound with mallet, score with knife, or grind.

- Labels must tell the type of meat, the wholesale cut it comes from, and the standard retail name. The 1000 former "fancy names" are now reduced to 300 that consumers can recognize.
The shield indicating Government grades on meat is an indicator of quality and tenderness; it is a shield-shaped stamp in purple dye on the side of meat. (Grading is voluntary however, and the shield may not be present on all meats.)


- Visit a meat department of supermarket and find some grade stamps on meats. If none are visible ask meat man to show you wholesale cuts where stamp is shown.

- Grades in descending order are:
  - Prime - mostly sold to restaurants, very tender, well-marbled
  - Choice - juicy, tender, flavorful, most commonly sold and used by household consumers
  - Good - fairly tender, less juicy, very lean.
  - Grades lower than good are not usually sold to the public.

**N.Y.S. DEPT. OF AGR. & MKTS. INSPECTED & PASSED EST. 000**

**U.S. INSPECTED AND PASSED BY DEPARTMENT OF AGRICULTURE EST.38**

**PRODUCED and MARKETED under FEDERAL - STATE QUALITY CONTROL PROGRAM**

**USDA STAMPS**
UNDERSTANDINGS

. The U.S. inspection stamp is required on meat sold in interstate trade; (this includes processed meats such as bacon, franks, etc.)

. Meat that is sold in the same state it is grown or processed may have the inspection stamp of that state, e.g., N.Y.S. stamp, is shaped like the outline of the state.

. Weights on meat packages are shown in decimal parts of a pound.

. Some labels have "pull dates" either in code or readable by consumers.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Have students find the inspection stamp on fresh or packaged meat. On fresh meat it may not be easy to find because only one stamp is required on each wholesale cut.

. Collect labels from meat packages and allow students to become familiar with reading them.

. Collect labels from meat packages and allow students to become familiar with reading them. Check meat labels for "pull dates". Ask the meat manager to explain the code.

SOURCE

. This stamp indicates that the meat came from healthy animals, a clean meat packing plant, and that its employees passed health and sanitary regulations.

"If you have to ask, you can't afford it."
UNDERSTANDINGS

. The demand for steak and roasts keeps the prices high, such as for steak at barbecue time, or roasts in cold weather.

. Beef prices are higher because of the increase in farm labor costs, real estate taxes, farm machinery costs, and total production costs.

. A 1,000 lb. steer yields only a 615 lb. carcass for the packer to sell to a retailer, who trims away another 183 lb. of fat, bone and waste, and ends up with only 432 lbs. of beef for you, the consumer.

CAN UNIT PRICING HELP THE CONSUMER?

. Unit Pricing is a method of indicating price based on weight or volume.

. Customers can determine the best buy by comparing the unit price of several comparable items of different sizes or brands.

. Customers should be able to read unit prices tags, which are located on shelves in stores.

. Collect unit price tags, (supermarket managers may have extra or obsolete ones,) and make a display.

. Have students compare unit prices of the same product in different size packages, different brands of the same food, etc., to find the best buy for the price.

. Discuss: Is price the only comparison to make? e.g., the homemaker who needs only two servings of beans finds the

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Unit Price tags give the following information: Brand and product name; Weight or size of item; Unit price (per. lb. or oz., length, etc.) in orange color; Price you pay for that item; Numbers indicate ordering number and number of row on shelf.

SOURCE

. The loin which yields porterhouse, T-bone, club, and sirloin steaks makes up only 17 percent of the total carcass.

. Supply and demand set the price for beef; when demand raises prices more producers are encouraged to go into production. High prices discourage sales to some consumers, increasing the amount on hand. Both of these factors tend to moderate prices.
UNDERSTANDINGS

Before unit pricing was put into effect the customer had to do mental arithmetic to determine cost per oz., etc.

Package sizes may be misleading the consumer into thinking she's getting more for her money than she is; unit pricing puts an end to this deception.

Large supermarkets in New York must have unit pricing in effect.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

"best price" on a six serving package - what package shall she choose?

Do some mental arithmetic with prices to show how consumers had to struggle to do comparison before unit pricing.

Find packages that look like they hold more than they do - e.g., frozen food boxes of the same face dimension but not as thick, may hold only 9 oz. not 10 oz.

Discuss how unit pricing can help consumers choose between two very different products that serve the same purpose, e.g., cold cereal at about 4¢ per serving, hot cereal about 2¢ per serving, an egg about 6¢ per serving.

Area supermarkets that use unit pricing often have booklets that explain it for their customers.

COMPARE BRANDS
UNDERSTANDINGS

- Unit pricing has met with resistance from some producers.
- Some consumers fail to use unit pricing as an aid in shopping.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Discuss why individual sized serving packaging costs much more: "convenience" packaging materials, steps in production.
- Compare individual sized packages of cereals, or cocoa packets, for price. What should be the consumer's attitude toward waste in packaging material?
- Take a field trip to an area supermarket that uses unit pricing. Have students observe difference in price of some of the most popular foods served in their own homes. If they were shopping which would they choose?

SOURCE

The National Association of Food Chains has opposed attempts by the Federal government and by New York City to require unit pricing on the basis that the costs would be prohibitive. The Association points out that in the long run the consumer would pay more for all products since the costs of the program would be passed on by the store to the shopper. Another objection is that consumers would not use the system. Some stores that have tried the system have a bulletin board or chart somewhere in the store on which unit prices are posted. Opponents claim that shoppers will not take the trouble to go to this central point to check on unit prices. Some shoppers agree this is true.

Finally one of the major objections is that unit pricing puts the stress on quantity rather than on quality. Spokesmen for this point of view say that it is not how much food we buy for our dollars but how good that food is. In short that nutrition and taste are equally or more important than price per unit.

"That's not a snack, that's a day's pay!"
UNIT PRICING

EXAMPLE OF UNIT PRICING

YOU RECEIVE MORE PER PENNY BY PURCHASING THE SMALL SIZE

EXAMPLE OF UNIT PRICING

USE THIS EXAMPLE TO HELP YOU BE A BETTER SHOPPER

EHLER’S BLACK PEPPER

COMPARE SIZE

SWEET LIFE BLACK PEPPER

COMPARE BRAND

129014
WHAT ARE CODED PRICES ON PACKAGES?

- Universal Product Code (UPC) may eliminate obvious prices of food packages; your register tape or receipt will show what the product is, its price, and weight.

- UPC symbols are printed on labels indicating price, size, manufacturer, and nature of contents. These symbols are read by a computer scanner which prints out the information on a tape for the customer.

- There are advantages and disadvantages to the UPC system. It reduces cost to retailers, wholesalers, and manufacturers which will be passed on to consumers; inventory will be constant; checkout will be faster; there will be no human error in checkouts; all products sold in supermarkets must be coded, even non-food items; less labor will be required for pricing resulting in a loss of jobs.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Have class members collect packages that show the UPC symbol - a series of vertical black bars and numbers. Note that each product has a different combination.

- Visit a supermarket that has a UPC system in effect. Watch the checking out process. Interview the manager and check-out clerk, as well as customers, for their opinions about UPC.

- Discuss the Pros and Cons of the UPC system.

SOURCE

The Universal Product Code is a mechanized device for pricing and totaling a customer's order. (See sample showing vertical bars on Green Giant label below.) These bars are scanned by a machine which then prints the price and totals the order.

The customer places her choices on a checkout conveyor, the packer places the UPC symbol on each package over the scanner which picks up the code and records it for inventory purposes and types it out on a sales-slip; meanwhile the packer is bagging the packages.
HOW CAN ONE HOLD DOWN FOOD BILLS?

- It is estimated that Americans now eat one meal in five away from home. Eating at home is almost always cheaper.
- Use house brands instead of nationally advertised brand-name food. The economics are simple: advertising, research, and distribution costs are significantly lower for private-label brands than for national brands. Supermarkets can pass along the savings to customers and still make a hefty profit.
- Make a plan for food shopping and stick to it.
- Make a written shopping list.
- Do comparison shopping.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- All the family can, and should be, involved in suggesting ways to curtail food costs. The suggestions given are but a few that might be developed by a family or class project. Make your own list. Hold an assembly or write an article for the school or community newspaper of further suggested ideas.
- In building your list use all the resources available: family; friends; store managers; newspaper, radio and television presentations, Government bulletins; and your own common sense.
- Major retailers say that food savings of 15 to 20 percent are possible by consistent use of house-brand foods. Comparison shop to see if these figures are true in your neighborhood stores.
- Discuss the food buying habits of the class. Observe parents and other adults. How many:
  - make a written list of needs

SOURCE

- "Family Circle Food Shopping Tips," Family Circle magazine, Cowles Communications.
- Saving money on private-label purchases may be one of the more painless ways to preserve your food dollar. As one industry spokesman puts it, "There's no easier way I know of to save 15 percent on your food bill."
- "House Brands: They Hold Down Food Bills," National Observer, April 7, 1973
- "Sales of private labels have gone up because consumers are becoming aware that the quality they are getting is as good as with national brands but at less money," Esther Peterson, consumer advisor.
- Get the midweek habit of shopping your newspaper's supermarket ad for all it's worth, for this is one of the greatest time and moneysavers. Find out what meats, fresh produce, frozen foods, and staples are on special, then work them into your weekend meals.
SUGGESTED PUPIL AND TEACHER ACTIVITIES

- do comparison shopping of the ads in the newspaper
- resist the temptation to add snacks and deli items while shopping
- keep a record of the amount spent for food
- plan meals in advance to take advantage of seasonal specials and to use up leftovers
- include advertised supermarket specials when they are within your food plan reasonably priced?

SOURCE

. Before you start out, plan your menus completely enough to guide you in making up a shopping list. Jot down items by departments to save steps and avoid forgetting anything.

. One of the greatest wastes of the food dollar comes through impulse buying. Children are notorious for wanting attractive items they see in the food store but adults are not much better.

. Many woman find it wise to shop without husband or children and at a time when they are not hungry.

"Your Food Dollar," Money Management Institute, Household Finance Corporation, Chicago, Illinois

. It is claimed that the specifications for house brands are as high as for national brands.

. Sometimes when storage space is adequate and foods will keep, it may pay to stock up. Gather experiences of parents as to what fortune they have had in quantity buying.

. Conduct a blindfold test of house and national brands. Were pupils able to detect any difference in quality?
Group Activity 7: COMPARE NATIONAL AND STORE BRANDS

Compare the national brands (name brands) and store brands of the items on this list or others for which you commonly shop. Write down the price of the highest quality store and of a national brand, and make sure that both are otherwise identical as to size of container, weight, and type of merchandise.

Subtract the less costly brand from the higher priced and write the difference in the right hand column.

You may not find national brands and store brands in the given sizes for some items. In those cases, try to match other sizes.

<table>
<thead>
<tr>
<th>Item and quantity</th>
<th>Price of brand</th>
<th>Difference in price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flour, 5 pound bag</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Store Brand</td>
<td></td>
</tr>
<tr>
<td>Vinegar, 1 quart bottle (32 oz.)</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Store Brand</td>
<td></td>
</tr>
<tr>
<td>Shortening, 3 pound can (48 oz.)</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Store Brand</td>
<td></td>
</tr>
<tr>
<td>Salad oil, 1 quart bottle (32 oz.)</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Store Brand</td>
<td></td>
</tr>
<tr>
<td>Margarine, 1 pound (16 oz.)</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Store Brand</td>
<td></td>
</tr>
<tr>
<td>Tuna fish in vegetable oil, 7-1/2 oz. can</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td>Peanut butter, 3 pound jar (48 oz.)</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td>Spaghetti, 3 pounds (48 oz.)</td>
<td>National Brand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Store Brand</td>
<td></td>
</tr>
</tbody>
</table>

from "Be a Better Shopper" - Cooperative Extension Service
UNDERSTANDINGS

. Most house brands (chain store private labels) compare in quality with nationally advertised brands.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Discuss the following quotation: "We've been led to think that there are great differences between the quality of brand-name products and house brands. But the consumer is beginning to find out this isn't so. Unit-pricing zeroes the consumer's attention in on the differences in prices between different brands. He begins to ask whether he's really getting that much more for his money with the more expensive name brands."

. Ask pupils to check on food waste in the home and the school cafeteria. Estimate what percentage of food is wasted. In addition to obvious waste, such as food thrown in the garbage can, is there waste of valuable nutrients such as liquids poured from cooked vegetables, discarded potato skins, meat fats, or juices? Is there waste of food due to failure to keep it refrigerated or covered?

. Store food properly. Plan to use leftovers creatively, before they go bad and must be thrown away.

. One authority claims that seven percent of our food is wasted.

SOURCE

"When a supermarket chain goes out to buy a private label, it establishes specifications as to what the quality must be—grade, size, sugar content, shape, chemical composition, degree of protein, and so on. These are carefully described to make sure the quality is comparable to the brands on the market that the chain wants to compete with. It must be of comparable quality or it can't compete."

Clarence Adamy, president of the National Association of Food Chains
UNDERSTANDINGS

. If possible, grow some of your own food.
.
. Gardening is important as
  - a satisfying hobby
  - a means of saving money
  - a boon to ecology

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Even in the cities, ingenious people have found places to grow a few plants. People are planting carrots around garages, lettuce in tubs on fire escapes, beets and cabbage in boxes, and chives and herbs indoors. Vacant lots are being raised or loaned for communal planting. Investigate the possibilities for a garden in your area. If no land is available contact the municipal authorities to see what can be done to provide garden plots for those who wish to have them.
.
. Consider the ecological advantage of composting wastes for garden use. One of the important outcomes of the ecological movement has been the renewed interest in gardening.
.
. Consider cooperative buying.
.
. In Scandanavian countries consumer cooperatives are very popular and quite successful.
.
. Cooperative buying in quantities may permit substantial savings to members.
.
. Cooperative buying requires group action for the

SOURCE

. Estimates of the amount saved by having even a small garden range from $250 to $500.

"How to Fight Inflation with Your Garden," First National City Bank, 399 Park Avenue, New York, N.Y. 10022

. "You live in a single room, an apartment, or somewhere with no land? You can still grow some vegetables and herbs. All you need is a window-sill, or balcony, doorstep, fire escape or, in a total crunch, a corner where you can install fluorescent lights. Plants can be started year round under 40-watt fluorescent tubes, which should be six to eight inches above the seedlings. Soil pellets are the simplest and easiest starters and are available from garden supply stores and mail order houses," Consumer Views, National City Bank.

. The object of a cooperative is to provide its members the products they need at the lowest possible prices. Usually a group organizes and assigns tasks. A location for a store is secured, arrangements are made for members to purchase goods from the farmers' or wholesale market, orders are taken, and the group is in business.
UNDERSTANDINGS

Cooperatives have had only limited success in the United States. At times of high food costs they tend to appear, but as prices drop members often become less interested.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- What might be the disadvantages of cooperative buying? (Requires group action and responsibility. If any members of the group fail to perform their responsibilities, others will suffer; choice may be more limited than from conventional outlets; absence of services such as sorting, bagging, and delivery may be frustrating.)

- Consider ways in which the meat bill could be cut. Among the ways suggested are these:
  - Use meat substitute (soy beans, fish, eggs, cereals, etc.)
  - Cheaper cuts are just as nutritious, and may be made as flavorful by competent cooks.
  - When possible, be your own meat cutter. Chickens may be bought uncut or cut up. Savings up to 4¢ per pound may be made by cutting the chicken oneself.

- Consider cutting the meat bill.

- Meat takes a larger share of the food dollar than any other item. If adequate and appealing substitutes can be found, a substantial savings can be made.

- You can cut your food bill 20 percent by using lower-priced items in your menu.

- Performing some services can save money.

- Probably most important of all, no matter what you are buying, is to be an avid label reader, for here is your outside look at what's inside. Comparing weight, contents, and price before deciding...

SOURCE

- Common problems are inability to agree on the kind or quality of items to be handled, failure of those responsible to purchase or tend the store to perform their duties, difficulty of some members to plan ahead, limited hours when store is open.

- Americans probably eat more meat per capita than any other nation. As incomes rise the amount of meat consumed rises too, and so do prices.

- Many stores now sell meat extenders, items which can be added to meat. Among the popular items is a soybean preparation which when mixed with hamburger increases the quantity to be served with (it is claimed) no loss of nutrition or appetizing value.

- "Family Fare, A Guide To Good Nutrition," Consumer Product Information, Public Documents Distribution Center, Pueblo, Colorado 81009
which product best suits your need is the secret to your greatest savings in food costs.

. It's the cost per serving, not the cost per pound.

. Check with the family cook to see what types of meat are the lowest cost per serving. What types of meat does she avoid? How much use is made of quantity buying? How much use is made of "specials"?

. Check sales of two, three, or five items for 0.00c. They usually mean big savings if the foods are ones your family likes. Mix-and-match offers let you pick all of one kind or a combination of several.

. Learn to recognize a "feature special" and take advantage of it. This is a product on which your supermarket lowers the price to coax you into the store. If it's an item you use often, or it keeps well and you have storage space, it is a good food investment.

"24 payments should take care of the roast."
UNDERSTANDINGS

Learn to cook well. By learning techniques of proper and creative cookery you can eliminate mistakes that waste food, and eat nutritious and delicious meals at lower cost.

Keep the store's costs down by being a cooperative shopper. Higher operating costs are passed on to the customer.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

Have students survey the possible courses in cooking that are available locally. Most high schools offer courses to students, some offer adult education courses at night. You can even learn to cook by watching TV. Cookbooks for beginners can be a "do-it-yourself" course.

Have students think of thoughtless customer habits that cost the store money, such as:
- Squeezing produce items to find the ripeness desired which creates bruises and makes food spoil faster
- Leaving an item in one aisle that came from another aisle; the stock boy wastes time putting items back; frozen or refrigerated items may spoil
- Taking shopping carts home
- Opening containers or jars to check freshness or flavor; the opened package is not saleable.
- Shoplifting items from the store. It is estimated that shoplifted items add to the store costs. These costs must be

SOURCE

Local high school
Continuing education classes
Home Economics demonstrations
Family Circle, Better Homes and Gardens, and other periodicals feature articles on cookery.

A shopping cart costs between $35 and $40. The loss must be made up by other consumers.
"The Irréponsible Consumer," a slide set from University of Iowa, shows how the thoughtless consumer can raise food costs for everyone.

39
<table>
<thead>
<tr>
<th>UNDERSTANDINGS</th>
<th>SUGGESTED PUPIL AND TEACHER ACTIVITIES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shop the most suitable stores for the items you want. Sometimes the cost in fuel and time doesn't warrant shopping around.</td>
<td>This practice adds 5 percent to consumer costs. Have students add to this list of ways in which store costs are increased, from personal experience or by interviewing store personnel.</td>
<td>Made up by purchases of other consumers.</td>
</tr>
<tr>
<td>Know how to pick foods that will meet your family's needs and preferences.</td>
<td>Make an imaginary shopping trip to get the best buys at every store in your area. Calculate the gas and time required to buy the bargains, then figure how much more it would cost to shop in just one store. Evaluate whether or not shopping around is worth it.</td>
<td>Security devices and personnel raise operating costs which are passed on to the consumer.</td>
</tr>
<tr>
<td>Use cash rather than a check when you shop.</td>
<td>Have students pick a food or group of foods that is frequently purchased and give some buying hints to the class. Use as resources Government pamphlets and books.</td>
<td>Some consumers note that if they find the one store that has most of the items they usually buy at reasonable prices, it pays them to shop just that one store.</td>
</tr>
<tr>
<td>Resist the temptation to touch an item unless you plan to buy it.</td>
<td>View slide sets on food purchasing available from Cooperative Extension, &quot;Be a Better Shopper&quot; and &quot;Cut Food Costs.&quot;</td>
<td>Two inexpensive paperbacks on food buying are &quot;How to Shop for Food,&quot; Jean Rainey, Barnes &amp; Noble Books, N. Y. 95¢; &quot;Supermarket Counter Power,&quot; Adeline Garner Shell, Warner Paperback Library, N. Y. $1.25.</td>
</tr>
<tr>
<td></td>
<td>A filmstrip on food and a comprehensive booklet is available from Household Finance Corporation, Money Management Institute, Prudential Plaza, Chicago, Illinois</td>
<td>Some people feel that a check isn't really &quot;money&quot; and its easier to rationalize spending a little more if you don't see the cash.</td>
</tr>
<tr>
<td></td>
<td>According to Nancy Weaver, New Mexico Home Economist, the odds are 19 out of 20 that if you pick something up, you'll end up buying it. From, &quot;Seventy-Four Ways to Eat Better and Spend</td>
<td></td>
</tr>
</tbody>
</table>
UNDERSTANDINGS

Check the consumption of soft drinks. Americans annually consume an average of 30.3 gallons of soft drinks, compared to 25.3 gallons of milk, and only five gallons of fruit juice.

Have students compare the contents of soft drinks. Most soft drinks are largely carbonated water, sugar, artificial color and flavor. Fruit juice, on the other hand, is made of natural ingredients, and contains fruit sugar, vitamins and minerals. Compare cost and be surprised!

Take as few trips to the store as possible, shop as quickly as you can, while doing a reasonable job of comparison shopping; extra time puts temptation in your way.

Most buying decisions in the food store are "impulse" purchases.

Have students interview parents about their "impulse" buying patterns.

Decide on your spending priorities. Some families put good food high on the list of priorities for their goals; they put their resources toward achieving fine meals; other families do not feel that food is that important to them.

Have students consider comparing cost and be surprised!

According to Betty Furness, Consumer Aide in New York City, for every minute over 30 minutes spent in the supermarket you spend 50 cents.

"Nearly 7 out of 10 supermarket purchases result from some decision made in the store. ...49.9% were unplanned or impulse purchases. Total store decisions amounted to 69.9% of purchases," from the 7th DuPont Consumer Buying Habits Study.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

60601. The title of the filmstrip is "Your Food Dollar."

SOURCE

UNDERSTANDINGS

SUGGESTED PUPIL AND TEACHER ACTIVITIES

for food. One 5 person family spends $430 per month.

- Have students use the "Reader's Guide to Periodical Literature," for recent articles about food prices, or "how to economize" articles.

- Have pupils subtract from the list in the source column those items which are non-food. Discuss the question of whether our food bills are as high as we think they are if items other than food are not charged to the food budget.

<table>
<thead>
<tr>
<th>HOW A CUSTOMER SPENDS $100 IN A SUPERMARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEAT</td>
</tr>
<tr>
<td>PRODUCE</td>
</tr>
<tr>
<td>DAIRY</td>
</tr>
<tr>
<td>ICE CREAM</td>
</tr>
<tr>
<td>FROZEN FOODS</td>
</tr>
<tr>
<td>BAKERY</td>
</tr>
<tr>
<td>Baby Foods</td>
</tr>
<tr>
<td>Baking Mixes</td>
</tr>
<tr>
<td>Baking Needs</td>
</tr>
<tr>
<td>Beer, Wine, Ale</td>
</tr>
<tr>
<td>Candy, Chewing Gum</td>
</tr>
<tr>
<td>Cereals</td>
</tr>
<tr>
<td>Cigarettes, Smoking Supplies</td>
</tr>
<tr>
<td>Coffee, Instant</td>
</tr>
<tr>
<td>Coffee, Regular</td>
</tr>
<tr>
<td>Condiments</td>
</tr>
<tr>
<td>Cookies</td>
</tr>
<tr>
<td>Crackers, Toast Prod.</td>
</tr>
<tr>
<td>Desserts</td>
</tr>
<tr>
<td>Diet Meals, Cookies</td>
</tr>
<tr>
<td>Fish, Canned</td>
</tr>
<tr>
<td>Fruit, Canned</td>
</tr>
<tr>
<td>Fruit, Dried</td>
</tr>
<tr>
<td>General Merchandise</td>
</tr>
<tr>
<td>Health &amp; Beauty Aids</td>
</tr>
<tr>
<td>Household Cleaning Compounds</td>
</tr>
<tr>
<td>Household Supplies</td>
</tr>
<tr>
<td>Jams, Jellies, Spreads</td>
</tr>
<tr>
<td>Juices &amp; Drinks, Veg., Fruit</td>
</tr>
<tr>
<td>Laundry Supplies</td>
</tr>
<tr>
<td>Macaroni Products, Dry</td>
</tr>
<tr>
<td>Meat &amp; Prepared Food</td>
</tr>
<tr>
<td>Milk, Canned &amp; Dry</td>
</tr>
<tr>
<td>Paper Products</td>
</tr>
<tr>
<td>Pet Foods</td>
</tr>
<tr>
<td>Salad Dressings</td>
</tr>
<tr>
<td>Shortening &amp; Oils</td>
</tr>
<tr>
<td>Snacks</td>
</tr>
<tr>
<td>Soaps &amp; Detergents</td>
</tr>
<tr>
<td>Soft Drinks</td>
</tr>
<tr>
<td>Soup, Canned &amp; Dry</td>
</tr>
<tr>
<td>Sugar</td>
</tr>
<tr>
<td>Tea</td>
</tr>
<tr>
<td>Vegetables, Canned</td>
</tr>
<tr>
<td>Vegetables, Dry</td>
</tr>
</tbody>
</table>

Every Price Will Go Up
(Declaring value preferences)*

One way to introduce values that need to be clarified in a non-threatening and stimulating manner is through the use of value sheets. Learners are presented with a value issue and its alternatives. From that, the learners are encouraged to make choices and describe actions they would take.

The following activity is an example of a value sheet. The questions have been designed to help the learners clarify their values and declare value preferences.

Because valuing is a personal and individual matter, each learner writes his answers on a value sheet by himself. Later these can be shared with others or used as a basis for group discussion.

(You will need to make a sign or poster that resembles the one below, "EVERY PRICE IN OUR STORE WILL GO UP ON MONDAY." Prepare a handout sheet of the questions for each learner.)

EVERY PRICE
IN OUR STORE WILL GO UP
MONDAY

PROTECTION DEVICES AND OTHER SECURITY MEASURES HAVE FAILED TO STOP SHOPLIFTING SO WE HAVE ADDED THE COST OF LAST MONTHS' LOSSES TO EVERY ITEM IN THE STORE.

1. What are your reactions to this ad?
2. What emotions do you feel? Are these emotions strong?
3. Under what circumstances would you take something home without paying for it?
   - If you really wanted something and didn't have the money for it
   - If it was food and your family was starving
   - Never, under any circumstances
   - If the sales clerk put something in your bag with other merchandise and didn't add the price to your bill
   - Other reasons.
4. Do you think someone could take something without ever knowing he had?

5. How would you feel if a friend took something while shopping with you?

6. What would you do if you saw someone take something from a store without paying for it?

7. What would you do if you saw someone taking something out of your mailbox?

8. Would you take part in a campaign to decrease shoplifting?

9. What alternatives other than campaigns are there to decrease shoplifting?

10. How would you feel if the cost of shoplifting were passed on to consumers as it was in this situation?
Table 1.--Cost of 3 ounces of cooked lean from specified meat, poultry, and fish at February 1973 prices

<table>
<thead>
<tr>
<th>Food</th>
<th>Retail price per pound 1/</th>
<th>Part of pound for 3 ounces of cooked lean</th>
<th>Cost of 3 ounces of cooked lean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamburger</td>
<td>0.84</td>
<td>.26</td>
<td>0.22</td>
</tr>
<tr>
<td>Chicken, whole, ready-to-cook</td>
<td>.46</td>
<td>.48</td>
<td>.22</td>
</tr>
<tr>
<td>Turkey, ready-to-cook</td>
<td>.57</td>
<td>.40</td>
<td>.23</td>
</tr>
<tr>
<td>Beef liver</td>
<td>.84</td>
<td>.27</td>
<td>.23</td>
</tr>
<tr>
<td>Ocean perch, fillet, frozen</td>
<td>.90</td>
<td>.29</td>
<td>.26</td>
</tr>
<tr>
<td>Chicken breasts</td>
<td>.84</td>
<td>.35</td>
<td>.30</td>
</tr>
<tr>
<td>Pork, picnic</td>
<td>.69</td>
<td>.46</td>
<td>.32</td>
</tr>
<tr>
<td>Ham, whole</td>
<td>.91</td>
<td>.35</td>
<td>.32</td>
</tr>
<tr>
<td>Haddock, fillet, frozen</td>
<td>1.20</td>
<td>.29</td>
<td>.35</td>
</tr>
<tr>
<td>Ham, canned</td>
<td>1.39</td>
<td>.25</td>
<td>.35</td>
</tr>
<tr>
<td>Chuck roast of beef, bone in</td>
<td>.96</td>
<td>.45</td>
<td>.43</td>
</tr>
<tr>
<td>Pork loin roast</td>
<td>1.06</td>
<td>.50</td>
<td>.53</td>
</tr>
<tr>
<td>Rump roast of beef, boned</td>
<td>1.64</td>
<td>.34</td>
<td>.56</td>
</tr>
<tr>
<td>Round beefsteak</td>
<td>1.68</td>
<td>.34</td>
<td>.57</td>
</tr>
<tr>
<td>Rib roast of beef</td>
<td>1.42</td>
<td>.45</td>
<td>.64</td>
</tr>
<tr>
<td>Pork chops, center</td>
<td>1.48</td>
<td>.45</td>
<td>.66</td>
</tr>
<tr>
<td>Sirloin beefsteak</td>
<td>1.68</td>
<td>.43</td>
<td>.72</td>
</tr>
<tr>
<td>Veal cutlets</td>
<td>2.96</td>
<td>.25</td>
<td>.74</td>
</tr>
<tr>
<td>Lamb chops, loin</td>
<td>2.18</td>
<td>.46</td>
<td>1.00</td>
</tr>
<tr>
<td>Porterhouse beefsteak</td>
<td>1.97</td>
<td>.52</td>
<td>1.02</td>
</tr>
</tbody>
</table>


The chart shows how the eating patterns of the average American changed between 1952 and 1972. Americans almost doubled their consumption of beef. At the same time many other sources of protein showed a decline in usage. The latest estimates for 1973 show per capita consumption of all meats at some 178 pounds, including about 111 pounds of beef.


All weights and percentages rounded.
Table 2.—Cost of 20 grams of protein from specified meats and meat alternates at February 1973 prices

<table>
<thead>
<tr>
<th>Food</th>
<th>Market unit</th>
<th>Price per market unit</th>
<th>Part of market unit to give 20 grams of protein</th>
<th>Cost of 20 grams of protein</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry beans</td>
<td>lb.</td>
<td>$.26</td>
<td>.24</td>
<td>.06</td>
</tr>
<tr>
<td>Peanut butter</td>
<td>12 oz.</td>
<td>.51</td>
<td>.23</td>
<td>.12</td>
</tr>
<tr>
<td>Chicken, whole, ready-to-cook</td>
<td>lb.</td>
<td>.46</td>
<td>.37</td>
<td>.17</td>
</tr>
<tr>
<td>Bean soup, canned</td>
<td>1 l 1/2 oz.</td>
<td>.17</td>
<td>.96</td>
<td>.17</td>
</tr>
<tr>
<td>Milk, whole fluid</td>
<td>1/2 gal.</td>
<td>.62</td>
<td>.29</td>
<td>.18 3/</td>
</tr>
<tr>
<td>Eggs, large</td>
<td>dozen</td>
<td>.69</td>
<td>.26</td>
<td>.18</td>
</tr>
<tr>
<td>Hamburger</td>
<td>lb.</td>
<td>.84</td>
<td>.24</td>
<td>.20</td>
</tr>
<tr>
<td>Beef liver</td>
<td>lb.</td>
<td>.84</td>
<td>.24</td>
<td>.20</td>
</tr>
<tr>
<td>Turkey, ready-to-cook</td>
<td>lb.</td>
<td>.97</td>
<td>.35</td>
<td>.20</td>
</tr>
<tr>
<td>Sardines, canned</td>
<td>4 oz.</td>
<td>.22</td>
<td>.94</td>
<td>.21</td>
</tr>
<tr>
<td>Tuna fish, canned</td>
<td>6 1/2 oz.</td>
<td>.47</td>
<td>.44</td>
<td>.21</td>
</tr>
<tr>
<td>American process cheese</td>
<td>8 oz.</td>
<td>.56</td>
<td>.38</td>
<td>.21</td>
</tr>
<tr>
<td>Pork, picnic</td>
<td>lb.</td>
<td>.69</td>
<td>.32</td>
<td>.22</td>
</tr>
<tr>
<td>Chicken breasts</td>
<td>lb.</td>
<td>.84</td>
<td>.26</td>
<td>.22</td>
</tr>
<tr>
<td>Ham, whole</td>
<td>lb.</td>
<td>.91</td>
<td>.29</td>
<td>.26</td>
</tr>
<tr>
<td>Ocean perch, fillet, frozen</td>
<td>lb.</td>
<td>.95</td>
<td>.36</td>
<td>.33</td>
</tr>
<tr>
<td>Liverwurst</td>
<td>8 oz.</td>
<td>.58</td>
<td>.60</td>
<td>.34</td>
</tr>
<tr>
<td>Chuck roast of beef, bone in</td>
<td>lb.</td>
<td>.96</td>
<td>.35</td>
<td>.34</td>
</tr>
<tr>
<td>Ham, canned</td>
<td>lb.</td>
<td>1.39</td>
<td>.24</td>
<td>.34</td>
</tr>
<tr>
<td>Pork loin roast</td>
<td>lb.</td>
<td>1.06</td>
<td>.33</td>
<td>.35</td>
</tr>
<tr>
<td>Frankfurters</td>
<td>lb.</td>
<td>.96</td>
<td>.36</td>
<td>.35</td>
</tr>
<tr>
<td>Round beefsteak</td>
<td>lb.</td>
<td>1.68</td>
<td>.22</td>
<td>.37</td>
</tr>
<tr>
<td>Salami</td>
<td>8 oz.</td>
<td>.76</td>
<td>.50</td>
<td>.38</td>
</tr>
<tr>
<td>Rump roast of beef, boned</td>
<td>lb.</td>
<td>1.64</td>
<td>.26</td>
<td>.42</td>
</tr>
<tr>
<td>Haddock, fillet, frozen</td>
<td>1 lb.</td>
<td>1.20</td>
<td>.35</td>
<td>.42</td>
</tr>
<tr>
<td>Sirloin beefsteak</td>
<td>lb.</td>
<td>1.68</td>
<td>.23</td>
<td>.47</td>
</tr>
<tr>
<td>Rib roast of beef</td>
<td>lb.</td>
<td>1.42</td>
<td>.33</td>
<td>.47</td>
</tr>
<tr>
<td>Bologna</td>
<td>8 oz.</td>
<td>.64</td>
<td>.73</td>
<td>.47</td>
</tr>
<tr>
<td>Pork sausage</td>
<td>lb.</td>
<td>.95</td>
<td>.52</td>
<td>.49</td>
</tr>
<tr>
<td>Pork chops, center</td>
<td>lb.</td>
<td>1.48</td>
<td>.35</td>
<td>.51</td>
</tr>
<tr>
<td>Bacon, sliced</td>
<td>lb.</td>
<td>1.15</td>
<td>.52</td>
<td>.60</td>
</tr>
<tr>
<td>Veal cutlets</td>
<td>lb.</td>
<td>2.96</td>
<td>.21</td>
<td>.63</td>
</tr>
<tr>
<td>Porterhouse beefsteak</td>
<td>lb.</td>
<td>1.97</td>
<td>.34</td>
<td>.66</td>
</tr>
<tr>
<td>Lamb chops, loin</td>
<td>lb.</td>
<td>2.18</td>
<td>.31</td>
<td>.67</td>
</tr>
</tbody>
</table>


2/ One-third of the daily amount recommended for a 20-year-old man. Assumes that all meat, including cooked fat, is eaten.

3/ Although milk is not used to replace meat in meals, it is an economical source of good quality protein. Protein from nonfat dry milk costs less than half as much as from whole fluid milk.
UNDERSTANDINGS

. Supermarket "specials" on meat are often "loss leaders" to draw customers into the store.

. Figure the cost per serving rather than the cost per pound when planning meat meals.

. When purchasing large cuts of meat on special, planning for the leftovers can turn potential waste into more savings.

. Learning to cut large pieces of meat yourself can save money; e.g., cutting a whole ham or leg of lamb into smaller pieces will enable you to have expensive cuts at a lower price per pound than if you were to buy them already cut.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Discuss "loss leader" techniques: selling an item at little or no profit, or even taking a loss on it, expecting the customer to purchase other items which do yield a profit to offset the loss.

. Figure the cost of four servings of ground sirloin at $1.59/lb. and sirloin steak at $1.89/lb., or use current prices.

. Have students compare ads of neighborhood stores for meat specials. Buying on a weekly basis, how many meals could be planned around these specials?

. Have a local chef, butcher, or Home Economics teacher demonstrate cutting up a large piece of meat.

. "How to Shop for Food", by Jean Rainey, Barnes and Noble, shows how to cut meat.

SOURCE

. Buying meat when it is on "special" may save the consumer up to 25 percent of the regular cost of that cut, especially on the higher priced cuts.

. Boneless meat with little or no fat yields 4 servings per pound.

. Meat with some bone and fat yields 2 to 3 servings per pound.

. Very bony, or fatty meat may yield only 1 serving per pound.

. Some "specials" look better in the ads than when inspected, due to quality or trimming techniques. Occasionally compare stores in the area of the school for quality comparison.
UNDERSTANDINGS

. Although many consumers believe otherwise, buying beef in wholesale amounts, (by the side or quarter), may not be an economical way to buy meat.

. If a freezer must be purchased to keep the meat, its initial cost, upkeep, and depreciation should be figured in the cost of the "bargain" meat.

. If financing charges are added to the cost of your meat purchase, your savings may be cancelled out.

. Check the dealer's reputation before making an expensive purchase of wholesale meat.

. Purchasing your favorite cuts of meat at your local supermarket as they become "specials" may save your money and give you what you really want, and not tie up a large amount of money, as an alternative to wholesale buying.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Read the article, "Buying Beef by the Side," Changing Times, September 1973, for a way to analyze your real cost in wholesale purchase of beef.

. View the filmstrip and accompanying booklet, "Buying Beef for Your Freezer," from your local Cooperative Extension Office.

. Find ads in local papers for wholesale beef. Try to analyze the ads for deceptive devices such as lack of full information on waste, extra charges for cutting, packaging, or freezing; note especially if the grade of beef is mentioned.

. "Bait and switch" tactics are common among dishonest meat dealers; discuss these techniques.

. Read USDA booklets, "How to Buy Beef Steaks, & Roasts."

SOURCE

. Many consumers erroneously assume that a side or quarter of beef will give them lots of their favorite cuts, like steaks and roasts, only to find out to their dismay that they have a lot of ground meat, stew meat, and soup bones and suet (fat) for which they are paying the same price per pound as the luscious steaks! Most wholesale meats are sold "hanging weight," that is, priced by the pound before trimming of fat and waste is removed; this waste may amount to 25-33 percent.

. See the meat chart on page 25 for an accurate picture of what a side of beef consists of.

. Check with local Consumer Protection Agency about wholesale meat rackets in your area.
UNDERSTANDINGS

. Most Americans eat more protein than they actually require for health.
. The amount of protein can be stretched with "extenders," such as the soybean protein added to ground beef, macaroni, or other starches added to casserole meals.
. Most protein needs can be met by extenders such as the soy protein added to ground beef, macaroni, or other starches added to casserole meals. Storing and cooking meat properly will avoid waste.
. Poultry is usually a good protein buy.
. High quality chicken is indicated by a USDA inspection stamp and Grade A shield.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Show how big 3 oz. is (piece of meat 4" x 2" x ½") by letting each pupil handle a portion this size.
. Have students plan some "vegetarian" meals using non-meat proteins such as beans, cheese, whole grain cereals, milk, and eggs.
. Get sample of ground beef with soy added and have students sample it as hamburgers; (use electric frypan if cooking facilities are not available.) Get reactions from class. Compare cost with regular ground beef.
. Most cookbooks give information about storing and cooking meat. Have students find out proper techniques by reading or interviewing parents, chefs, or home economists.
. Cooking meat at low to moderate heat prevents shrinkage and keeps meat juicy.
. Since whole chicken is usually less expensive than chicken parts, have a butcher, chef, or Home Economics teacher show how to cut up a chicken.

SOURCE

. The RDA for protein is 60 grams. The Basic Four requirement is two 3 oz. servings of meat, fish, poultry, or eggs daily.
. Doctors recommend lowering the amount of saturated fat in the diet. Eating soy protein can increase our protein intake without adding to our fat intake at the same time.
SUGGESTED PUPIL AND UNDERSTANDINGS

HOW CAN INFORMATION ON FOOD LABELS HELP CONSUMERS?

- A label is a "window" to the contents of a can or package of food.
- View the filmstrip, "Labels: Blindfold or Billboard," from your county Cooperative Extension Agency.
- Collect labels from canned, frozen, or packaged foods; dairy, fruits and vegetables, meats, etc; display on bulletin board or pass around to students. Have students examine them and tell whether the label is informative.
- View the filmstrip, "Labels: Blindfold or Billboard," from your county Cooperative Extension Agency.
- Information on labels can help consumers decide which product best suits their needs.
- Discuss how reading labels can help you decide which product meets your needs; e.g., three different kinds of canned tomatoes: "Cut wedges" for salads, "Whole stewed tomatoes" for a side dish; "Tomato pulp and pieces" for sauce or casserole.
- Since grading is optional, many companies avoid making consumers aware of lower quality than Grade A by using different labels or brand names for the lower quality in their line; for example: A&P may

SOURCE

- Although pictures on food labels may not be obviously deceptive, often they are glorified or idealized.
- "The Great American Food Hoax," by Sidney Margolius presents some typical ways in which the American consumer takes too much for granted in the area of food purchasing and gives some hints on becoming a more discerning shopper.
- U.S.D.A. grades exist for canned and frozen fruits and vegetables as follows:
  - U.S. Grade A or fancy-carefully selected for color, tenderness, freedom from defects.
  - Products so graded are most tender, succulent, and flavorful.
UNDERSTANDINGS

- By using grades instead of brand names to choose food you may get better value for your money.

- Indication of grade of canned fruit may be by type of syrup used; Extra Heavy, Heavy, and Light, for Grade A, B, and C respectively. (Recent interest is more natural foods and diet have made some exceptions to this rule, notably the use of fruit juice or nectar in place of sugar syrup.)

- Certain information is required by law on labels.

- Comparison of prices can be made by dividing the weight into the price.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Call their highest quality, "Ann Page," their next grade "Sultana," and their lowest grade, "Iona."

- Have students report on brands of vegetables or fruits they or their parents have found to be of consistently high or low quality.

- Buy several cans or packages of the same food in different grades, open, and compare contents for appearance, texture, taste.

- Discuss how required information can help consumers: e.g., if a consumer has a complaint or a suggestion she can get in touch with the producer. Labels can also be used to find the best buy by comparing price per ounce.

- Secure the pamphlet, "Read the Label," from Cornell University, Ithaca, New York

- Send for informational pamphlets from the National Canners Association, 1133 20th Street, Washington, D.C.

SOURCE

- U.S. Grade B or Extra Standard - excellent quality but not quite as perfect as Grade A. Slightly more mature.
- U.S. Grade C or Standard - not so uniform in color and flavor, more mature.

- F.D.A. requires labels to include the following:
  - product name
  - name and address of manufacturer, packer, or distributor
  - net contents of the container by weight or liquid measure
  - variety, style and packing medium when relevant
  - dietary properties when these are relevant
  - any artificial color, flavor or preservative
Ingredients must be listed in order of predominance.

"Standards of Identity" established by the Government agencies exist for some foods such as jelly, mayonnaise, ice cream, noodles, etc., so that these products do not have to list ingredients.

Compare labels from several brands of beef stew or corned beef hash to determine which has more meat than potatoes; do the same comparison for other popular foods such as canned chicken soup, fruit drinks, etc.
### UNDERSTANDINGS

**WHY IS GOOD NUTRITION SO IMPORTANT?**

- Breakfast is the most important meal of the day.
- Without breakfast the body must work up to 18 hours without proper fuel; this may lead to inefficiency, errors, and even a poor disposition.
- Lowered mental and physical ability may lead to accidents or poor judgment in work or school.

- Girls who are weight conscious may skip breakfast hoping to lose weight, but this habit leads to snacking and over-eating at lunch.

- Proteins and fats have "staying power"; they keep you feeling full and satisfied long after carbohydrates have been digested.

### SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Give students a questionnaire on their breakfast habits to determine how many skip breakfast.
- Have students figure out the number of hours between dinner and lunch.
- Ask students to describe the way they usually feel between 10 a.m. and noon, (before lunch). How many feel hungry, sleepy, edgy, or inattentive? Could it be related to lack of food?
- What kinds of foods are available to hungry students at mid-morning? (Usually snack foods of "empty calories."
- Have students suggest foods they would eat at breakfast such as tuna fish sandwich, hamburger, etc; try to break down food prejudices - some food is better than none.
- View the filmstrips: "Breakfast for B.J.," Pillsbury Co., and view the filmstrip, "Breakfast and the Bright Life," from the Cereal Institute.

### SOURCE

- Typical reasons for skipping breakfast are: "not hungry," "don't have time," "it's boring," "it's fattening," "feel sick when I eat breakfast."
- Studies in France, where breakfast is not popular or consists only of coffee and sweet rolls, indicate high accident rates in traffic and on the job in the morning. Nutritionists suggest that breakfast should include from 1/4 to 1/3 of our daily food needs.

- It's suggested that foods from other meals be eaten in the morning if typical breakfast foods are not appealing, as long as they are nutritious.
### UNDERSTANDINGS

- Good nutrition has a bearing on looking and feeling good.
- Good food choices and poor food choices are available to most of us; by developing attitudes of caring about nutrition we will more often make good choices of things to eat than otherwise.
- When the subject of food and nutrition becomes more interesting and valuable and less dry, some of the learnings may become accepted.

### SUGGESTED PUPIL AND TEACHER ACTIVITIES

- View the TV series "Mulligan Stew" created by and for young people on topics of nutrition. (Tapes may be available from your educational TV channel.)
- Have students try to make up a TV show of their own about nutrition; try it out on a class of younger students.
- Read, "Food is More Than Just Something to Eat," from Nutrition, Pueblo, Colo. 81009.
- Have students create games, puzzles, songs about food and nutrition to create an interest in learning more about it.
- Plan breakfasts that solve some of the problems that were mentioned; e.g., 10-minute breakfast for slowpokes.

### SOURCE

- Good eating habits cannot be forced on teenagers. Their attitude toward nutrition must be drawn out of a desire to look and feel good. Pointing out the relationship between the training table meal of the athlete and his winning performance, or the cover girl's bright, sparkling looks derived from enough fruits, milk, and vegetables does more to change attitudes than lectures that start out, "You must do this..."
- Games about food and nutrition can be found on cereal boxes, in books and magazines for children. Some samples are included in this module.
NUTRIENT NOTES

Nutrients are the materials our bodies need to survive and flourish. There are six nutrients that supply our basic food requirements: carbohydrates, fats, proteins, vitamins, minerals and water. Here’s a chart that briefly outlines their functions and sources:

<table>
<thead>
<tr>
<th>NUTRIENTS:</th>
<th>WHAT THEY DO:</th>
<th>WHERE THEY ARE FOUND:</th>
</tr>
</thead>
<tbody>
<tr>
<td>VITAMINS</td>
<td>Are essential for body growth, for resisting infection and for keeping the body functioning properly. All vitamins needed for good health can be found in food.</td>
<td></td>
</tr>
<tr>
<td>Thiamine or Vitamin B,</td>
<td>Promotes good appetite and digestion. Helps keep nerves in healthy condition. Helps change substances in food into energy for work.</td>
<td>Enriched and whole grain cereals and breads. Milk, cheese. Lean meat and variety meat like livers, heart, kidney.</td>
</tr>
<tr>
<td>Riboflavin or Vitamin B,</td>
<td>Helps cells use oxygen. Helps keep vision clear. Helps keep skin around mouth and nose smooth.</td>
<td>Enriched and whole grain cereals and breads. Milk, cheese. Lean meat and variety meat like livers, heart, kidney.</td>
</tr>
<tr>
<td>Niacin</td>
<td>Helps keep nervous system healthy. Helps body cells use oxygen to produce energy. Helps to maintain the health of the skin, tongue and digestive system.</td>
<td>Enriched and whole grain cereals and breads. Peanuts, peanut butter. Lean meat, poultry, fish. Peas, beans.</td>
</tr>
<tr>
<td>MINERALS</td>
<td>Help build the body structure and help regulate many processes in the body.</td>
<td></td>
</tr>
<tr>
<td>Phosphorous</td>
<td>Helps build bones and teeth. Helps control the rate at which energy is released.</td>
<td>Milk. Meat, fish, poultry, eggs. Cereals.</td>
</tr>
<tr>
<td>Iron</td>
<td>Combines with protein to make hemoglobin, the red substance in the blood that carries oxygen to the cells.</td>
<td>Liver, other meats and eggs. Dried beans and peas. Enriched and whole grain cereals and breads. Dark green leafy vegetables. Molasses.</td>
</tr>
<tr>
<td>WATER</td>
<td>Is also essential, even though many people do not think of it as food. Water helps in carrying the nutrients to cells and waste products away, in building tissues, regulating body temperature, aiding digestion and replacing daily water loss.</td>
<td></td>
</tr>
</tbody>
</table>
INCREASE YOUR CHILD'S LEARNING POWER
Fled Them Right

You've read and been told a million times that proper nutrition is important to your child and to you. You've heard about the 4 Basic Food Groups and the importance of balanced meals. Our cereal boxes have tried to stress the importance of breakfast for years. It's true that we "sell" our cereals as a worthy part of that breakfast, but we point out that you need more than a bowl of cereal to have a nutritionally complete breakfast. We constantly recommend that you have at least some buttered toast, fruit or juice, and a glass of milk with it.

We hope that our small efforts and the efforts of other companies and doctors and nutritionists are effective in helping you understand something

Continued on aide panel

BRAIN BUILDER GAMES

1. BALANCED TRICKS. Two players. Shuffle the cards. Give each player four cards and put the rest in the middle. The idea is to get a Balanced Meal "trick" — four cards that show 1 food from each of the four basic groups. You may ask your opponent for a particular food group, or to make it harder, ask for a particular food in that group. (Ask for "milk" or "cheese" instead of just "Dairy Products"). If he has it, he must give it to you. If not, you draw a card from the middle stack. First player to get rid of all his cards, by making Balanced Meal "tricks," wins.

2. REMEMBER BALANCED MEALS. Put all cards face down. First player turns up 4 cards. If they make up a Balanced Meal (1 card from each of the 4 groups) he removes them and turns up 4 more. If they do not make a Balanced Meal, he turns them down and the next player tries. When board is clean, count your cards. Player with the most cards wins. Anyone who eats Balanced Meals wins too.
INSTANT PLAY AND LEARN GAMES

Continued from back panel

the first letter of the second word.
Then the first letter of the third word. Keep on going until someone "finds" the name of a food from this series of letters. Example: If you were using these directions for your printed matter you'd have T A F G S A F A V O, and you could stop there if you find OATS, a cereal grain.

This Life Cereal Learning Program was prepared for the Quaker Oats Company by BRENT R. EVANS. We would like your reaction to the use of our cereal boxes for this Learning Success project and would be happy to supply you with additional free Instant Play and Learn Games to help develop the Brain Builder skill on this package. Write to:
The Quaker Oats Company
Life Cereal Brent Evans Lesson #9
Merchandise Mart Plaza
Chicago, Illinois 60654

A one-ounce serving (approximately 1/4 cup) of Life supplies the following:

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Minimum Daily Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiamine (Vitamin B,)</td>
<td>1.0 mg. 100%</td>
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<tr>
<td>Riboflavin (Vitamin B.)</td>
<td>1.2 mg. 100%</td>
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<tr>
<td>Niacin</td>
<td>1.0 mg. 100%</td>
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<tr>
<td>Iron</td>
<td>1.5 mg. 159%</td>
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<tr>
<td>Phosphorus</td>
<td>90 mg. 125%</td>
</tr>
<tr>
<td>Calcium</td>
<td>75 mg. 109%</td>
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<tr>
<td><strong>Composition</strong></td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>5.1 gm. 189%</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>20.4 gm. 725%</td>
</tr>
<tr>
<td>Fat</td>
<td>0.6 gm. 27%</td>
</tr>
<tr>
<td>Calories-107</td>
<td></td>
</tr>
</tbody>
</table>
| Additional nutritional information on Quaker products is available on request

INGREDIENTS: Oat flour, sugar, soy protein concentrate, salt, calcium carbonate, sodium phosphate (a phosphorus source and dough conditioner), niacin, iron, artificial coloring, riboflavin, BHA (a preservative), thiamine.

Our guarantee: your money back if not satisfied

Manufactured by
The Quaker Oats Company
Chicago, Ill. 60654, U S A

Continued from back panel

about "Feeding Them Right."
But we're not sure. And that's unfortunate. Because proper nutrition is important. Very important to your child's learning power as well as his growing power. Educators know this as well as doctors and nutritionists. And it starts even before your child is born.

FACTS: A deficiency of protein in the diet of a pregnant woman can limit the brain growth of her child. The human brain attains 70% of its maximum adult weight in the first year of a child's life. This growth is largely a process of protein synthesis.

Vitamins and minerals are needed to make the body process (synthesize) the protein it takes in.

Exploratory research indicates that severe under-nutrition in children 2 to 3 years of age results in lowered intelligence.

Further studies have also shown extremely malnourished children had IQ scores 20 points lower than better nourished children of similar parents. This lower IQ was constant from 1-year olds to 8-year olds.

It is obvious that proper nutrition affects not only the body but also the brain.

So for the next two weeks we ask you to concentrate on learning about nutrition. The Brain Builder on this package will help you with the 4 Basic Food Groups. (And the fact that we've made a game out of it will help your child develop the habit of good nutrition.) Newspapers and magazines carry many columns and articles by recognized nutritional authorities. Look for them. Read them. Learn them. And let your child and your whole family benefit from what you're learning. Make it a habit to "Feed Them Right."

To help, we'll be happy to send you a brief Quaker Quotes Nutrition pamphlet. Just ask for it along with the free Instant Play & Learn Games offered on the opposite side panel of this box.

Remember, the Life Cereal Learning Program can be even more effective in increasing your child's power to learn if he is properly nourished.
FOOD-INTAKE CHART — TO HELP EVALUATE MY DIET

<table>
<thead>
<tr>
<th></th>
<th>BREADS AND CEREALS</th>
<th>MILK AND MILK PRODUCTS</th>
<th>VEGETABLES AND FRUITS</th>
<th>MEAT GROUP</th>
</tr>
</thead>
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<td>Sunday</td>
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<td>2 servings daily</td>
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Wheat Flour Institute. 14 E. Jackson Blvd., Chicago, Ill., 60604.
FOOD BINGO

BY VALERIE M. CHAMBLRLAIN AND JOAN KELLY

This action-oriented game may be used to motivate students, to serve as a "fun-type" review and to add variety to classroom learning activities. The “Food Bingo” card can be duplicated to provide one per student. One basic picture layout can be used for all cards. In other words, the cards may be the same for each student.

Directions For The Students

The purpose of the game is to see who can “Food Bingo” first by drawing an X through pictures that make a vertical, horizontal or diagonal line on the game sheet. Four corners do not count.

Several answers may be correct for each question. The risk or chance involved in the game is to select a correct answer that will enable you to “Food Bingo” first. Write the number corresponding to each question in the block you have chosen to answer that item. You may cross out only one picture for each question. Do not change a number from one block to another after the next question has been read.

If you have filled in all the blocks that answer a particular question, skip that question and wait for the next. At the appropriate time call out “Food Bingo.”

Notes For The Teacher

This game affords an excellent opportunity to add depth to your teaching by doing the following:

1. Repeat each question and ask the student who has “Food Bingoed” first to tell the class which block was crossed out for question number one, two, etc. For each question, ask what the other possible answers would be and discuss all of these.

2. List other answers that would have been correct but were not on the card.

3. Discuss any incorrect answers, explaining why they were not good choices.

If the student who has “Food Bingoed” first has made an incorrect choice, proceed to the question where you had stopped reading. Continue until another student “wins.” It is possible that several students may “Food Bingo” on the same question. This provides added opportunity to enrich your teaching by asking each of the “winners” which response was made to each question and discussing these.

Sample Questions For Use By The Teacher

1. An example of poultry
2. “Nature’s most nearly perfect food”
3. It is said that one of these a day will keep the doctor away!
4. Are most commonly bought by the dozen
5. A citrus fruit rich in Vitamin C
6. Actually a fruit, but served as a vegetable
7. A natural source of Vitamin D
8. Cereal made from the husk of a grain
9. A low calorie food containing approximately 95% water
10. A vegetable that can be bought fresh, frozen, canned or dried
11. Grows underground so it is usually rich in minerals
12. Food that is enriched with Vitamin D
13. Excellent source of a vitamin that will help prevent night blindness
14. One of the best sources of iodine
15. Can occasionally be used as a meat substitute
16. The best source of thiamine
17. Usually enriched with thiamine, riboflavin and niacin
18. The best source of iron
19. The brighter and darker the green color of this food, the more nutritious it is
20. An excellent source of Vitamin A
21. High in calories and low in food value
22. A fat that is a good source of Vitamin A

The authors are associate professors in the Dept. of Home Economics Education, Texas Tech University, Lubbock.

October 1973

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HERE ARE SOME OLD FRIENDS you may remember from your childhood days. Poor things, they need help. You can come to their rescue by filling in the blanks, giving them some much-needed advice about nutrition.

1. Everyone knows that Humpty Dumpty sat on a wall and that he also took a very great fall. But not everyone knows that some of his teeth were knocked out and that his gums didn't heal because he was lacking vitamin _____.

2. Just as Humpty Dumpty fell off the wall, a crooked man went by. The crooked man had just bought a crooked cat which had caught a crooked mouse. Pity them, they all must have had rickets because of insufficient vitamin _____.

3. In a home nearby lived five little pigs. One little pig was going to market, one little pig was staying home, one little pig was having roast beef, and one little pig was having none. The last little pig cried, "Wee, wee, wee!" because he knew he needed _____ so that he could grow as big as the other pigs.

4. Three other pigs in the neighborhood were building homes of straw, furze, and brick. The nervous, fussing, pulling wolf who gave them a hard time was doing so because he needed pork in his diet to get more of the vitamin called _____.

5. Nearby, Jack was making trips up and down the beanstalk to retrieve some of the giant's possessions such as the hen that laid the golden eggs. Jack especially treasured these golden eggs because he knew their rich, yellow yolks contained vitamin _____ that he and his mother needed.

6. In the distant meadow, Little Boy Blue should have been looking after his sheep, but instead he was under the haystack fast asleep. Perhaps Boy Blue couldn't stay awake because he was suffering from anemia due to insufficient _____ in his diet.

7. Walking through the woods, Little Red Riding Hood could be seen on her way to grandmother's house in the basket of food she was bringing to her grandmother. There were several oranges. Red Riding Hood's mother, who packed the oranges in the basket, knew these were a good source of vitamin _____, which grandmother needed every day.

8. Next door to grandmother's house, Little Tommy Tucker was singing for his supper. He usually had white bread and butter. Let's hope his bread was enriched with the B-complex vitamins thiamine, riboflavin, and _____.

9. In the same town, Cinderella lived with her three stepsisters. Cinderella spent most of her days working inside the dark, dingy house. Because she seldom had the opportunity to get outside in the sunshine and since her stepmother did not buy fortified milk, Cinderella was probably lacking sufficient vitamin _____.

10. On a turret near Cinderella's house, Little Miss Muffet sat eating her curds and whey. It's unfortunate that a spider frightened her away because, like all growing girls, she needed _____ from milk that day.

11. The hill behind Miss Muffet's house was the scene of a tragic accident. Jack had fallen down and broken his crown, and Jill had come tumbling after. Both Jack and Jill were severely cut. Let's hope they had been eating foods with sufficient vitamin _____ so their blood would clot quickly.

12. Jack and Jill were fortunate not to live in Old Mother Hubbard's house. When she went to the cupboard, she usually found it bare. There was not a single serving in her cupboard from any of the _____ Groups.

13. Goldilocks knew it would be useless to go into Mother Hubbard's house. Instead, she made a visit to the home of the three bears who had gone out and left their porridge to cool. After eating the little, small, wee bear's porridge, Goldilocks knew that she had eaten one of her four servings from the _____.
14. Even Goldilocks knew that Jack Sprat and his wife had terrible table manners because they licked their platter clean. It was well known that Jack would eat no fat and his wife would eat no lean. Therefore, it can be seen that only Jack was getting enough protein from the ______ Group every day.

15. Little Jack Horner sat in a corner of the Sprat’s house and when he had eaten a plum proudly said, “What a good boy am I.” He knew he had just had one of his four servings from the ______ Group for that day.

16. The pretty maid, who was a friend of Little Jack Horner’s, was walking down the road when she met a handsome stranger who asked, “What is your father, my pretty maid?” She replied that her father was a dairy farmer who helped provide the townspeople with their daily requirement from the ______ Group.

17. The pretty maid’s father often employed the butcher, the baker, and the candlestick maker to churn his butter. They worked very hard to provide the townspeople with this form of ______, which helped to make their foods more appealing. As they churned, they often hummed, “Rub-a-dub-dub, three men in a tub.”

18. The Queen of Hearts used some of this butter to make her tarts. When baking, she frequently sampled her goodies and eventually became as round as her tarts. She would be wise to begin to limit her ______ so she could lose weight and fit into her favorite dress again — the one she planned to wear to the fair.

19. One of the Queen’s subjects was Simple Simon who met a pieman going to the fair. Said Simple Simon to the pieman, “Let me taste your ware.” The pieman replied, “My pies are full of energy and contain lots of starches and sugar. These are forms of ______ which will give you energy to enjoy the fair.”

20. Polly put the kettle on to make her friends some tea. She knew this would contribute to the eight glasses of ______ or its equivalent that they should have every day. However, Sukey took the kettle off and told Polly, “Your friends have gone away. They’ve gone into town to help Humpty Dumpty put himself together again.”
SUGGESTED PUPIL AND TEACHER ACTIVITIES

WHO HAS THE 'ULTIMATE RESPONSIBILITY FOR THE WISE USE OF THE FOOD DOLLAR?

- The family's basic health is directly related to the planning of meals based upon the selection and purchasing of nutritionally sound foods. Thus, the ultimate responsibility rests with the consumer.

- Nutrition is the study of the chemistry of food and its effect on the human body. Nutrients are the substances found in food classified as carbohydrates, fats, proteins, vitamins, and minerals.

- All foods contain calories. The caloric content does not indicate the nutritive quality.

- The commercially prepared dietetic foods are not essentially the best buy for your calorie dollar.

WHAT WOULD YOU CONSIDER WHEN CHOOSING A FOOD STORE?

- The variety of stores available in the shopper's community influences where and what he can purchase.

- Have students visit and list neighborhood community stores selling food items.

- Take a field trip to a local market to evaluate the cost of diet foods vs. regular foods packed in water. Consider fruits, fish, etc.

- Use food models to develop high and low calorie meals with high nutritive content.

- Other Dairy Council materials: Food models and display rack

- Type of stores: Chain store - national, statewide, or large local concern of several stores.

- View dairy council film.

- Conduct a class discussion and reaction to Food Comparison Charts.

- Bring in newspaper clipping and review on nutrition.

- Invite home economics teacher to demonstrate examples of good and bad meals.

- Dairy council materials: films — "The Food Platform" and "What's Good to Eat"

- Food comparison charts 'Count Your Calories by the Company They Keep," pamphlet, Dairy Council

- Other Dairy Council materials:
  - Food models and display rack

SOURCE:
- Dairy council materials: films — "The Food Platform" and "What's Good to Eat"
- Food comparison charts 'Count Your Calories by the Company They Keep," pamphlet, Dairy Council
- Other Dairy Council materials: Food models and display rack
- Type of stores: Chain store - national, statewide, or large local concern of several stores.
UNDERSTANDINGS

Other factors are convenience, services, and sometimes a sense of security in dealing with merchants with whom one is familiar and who speak the same language.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

Discuss the various types of food stores and their characteristics.
- bakery shop
- butcher shop
- chain store
- cooperative
- corner store
- dairy store
- delicatessen
- ethnic shop
- farmers' market
- general store
- health and food store
- take out
- thrift

To what extent do pupils' families tend to shop in the neighborhood? What effect does transportation have on the choice of a market? To what extent do added services such as delivery, taking orders over the phone, check cashing, etc., influence the choice of a market?

SOURCE

Usually located in area of large population. Store sells national and own store brand food. Store employs numerous people, advertises widely, often has consumer panel, uses sales gimmicks (stamps, specials, etc.) to encourage trade. Prices generally lower due to quantity sold.

Cooperative - A store owned by a group who have purchased shares. The owners share responsibilities. Orders and payment usually made in advance. To increase purchasing power, outside people are allowed to buy there. Price generally lower because there is no middle man and buying is done in quantity.

Farmers' Market - Regional market situated near urban center where share holders bring produce for sale. Usually holds early morning sales. Public and business buyers for quantity selling only.
- Road side stands or at farm markets
- Peddlars - sale from truck to housewife

Ethnic - Store selling food items related to the cuisine of a specific nationality,
What help does the government furnish in the field of nutrition?

Because nutrition is a highly technical subject, the government is beginning a program that will result in more informative labeling.

Ask pupils whether they know the nutritional value of foods. Probably most will be able to respond in general terms but few would know what percentage of the U. S. Recommended Daily Allowance each food furnishes.

Discuss "empty calories." Ask pupils to name foods that contain "empty calories" (sugar, for example).

"Next time you're in a supermarket, take a careful look at the labels of the foods you buy — because over the next few months and years, there will be significant changes in the information on the labels.

"The changes will come about because of a Food and Drug Administration program to make food labeling more informative as an aid to better nutrition. The program is designed to provide information that American consumers can use to identify and select nutritious foods.

"Charles C. Edwards, N.D., Commissioner of Food and Drugs, said the program 'will bring about the most significant change in food labeling since food labeling began.'

"The regulations that comprise the program are interrelated. Some parts call for entirely new concepts in food labeling — such as identifying..."
SUGGESTED PUPIL AND TEACHER ACTIVITIES

Newer regulations call for informative labeling which considers U.S. Recommended Daily Allowances rather than on minimum daily allowances of vital nutrients.

- Have pupils bring in examples of nutrition labeling under the old standards and the new.
- Compare the nutritional value of various foods in regard to how they meet Recommended Daily Allowances.
- TV ads frequently picture breakfast foods and extol the nutritional qualities. Compare the nutritional values of the most popular brands.
- Ask pupils to identify new foods that have been developed to improve nutritional quality or to benefit individuals not now

and giving the amounts of nutrients, calories, fat, protein, and vitamins in a food, establishing nutritional guidelines for such classes of foods as frozen dinners, or identifying and giving the percentage by weight of seafood in a seafood cocktail. Other parts are technical changes that update and improve existing FDA regulations."

U.S. Food and Drug Administration. FDA Publication 73-2036.

- Under revised FDA regulations, whenever a food is labeled with nutrition information the label must follow this standard format: "Nutrition Information Per Serving"
  1. Serving size
  2. Servings per container
  3. Caloric content or calories
  4. Protein content or protein
  5. Carbohydrate content or carbohydrate
  6. Fat content or fat
  7. Percentage of U.S. Recommended Daily Allowances (U.S. RDA)

"During the last few years the food industry has been working with the Food and Nutrition Service of the U.S. Department of Agriculture..."
WHAT ARE NEW FOODS?

New foods are food ingredients or components put together in a different composition.

Some scientists refer to these newly formulated foods as "nutrified foods" that carry a definite proportion of necessary nutrients when eaten alone or in combination with other foods that regularly accompany them. For example, a specially formulated cake when eaten with milk will add up to a nutritionally balanced meal.

Can pupils identify some of these "nutrified foods"? (For example, the addition of soybean meal to hamburg meat) Ask a store manager, school cafeteria director, or home economist to help identify other such foods.

Although newly formulated foods are presently in use in government feeding programs, they have been developed with the ultimate goal of being accepted by the general population through the commercial market.

New foods are food ingredients or food components that have been put together in a new form or a new composition, usually to answer a specific need or problem. They may also be familiar foods redesigned to meet new needs.

All formulated foods in the child nutrition programs come from "usual foods, such as flour, fat, eggs,
SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Of what significance are such foods to consumers? Do they save money, add appeal, or enhance nutrition?

. Role play a situation in the future when the family sits down to a meal entirely composed of new foods. How does the family react? Have students comment on the following: Most Americans have developed a taste and desire for beef which is high in saturated fats. Doctors have recommended a general lowering of saturated fat intake. If low fat soy protein can be made to taste like beef, ham, etc., should we consume more of it? Ecologically speaking, the production of meat on the hoof is a waste of resources. We can eliminate one step in the food chain by eating our protein from plant sources.

SOURCE

and nonfat dry milk. No totally synthetic foods that come from non-natural sources are used in the program.

. During the past year specifications have been written for textured vegetable protein, fortified macaroni, cup-cans, and formulated grain-fruit products to include fortified baked products.

. To be acceptable for use by the government, a new food must offer improved nutrition; greater convenience with regard to labor time required for preparation, service, and clean up; improved stability; reduced cost; and greater acceptability to the consumer than its traditional alternate.
WHY HAS THE PRICE OF FOOD GONE UP SO MUCH?

Food prices climbed 20 percent in 1973.

Discuss factors that caused higher food prices in 1973:
- Weather - a wet fall and cold winter meant that farmers could not grow millions of bushels of corn and soybeans, both used for animal feed. Cattle and hogs died too.
- Other acts of God - heavy spring rains and floods delayed planting of many crops.
- Economic Error - devaluation of the dollar encouraged foreign buyers of our produce.

Soybeans rose to $8.60 per bushel from $3.65. The cost of raising beef and hogs rose for the farmer so he passed on the cost. High grade beef and pork comes from livestock which consume large quantities of expensive feed.

A shortened growing season reduces yield.

Our goods become cheaper to foreigners when the dollar is devalued. We have encouraged exports to balance our trade deficit. U.S. foodstuffs are wanted by other countries. These factors encourage the exportation of scarce food supplies.

ONE YEAR'S RISE IN THE PRICE OF GROCERIES

March, 1973 = 100
(figures seasonally adjusted)
UNDERSTANDINGS

In 1963 the average American spent $420 a year for food, in 1973 about $750.

Since 1965 per capita income has risen 62 percent while retail food prices have gone up 33 percent.

It is predicted that food prices will continue to rise at a rate of about 4 percent per year.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Selling of large amounts of wheat to Russia to help alleviate their poor crop harvest without realizing the size of reserves here was small.
- Law of Supply and Demand - increasing world population is increasing the demand on food supply; the supply is not increasing proportionately.
- Higher individual income - increases demand for better and more expensive foods.
- Wage and Price Spiral - wages of farm workers, truckers, and food production workers increased.
- Changes in Humboldt Ocean Current - reduced the fish catch.
- View and discuss the filmstrip: "Our Shrinking Food Dollar" - General Mills, Minneapolis, Minn.

SOURCE

- Food prices are so high that a lady said to her neighbor last week: "If you'll let me fry my eggs in your butter, I'll let you boil your ham in my cabbage."
  Quoted in Jackson, Miss., Baptist Record

- Despite the higher cost of food, Americans still spend a smaller percentage of their income for food than do the peoples of other nations. We spend about 16¢ of the after-tax dollar on food; in Greece and Italy the share going for food is about 37¢; in the United Kingdom it's 24¢; in Bulgaria it's 54¢; in Ghana it's 60¢.

- Industrialized as well as developing nations are raising their standards of eating, thus increasing the demand for foodstuffs.

- The Peruvian anchovy makes up 42 percent of the fish meal fed to poultry and livestock. In 1973 it disappeared, reducing feed sources drastically.

- An increasing world population, as well as continuation of the pressures felt in 1973, point to a continuous rise in food prices.
SUGGESTED PUPIL AND
TEACHER ACTIVITIES

. Discuss the many steps that processed foods go through.

. Does it pay to have someone else do the "maid service" on your food?

. Take an inventory of a typical grocery basket at the local supermarket - how does the food dollar get spent?


. Have students keep a record of everything they consume for three days. Evaluate this intake by comparing to the Basic Four requirements. Have students ask parents to do the same record keeping. Who has the better nutrition? How does the group compare to the national average?

. View and discuss the filmstrip, "Improving Teenage Nutrition," available from United States Department of Agriculture.

SOURCE

. Marketing costs now account for about 70 cents out of each dollar the U.S. consumer spends for food. Such costs include storage, transportation, grading, packaging, and processing.

. "Despite the abundance and variety of food available to them, American consumers are selecting poorer diets today than in the past. A national survey of household food consumption in 1965 found that only 50 percent of families had good diets in that year compared to 60 percent in 1955," U.S.D.A. Agricultural Research Service.

The average American family of four spends $60 a week for food; this is about 16 percent of their disposable income. Proportionately the British, Italians, and Japanese spend about twice as much of their income for food as do Americans.

IN AMERICA, THE LAND OF PLENTY, WHY THINK ABOUT NUTRITION?

. Many Americans are overfed but undernourished; teenagers are among the most poorly nourished group.

. Trends in eating habits contribute to poor nutrition:
   - snacking
   - fad diets to control weight
   - skipping breakfast
   - eating in a hurry
   - eating away from home
   - eating "junk" foods

. Have students ask parents to do the same record keeping. Who has the better nutrition? How does the group compare to the national average?

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WHO GETS THE MONEY WE SPEND FOR FOOD?

. Food goes through many hands before we get it, and each handler gets his share.
. Farm production costs have doubled since 1964. These costs must be passed on to consumers by farmers.
. Many of the foods we buy are processed; e.g., frozen dinners ready to eat, cereals, cake mixes, frozen juices, canned foods, frozen vegetables in sauces.
. The greatest increase in food cost has been in the processing of foods.

Discuss the many steps that food must go through between the planting and the time we eat it at our table:

- farmer
- picker
- processor
- shipper
- wholesaler
- storage agent
- retailer

. Discuss how increased costs of fuel and fertilizer, higher farm worker wages, higher interest rates on loans, increased machinery costs all contribute to higher food costs.

. Take inventory of food shelves at home or in food stores to see the amount of "raw" foods compared to "processed" foods.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. What should be our attitude toward the world's need for food at a time when prices at home are rising so rapidly? It is probable that the needs of other nations will continue to rise. Should we continue to supply other nations at the risk of still higher prices for food in the U.S.A.?

SOURCE

estimates for 1973

Where does your food dollar go?

Better Homes and Gardens
January 1974
WHAT GUIDELINES CAN HELP US CHOOSE A HEALTHFUL DIET?

. Basic Four Food Groups and R.D.A. (recommended daily allowances) are guides to good nutrition.

. Most packaged foods now have nutritional labeling to help plan nutritious meals. Information is given in percentage of RDA that a serving will provide.

. Collect food labels that include nutritional information.

. Plan some nutritious meals that your family would enjoy. Check Basic Four and R.D.A. presence.

. View the slide set, "How Food Affects You" available from local County Cooperative Extension Office.

Read and discuss the pamphlet "A Guide to Good Eating," available from National Dairy Council. This pamphlet shows the Basic Four and discusses need for each in the diet.

Basic Four Recommends:

Daily:

4 servings fruits and vegetables
4 servings breads and cereals
4 servings milk and milk products
2 servings meat, fish, poultry, dry beans, nuts, or eggs

Basic Four Recommends:

R.D.A. levels were re-established in 1968 for nutrient content for all groups in the population. They include:

- Protein
- Vitamin A
- Vitamin B1 Thiamine
- Vitamin B2 Riboflavin
- Vitamin C
- Vitamin D
- Niacin
- Iron

NUTRITION INFORMATION

PER SERVING

SERVING SIZE - ONE LINK
SERVINGS PER CONTAINER - 10

Calories: 110 Cholesterol: 0
Protein: 11g Sodium: 150mg

Percentage of U.S. Recommended Daily Allowance (R.S. RDA)

- Protein: 12%
- Vitamin B3: 15%
- Vitamin B6: 9%
- Thiamin: 7%
- Riboflavin: 3%
- Niacin: 4%

For good nutrition eat a variety of foods.

Important!

To open: peel apart from center.

KEEP REFRIGERATED
## A DAILY FOOD GUIDE

### SERVINGS RECOMMENDED

<table>
<thead>
<tr>
<th>MET GROUP</th>
<th>2 OR MORE</th>
</tr>
</thead>
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<tr>
<td>MEAT GROUP</td>
<td></td>
</tr>
<tr>
<td>MILK GROUP</td>
<td></td>
</tr>
<tr>
<td>CHILD, under 9</td>
<td>2 TO 3</td>
</tr>
<tr>
<td>CHILD, 9 to 12</td>
<td>3 OR MORE</td>
</tr>
<tr>
<td>TEENAGER</td>
<td>4 OR MORE</td>
</tr>
<tr>
<td>ADULT</td>
<td>2 OR MORE</td>
</tr>
<tr>
<td>PREGNANT WOMAN</td>
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<tr>
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<td>4 OR MORE</td>
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<tr>
<td>VEGETABLE-FRUIT GROUP</td>
<td>4 OR MORE</td>
</tr>
<tr>
<td>BREAD-CEREAL GROUP</td>
<td>4 OR MORE</td>
</tr>
<tr>
<td>OTHER FOODS AS NEEDED</td>
<td></td>
</tr>
</tbody>
</table>

### WHAT COUNTS AS A SERVING*

| MEAT GROUP | 2 TO 3 OUNCES OF LEAN COOKED MEAT, POULTRY, OR FISH. As alternates ... 1 egg. 1/2 cup cooked dry beans or peas, or 2 tablespoons of peanut butter may replace 1/2 serving of meat. |
| MILK GROUP  | ONE 8-OUNCE CUP OF FLUID MILK—whole, skim, buttermilk—or evaporated or dry milk, reconstituted. As alternates ... 1-inch cube cheddar-type cheese, 3/4 cup cottage cheese or ice milk, or 1 cup ice cream may replace 1/2 cup of fluid milk. |
| VEGETABLE-FRUIT GROUP | 1/2 CUP OF VEGETABLE OR FRUIT; OR A PORTION, for example, 1 medium apple, banana, or potato, half a medium grapefruit or cantaloupe. IMPORTANT SOURCES: Grapefruit, orange, lemon, and tangerine (fruit or juice); cantaloupe; guava; honeydew melon; mango; papaya; raw strawberries; watermelon. Asparagus tips; broccoli; brussels sprouts; raw cabbage; collards; green or sweet red peppers; kale; kohlrabi; mustard greens; potatoes and sweetpotatoes cooked in jacket; spinach; tomatoes or their juice; turnip greens. IMPORTANT SOURCES: Dark-green and deep-yellow vegetables and a few fruits, namely: Apricots; broccoli; cantaloupe; carrots; chard; collards; cress; kale; mango; persimmon; pumpkin; spinach; sweet potatoes; turnip greens, and other dark-green leaves; winter squash. |
| BREAD-CEREAL GROUP   | COUNT ONLY IF WHOLE-GRAIN OR ENRICHED: 1 slice of bread or similar serving of baked goods made with whole-grain or enriched flour, 1 ounce ready-to-eat cereal, 1/2 to 3/4 cup cooked cereal, cornmeal, grits, spaghetti, macaroni, noodles, or rice. |

### OTHER FOODS AS NEEDED

TO ROUND OUT MEALS AND MEET ENERGY REQUIREMENTS

Refined unenriched cereals and flours and products made from them; sugars; butter, margarine, other fats. Try to include some vegetable oil among the fats used.

*Amounts actually served may differ—small for young children.

(From "Your Money's Worth in Foods," U.S. Department of Agriculture, Home and Garden Bulletin No. 183.)
USE OF FOOD GROUPS

SOME WAYS TO USE IN FAMILY MEALS

Foods from meat group usually appear as the main dish, the "meat," at a meal; or as an ingredient in a main dish—a soup, stew, salad, casserole, or sandwich. Small amounts of two or more foods from the group used during the day can add up to a serving. Egg used in custards and baked goods counts, too.

Milk may be served as a beverage at meals or snacks. Some may be included on cereals and in preparation of other foods—soups, main dishes, custards, puddings, baked goods. Cubed or sliced cheese (plain, on crackers, or in sandwiches) and ice cream or ice milk (at meals or in between) may replace part of the milk.

Vegetables or fruit are part of most meals. Serve some raw and some cooked, some with crisp textures and some with soft; and contrast strong flavor with mild, and sweet with sour for variety in meals. Brighten meals with color—a slice of red tomato, a sprig of dark greens, or other colorful vegetable or fruit. Both vegetables and fruit are used in salads and as side dishes; some vegetables in casseroles, stews, and soups; and some fruits raw, as juices, and in desserts, such as cobblers, pies, or shortcakes. Many families include their vitamin-C food as a citrus fruit or juice, as melon or strawberries (when in season) at breakfast.

Foods from this group are served at breakfast as toast, muffins, pancakes, or grits; cereals, cooked or ready-to-eat; at lunch and dinner as macaroni, spaghetti, noodles, or rice in a casserole or a side dish; as any kind of bread and as a baked dessert, such as cake, pastry, and cookies. Because breads and cereals are well liked, usually inexpensive, and can be served a number of ways, they are used more than four times a day in most households.

Some of these items, such as flour, sugar, and fats, are ingredients in recipes. Some may be added to other foods at the table—sugar on cereals, dressing on salads, and spread on bread.

- extra large (or seconds) for very active adults or teenagers.

(From "Your Money's Worth in Foods," U.S. Department of Agriculture, Home and Garden Bulletin No. 183.)
Many nutrients are needed each day to maintain health. The amounts vary according to age, sex, weight and height, physical activity and other factors, such as pregnancy and breast-feeding. The table below shows the recommended daily intake of calories and nutrients for most healthy people.

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<thead>
<tr>
<th>Age Group</th>
<th>Sex</th>
<th>Weight (lbs)</th>
<th>Height (in)</th>
<th>Calories</th>
<th>Protein (g)</th>
<th>Calcium (mg)</th>
<th>Phosphorus (mg)</th>
<th>Iron (mg)</th>
<th>Magnesium (mg)</th>
<th>Vitamin A (I.U.)</th>
<th>Thiamin (mg)</th>
<th>Riboflavin (mg)</th>
<th>Niacin (mg)</th>
<th>Vitamin C (mg)</th>
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<td>2,400</td>
<td>65</td>
<td>800</td>
<td>800</td>
<td>10</td>
<td>350</td>
<td>5,000</td>
<td>1.2</td>
<td>1.7</td>
<td>14</td>
<td>60</td>
</tr>
<tr>
<td>FEMALES</td>
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<td></td>
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<tr>
<td>10-12</td>
<td></td>
<td>77</td>
<td>56</td>
<td>2,250</td>
<td>50</td>
<td>1200</td>
<td>1200</td>
<td>18</td>
<td>300</td>
<td>4,500</td>
<td>1.1</td>
<td>1.3</td>
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<td>40</td>
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<tr>
<td>12-14</td>
<td></td>
<td>97</td>
<td>61</td>
<td>2,300</td>
<td>50</td>
<td>1300</td>
<td>1300</td>
<td>18</td>
<td>350</td>
<td>5,000</td>
<td>1.2</td>
<td>1.4</td>
<td>15</td>
<td>45</td>
</tr>
<tr>
<td>14-16</td>
<td></td>
<td>114</td>
<td>62</td>
<td>2,400</td>
<td>55</td>
<td>1300</td>
<td>1300</td>
<td>18</td>
<td>350</td>
<td>5,000</td>
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<tr>
<td>16-18</td>
<td></td>
<td>119</td>
<td>63</td>
<td>2,300</td>
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<td>1300</td>
<td>1300</td>
<td>18</td>
<td>350</td>
<td>5,000</td>
<td>1.2</td>
<td>1.5</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>18-22</td>
<td></td>
<td>128</td>
<td>64</td>
<td>2,000</td>
<td>55</td>
<td>800</td>
<td>800</td>
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<td>5,000</td>
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<td>35-55</td>
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<td>55-75+</td>
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<td>300</td>
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<td>1.0</td>
<td>1.5</td>
<td>13</td>
<td>55</td>
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<tr>
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<td></td>
<td>+200</td>
<td>65</td>
<td>+400</td>
<td>18</td>
<td>450</td>
<td>6,000</td>
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<td>1.8</td>
<td>15</td>
<td>60</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>NURSING WOMEN</td>
<td></td>
<td>+1,000</td>
<td>75</td>
<td>+500</td>
<td>18</td>
<td>450</td>
<td>8,000</td>
<td>+0.5</td>
<td>2.0</td>
<td>20</td>
<td>60</td>
<td></td>
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</tr>
</tbody>
</table>

1 Adapted from the Food and Nutrition Board, National Academy of Sciences, National Research Council, Recommended Daily Dietary Allowances, Revised 1968

1 ounce = 28.3 grams (gm), 1 grm = 1,000 milligrams (mg); 1 U = international unit.
CONSUMERS LIKE BUT DO NOT USE NUTRITIONAL LABELS

In recent times, many consumer groups have begun to focus on the possibility of creating legislation that would make it mandatory for food products to include nutritional information on their labels. Although the need for an improved understanding of nutrition on the part of the consumer is clear, there is no consensus about the method to be used to educate the consumer. Many experts feel that if the need is present and if the information is available, the consumer will logically make use of the information to fulfill the need. However, it must be recognized that a great many messages bombard the consumer while she is in the supermarket; furthermore, the consumer has many concerns to meet in her shopping, such as economy and time-saving, aside from just the nutritional content of the food. Indeed, even the most dedicated and nutrition-conscious consumer may be hampered by the very complexity of daily and long-term nutritional requirements.

Effect of nutritional labeling studied

A joint study with the Food and Drug Administration was undertaken to determine exactly what the effect of instituting a nutritional labeling program would be. Experience with other similar studies showed that consumer-benefit programs often gathered more in the way of generalized favor than concrete use. The present study was conducted in two parts. One part consisted of a panel study of 2,195 people and researched, in depth, the projected attitudes toward the program of a relatively small number of demographically "typical" consumers. The other part of the study consisted of less intensive personal interviews with 4,435 shoppers in several cities. The shoppers were interviewed in supermarkets operating a test of the nutritional labeling program. This study was designed to measure actual use of the labels in the purchase decision as well as the consumer's attitudes toward them. Other variables measured were change in customer response over time and with varying levels of promotional activity. The results of the two parts of the study were quite consistent.

Format of the labels

One of the major objectives of the panel study portion of the experiment was to determine the preferred format for the nutritional labels. To that end, three separate types of labels were designed and explained to the panel of consumers. They were then asked to state their preferences. A significant majority of the consumers showed a preference for the format of the labels which presented nutritional information in the form of a percentage of the Recommended Daily Allowance for the nutrient.
Perception, understanding, and use

The supermarket part of the study was designed to measure actual consumer response to the presence of the nutritional labels. In the four tests in different leading food stores, some of the private-label items carried the nutritional information. The interviews were conducted about two months after the introduction of the labels. Since only those who saw the labels could use the information presented on them in the purchase decision, it was necessary to determine the rate of perception of the labels. Perception over all four tests amounted to only 26.3 percent of those interviewed. The rate of understanding of the labels was lower than the rate of perception. Only 15.6 percent of all respondents understood the labels.

Actual use of the labels in the purchase decision was quite low. Although a great majority of respondents indicated that they would use the labels at least occasionally, the actual-in-store test revealed a very minor rate of direct use (9.2 percent of those interviewed). This is not an unexpected finding in the light of similar results obtained in other studies.

Changes over time and with varying promotional intensities

A test designed to measure change in consumer responses over time was conducted in one chain. A "before" questionnaire was administered before the beginning of the labeling program, and an "after 1" test was given about two months after the inception of the program and an "after 2" test was given about two months following that. Apparently, the duration of the labeling program favorably affects the nutritional education of the consumer. The "after 2" test revealed an increase in consumer knowledge of nutritional facts of an average of 10.1 percent over the results from the "before" test.

Another test, conducted in another chain, was designed to determine the effect on consumer responses of varying the intensity of promotional activity. Three test groups were utilized: one with limited promotion, one with medium promotion, and one with extensive promotion. Only the rate of perception increased significantly with the greater promotional intensity.

Non-use benefits

An important hypothesis behind the design of the study was that consumers are likely to be more favorable toward the nutritional labels than simple direct-use figures would tend to indicate. Presumably, the consumer sees the labels as having some intrinsic value quite apart from the role they might play in the purchase decision. For example, the labeling program might affect the manufacturers' claims and educate the consumer about nutritional facts through advertising. Indeed, consumers did judge these aspects of the labels to be highly beneficial in both the panel and interview studies. In the supermarket study, 30.9 percent of all respondents indicated recognition of non-use benefits of the labels in a non-leading question, and an average of 85.3 percent of all respondents agreed with listed non-use benefits in a leading question. Furthermore, 97.5 percent of all respondents indicated that they felt that it is a consumer right to have nutritional information available.
Conclusions

In the study of the nutritional labeling program, it was not surprising to find rather low results over the whole perception-understanding-use continuum. Other studies have documented similar results. However, this study sought to investigate the origins of the generalized support of the program despite little direct use. Perhaps consumers showed support simply because they felt the program was for them or in their interest. But perhaps also they viewed the program as a general protection against dishonesty or concealment on the part of the industry. Consumers felt that the industry might be influenced to improve the nutritional content of food products by the mere fact of mandatory disclosure.

In years past, the neighborhood grocer depended upon good customer relations to keep his clientele. As such, he was responsible for the quality of his products. The growth and mechanization of the supermarket, however, leaves the buyer to her own devices with no one to hold accountable if a product is bad.

It may be, then, that what consumers look for in a new program such as this is not another factor to consider in the purchase decision but instead a form of accountability of the food industry. A program which makes the food industry accountable for the quality of its products is a boon to the consumer who has been used to taking her chances with an industry whose policy seems to be "Let the buyer beware."
UNDERSTANDINGS

1. Good eating habits can influence later successful pregnancy and the bearing of healthy children.

2. Overweight conditions in middle age and heart attacks can often be traced to poor eating habits begun earlier in life.

3. As you grow older your calorie requirements drop so you cannot eat as much food as you used to without gaining weight.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

1. Discuss factors leading to poor nutrition.

2. Have students observe food choices in school cafeteria, favorite eating places such as hamburger or pizza places, etc. Have teacher observe eating habits of other teachers in teacher cafeteria. Report to class.

3. Have school cafeteria manager discuss problems of feeding teenagers.

4. Do an experiment to show the effect of soft drinks on tooth enamel; immerse a tooth in a cola soda for 48 hours - it turns soft!

5. Students who work in supermarkets should note typical food choices - amount of fruits and vegetables and milk compared to soft drinks and snack foods. Is there a difference in the buying habits among old and young, rich and poor, those of different ethnic groups?

SOURCE

Teenage boys are generally better fed than girls because of their larger intake of food. Teenagers are usually not as well nourished as children.

The AMA recommends a diet low in saturated fats (fats from animal sources) and only enough calories to keep weight normal. Excess calories tend to build up cholesterol deposits in the arteries and cause atherosclerosis. The AMA is suggesting this diet practice even for young people!
WHAT TYPES OF PEOPLE ESPECIALLY MUST WATCH THEIR FOOD BUDGET?

. **Young People**

Young people in their first jobs and young couples who have just married usually have low incomes and many bills.

. Using current minimum wage figures, have students figure out a weekly wage for a new worker. Subtract a reasonable percent for deductions, (taxes, F.I.C.A., insurance, etc.) and use 25 percent of the remaining figure as the food budget for a week. Using local food ads, plan a week's food purchases. Each student should decide whether this worker will bring his lunch or eat out. In any case a lunch cost is involved. Don't forget snacks and breakfast!

. Invite some recent graduates to the class and interview them about their income and budget. Have them give their real experiences and hints they've learned to keep the food budget down. A young couple with a baby might also be interesting. Three cannot live as cheaply as two!

. Young people who are accustomed to spending their money on frills and luxuries rather than necessities are often shocked when they are totally independent, to find out how much it really costs to feed themselves. They often compensate for their low income by depending on invitations from family and friends, or cutting out nutritious foods and substituting "junk" foods that give them satisfaction. Their lack of funds is sometimes compounded by a lack of cooking skills, so they cannot even take advantage of lower priced food because they can't satisfactorily prepare it.
I learned the value of a dollar the hard way, on combined earnings and allowance of 75¢ a week.

- **Elderly people**
  - Many factors may contribute to malnutrition among the elderly:
    - loneliness
    - frustration at high prices
    - diet restrictions
    - poor teeth or no teeth, or ill-fitting dentures
    - lack of energy for shopping and cooking
    - illness or disability

- **Discuss** some of the factors mentioned that are prevalent among the elderly.

- **Have students observe** buying habits of the elderly. Are they buying things because they are easy to eat or easy to cook; shopping frequently just for something to do; do they have

- **Some communities are trying to help the elderly keep up good nutritional practices** by having special programs such as, "Meals on Wheels," for the home-bound, community eating places, phone-call chain from person-to-person to demonstrate a sense of caring.
<table>
<thead>
<tr>
<th>UNDERSTANDINGS</th>
<th>SUGGESTED PUPIL AND TEACHER ACTIVITIES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>- &quot;don't care any more&quot; attitude toward food or life</td>
<td>difficulty in comparison shopping due to poor vision, etc.?</td>
<td>Often senior citizen centers offer talks or demonstrations on diet and food preparation techniques for the elderly.</td>
</tr>
<tr>
<td>- misconceptions about nutritional needs</td>
<td>Discuss what your community is doing or can do to help the problems of the elderly.</td>
<td>Some supermarket chains publish pamphlets about food buying hints, especially for elderly folk.</td>
</tr>
<tr>
<td>- embarrassment at using food stamps</td>
<td>A representative from a nursing home or social services office might speak about possible solutions to typical problems of feeding the elderly.</td>
<td>See &quot;The Consumer and His Health Dollar,&quot; one of the consumer series of which this is a part.</td>
</tr>
<tr>
<td>Older people on a pension or Social Security are probably living on a lower income than before retirement.</td>
<td>Have class find out what current Social Security payments are for a single retired person and a couple. Do they seem adequate?</td>
<td>Your local Social Security office will have information about current payments for retired persons.</td>
</tr>
<tr>
<td>Since many expenses are fixed, (rent, utilities, etc.), or seem more important, (medical, dental, etc.), food money may be skimmed and the diet of the elderly may suffer as a result.</td>
<td>Have a Social Security representative talk to the class about typical income of retired individuals.</td>
<td></td>
</tr>
<tr>
<td>Some older people are too proud to accept what seems to be charity even when their income is too low for healthful living.</td>
<td>Have students interview elderly relatives and friends as to typical expenses.</td>
<td></td>
</tr>
</tbody>
</table>
The poor
Frequently poor nutrition goes hand in hand with low income; however, many families with adequate or high income are also poorly nourished.

Use the accompanying chart, "Income and Quality of diet," on a transparency or opaque projector for the class to view. Discuss why low income families may have poor diets; also discuss why middle and even upper income families may also be poorly nourished. Do the same factors exist today as they did in 1965 when this survey was made?

Low income families may not have the funds to buy food that meets their nutritional needs as well as satisfying their appetites, so they substitute high calorie or more filling foods that are less nutritious. More affluent families can afford to buy nutritious foods but incorrectly reason that they are "probably" getting enough nutrients from foods they enjoy so they consume more foods with "empty calories," (snack foods, candy, soft drinks, etc.)
INCOME AND QUALITY OF DIETS

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Good Diets (%)</th>
<th>Poor Diets (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $3,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$3,000 - $4,999</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>$5,000 - $6,999</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>$7,000 - $9,999</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>$10,000 and over</td>
<td>63%</td>
<td>37%</td>
</tr>
</tbody>
</table>

* Below recommended dietary allowances for adults
* More than 1.5 allowances for 1 to 2 adults

INCOME AND DIETS BELOW ALLOWANCES

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Below (%)</th>
<th>More (%)</th>
<th>Normal (%)</th>
<th>2 or More Allowed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $3,000</td>
<td>37%</td>
<td>11%</td>
<td>52%</td>
<td>9%</td>
</tr>
<tr>
<td>$3,000 - $4,999</td>
<td>42%</td>
<td>11%</td>
<td>46%</td>
<td>11%</td>
</tr>
<tr>
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<td>31%</td>
<td>11%</td>
<td>58%</td>
<td>10%</td>
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<tr>
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<td>11%</td>
<td>55%</td>
<td>10%</td>
</tr>
<tr>
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<td>37%</td>
<td>11%</td>
<td>52%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Some communities have trained interested people from the low-income community to work as "nutrition aides" to help their low-income neighbors raise their nutritional intake standards. This work entails passing on information about meal planning, nutrition needs of family members, how to shop, and how to store and cook food to keep nutritive value. This is usually done with the aide working side by side with her neighbor in the home and store.

- Have a class representative talk to a doctor or nurse who works in a clinic that treats low-income families. Ask whether the patients have complaints that are related to poor nutrition and whether this income group seems more poorly nourished than other income groups.

- Find out from your local Cooperative Extension Office, Social Services or Welfare Office, or your school system whether any nutrition education programs exist for the poor in your community. If possible send a class representative to sit in on a lesson or interview the teacher. Find out how

Those lacking information

Some low-income homemakers may have little knowledge of nutrition because they have not been exposed to the information, or it has not been understandable.
SUGGESTED PUPIL AND TEACHER ACTIVITIES

nutrition education is aimed at a specific group.

Have students develop educational materials about nutrition that would reach and appeal to various ages and groups that need it. They might try slogans, songs, games, quiz shows, TV spots, booklets, demonstrations at fairs, in department stores, supermarkets, or even a TV show that might be viewed on closed circuit or cable TV. ("Mulligan Stew", a TV show by and for young people about nutrition, may be available on tape from ETV).

Have students plan some meals that are appealing to the ethnic poor in your area. For help in this planning find cookbooks that feature foods of the ethnic group you are planning for, or ask local leaders of this group (religious, social, educational leaders usually cooperate.) Make sure these meals are nutritionally sound.

Some school districts have adult education programs aimed at low-income families that concentrate on home and family living skills.

Art teacher, drama teacher, or school system public relations coordinator might help with development or promotion of the final products of your creativity.

Some typical foods in the low-income diet are actually quite expensive because they are not locally grown or are not popular and must be shipped in; e.g., a rural, Southern resident might commonly eat powdered dry milk. The use of powdered dry milk was promoted in Latin American communities but met with little use. Finally it was discovered that in the home country milk was considered suitable only for babies and children and was shunned by adults as "unmanly."

Local social services or welfare groups may suggest some techniques of teaching nutrition that have been used effectively locally.

See "Special Problems of the Poor," consumer education series.

SOURCE

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See "Special Problems of the Poor," consumer education series.
greens, beans or peas, rice, and pork leftovers because they were cheap or free from his garden; when he moves North he wants familiar foods that are not common in the North, so grocers provide them—but at a price!

Malnutrition may exist during many periods of the life cycle.

Protein deficiency during pregnancy can result in a mentally retarded baby.

Malnutrition during baby's first year results in physical and mental retardation that does not respond to later efforts to reverse it.

Inadequate nutrition in poor children results in poor learning ability. The resulting inability to learn may lead to lack of skills necessary to remain and be successful in school, and the resultant inability to get and keep a job.

Have a class member shop at a store that features ethnically popular foods and find out the items sold and the prices.

Read and discuss, "Hunger in America," Maxwell S. Stewart, Public Affairs Pamphlet #457, 381 Park Avenue South, New York, N.Y. 10016

Discuss whether a cycle of poverty may be related to nutrition.

Since the future of a society depends on the health of its members, does the government have any interest in improving the nutrition of its citizens? Does it have a right, or an obligation, to change the eating habits of its people? Have a class debate on this topic. It might get quite heated if someone suggests that the government take the role of mother to say, "Eat your spinach."

Dr. Charles Love, chairman of the Committee on Nutrition of the American Academy of Pediatrics, said, "There is not evidence that feeding people makes them smart, but it is indisputable that hunger makes them dull..." "Most of the malnourished are poor..." "Many families, regardless of income, lack knowledge of the basic facts of diet..." "Others, who have no valid excuse for being malnourished suffer from poor food habits."

"...Hunger and malnutrition...result in a general retardation of the mental and physical growth of children. The symptoms are apathy, listlessness, loss of energy and inability to concentrate, slowness in comprehension, and inattention, restlessness, and behavior problems...also lowered resistance to disease and infection."

Ibid.
UNDERSTANDINGS

"The number of Americans who are malnourished has been estimated at from ten to twenty millions." Hunger in America 1970

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Find out whether there are any feeding programs directed at the poor youth in your area. Some feeding programs might be incorporated into other programs such as Headstart and Day Care. Other programs might be in the form of a school breakfast, or school lunch, etc.

. Teaching good nutrition to young children from low-income families is an educationally sound idea since many of them are at least partially responsible for feeding themselves.

. Ask local elementary school teachers to survey their class to find out the number of children who choose the food they eat during the day. How many eat breakfast? What do they eat? Who decides what they eat for lunch? Is anyone home when they come home from school? Are meals regularly prepared for the whole family or do children fend for themselves?

. Some products now sold to the public were developed for school breakfast programs, e.g., "Breakfast Squares." Some people object to children being fed what appears to be cake in an endeavor to promote good nutrition, contending that children then assume "Cake is good for me!" This destroys the value of the concept that was to be taught. Discuss this problem.

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WHAT IS THE FOOD STAMP PROGRAM AND HOW DOES IT WORK?

- The food stamp program was begun in 1967. Its purpose is to provide low-income families with a way to secure necessary food at less than regular cost.

- The stamps are as good as cash at most grocery stores. They must be used only for food items and cannot be spent on such things as soap, tobacco, beer, wine.

- Proponents of the food stamp program say it is necessary to provide proper nutrition to the poor.

- Opponents say that money designed to help the farmer is being channeled off for other purposes.

- Critics say that only 15 million people are receiving help although there are 37 to 50 million people eligible.

Ask students to tell what they know about the food stamp plan. Why is the food stamp plan used instead of the distribution of surplus commodities which was formerly the way of helping the needy?

From student observation and discussion with parents and friends, determine whether pupils favor such a plan.

What are the advantages and problems of such a plan? Will the nation be able to continue such a plan or expand it in years to come? Why is the plan limited to food products? Should the plan be used for the elderly, needy, for victims of disaster, for those on strike?

What is happening to the cost of such a plan? Will the nation be able to support it if costs continue to rise as they have in the past?

When the food stamp plan was begun in 1966, the cost for the first year was $700 million. The estimated cost in 1975 is $5.9 billion.

Food stamps are given free to a family of three with an income of less than $30 a month or a couple or individual making below $20. Above these levels, families are required to pay a certain amount for a monthly allotment of the coupons.

The dollar value of the monthly allotment is determined by Federal nutrition experts and is based on the purchasing power needed to provide an adequate diet to families of various sizes.

At present, the schedule is $46 for a single individual for a month, $82 for a couple, $118 for a family of three, $150 for four, $178 for five, $204 for six, $230 for seven and $256 for eight.

Amount of food stamps a family can get varies with size of household, and the cash paid for stamps depends on the family's monthly income.
UNDERSTANDINGS

. The food stamp program took the place of surplus food distribution to low-income families.

. A family can get about twice the buying power of its money by using food stamps.

. Welfare families receive food stamps free; low income families must purchase them.

. The use of food stamps is restricted to purchase of food; no household items (such as paper goods, etc.) may be purchased with such stamps.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. Discuss whether it was possible to plan balanced meals around surplus foods. (Many times the same item was surplus for many months, creating monotony in the diet.)

. Communities were given the chance to choose surplus foods or food stamps for their low-income aid. Role play a meeting of concerned citizens deciding which program to enroll in; assume that some people in the community are in farming, some are storekeepers, and all are taxpayers, to get varied views.

. Food stamp regulations are changing frequently; however, in 1974, a low-income family could purchase $40 worth of food stamps for about $24.

. Discuss the pros and cons of restricting the use of food stamps.

SOURCE

. The Surplus Food Distribution Program was designed more for the benefit of farmers with surpluses than for poor families. It helped farmers get rid of excesses and glutting the market which would drive down prices. The low-income consumer received whatever food products were surplus without thought to diet needs. Common surplus items were: flour, oatmeal, shortening, peanut butter, rice, and dry milk.

. In January 1974, the food stamp allotment was $142 for a family of four on welfare.

. In 1974, non-welfare families of four, with income of $473 a month or less could receive food stamps.
UNDERSTANDINGS

. Some restrictions have been changed; originally the purchase of imported foods was not allowed. This was changed and such purchases are now allowed.

. Some food buying practices of low-income consumers prevent economic buying:
  - no comparative shopping
  - buying small amounts
  - buying brand name for status instead of comparable house brands
  - failure to utilize the power of consumer groups.

. Some low-income groups are finding solutions to problems of high food costs by forming cooperatives to buy food, making quantity purchases through community groups, or traveling together by car or taxi for shopping trips to the best stores.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

. List expensive shopping habits of some low-income consumers:
  - shopping at neighborhood stores where they are known and the surroundings are familiar, where they get credit or can cash their checks, where they speak the same language, where they can buy one egg or half a loaf of bread, where they can send a child with a list to be filled.

. Find out whether a food Co-op exists in your area. If so, visit or send a representative to find out how it works.

. Discuss the good and bad aspects of cooperatives.

. Imagine that the members of your group would like to start a co-op and go through the planning steps:
  - find a location
  - divide jobs:
    - taking orders for food
    - ordering food from best suppliers
    - keeping track of money

SOURCE

. Stores in low-income neighborhoods may have lower quality produce and meat - people don't complain! Poor people may feel out of place in high income neighborhoods.

. Stores in low-income neighborhoods may charge more because of "high risk" - possibility of shoplifting, higher insurance rates because of neighborhood, high rent in urban center.

. Co-ops have many advantages but some drawbacks too:
  - people must be involved on a long term basis.
  - must be really co-operative with most helping in one way or another.
  - some capital is needed to get started.
SUGGESTED PUPIL AND UNDERSTANDINGS  TEACHER ACTIVITIES  SOURCE

- deciding on product choices
- transportation of goods
- packaging and delivery

. View the film, "Hunger in America."

. Food stamps are being used by low-income families who may have limited knowledge of meal planning and nutrition.

. Discuss whether lessons or information about food buying and nutrition could or should be made available to participants in the food stamp program.

Food stamps are paid for by taxes paid by all citizens. Is this an effective use of tax dollars?

. Additional information about food stamps is available from your local USDA or write: Food Stamp Division, Food and Nutrition Services, USDA Washington, D.C. 20250.

. For an in-depth study of problems of the poor see the curriculum module, "Consumer Problems of the Poor."
“My diet is much richer now. It costs more money but furnishes fewer calories.”

DOES AN ABUNDANT FOOD SUPPLY COUPLED WITH AFFLUENCE BRING PROBLEMS?

- "Between 25 percent and 45 percent of the adults in this country are more than 20 percent overweight." U.S. Public Health Survey, 1972
- Have students estimate how many of their friends and relatives have problems of weight control.
- Many factors in our society lead to a tendency to overweight:
  - more sedentary life
  - spectator sports in place of participant sports
- Discuss how a typical day's activities one hundred years ago differs from today in terms of physical activity.
- "A third of the people in this country are overweight. Another third are struggling to keep their weight stable." Gerald M. Knox, Better Homes and Gardens, June 1972
UNDERSTANDINGS

- availability of food in abundance and variety
- appeals of media
- more "eating out"
- interest in "gourmet" eating
- higher income
- eating to satisfy frustration

More strenuous activity burns calories faster than less strenuous activity.

Keeping your weight even is achieved by consuming only as many calories as you are burning. Weight is gained when you consume more calories than you use; weight is lost when you use more calories than you consume.

There is only one way to lose weight: use more calories than you consume. There are two ways to do it — eat fewer calories, or use more calories, or a combination of the two at one time!

Weight control is, or will be, part of most people's lives because as we reach adulthood our need for calories for growth diminishes, so we need less food than we have been eating; therefore, we have to cut our intake from what we have been used to just to keep our weight stable.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

- Which of the factors mentioned as a tendency to overweight affect the students' lives?
- Have students divide the 24 hours of a typical day into types of activity: sleeping, sedentary, moderately active, very active. Which people in class tend to be most active? Do these people have weight control problems? How much do they eat? Interview some of the school athletes. What do they eat in a typical day? Calculate their total calorie intake. If they are not gaining weight, this must also be what they are burning in calories through activities.
- Survey books and articles on weight control for suggestions: restricting intake or exercising more — which is more popular?
- Interview people who have attempted or succeeded at weight loss. How was it achieved? Do they recommend their method? Does it have any drawbacks or dangers?
- Ask the school physician or school nurse to discuss sensible weight reduction programs.

SOURCE

Activity Calorie Costs
For 15-year-old girl, 55 kg. (120 lbs.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Calories per kg per hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressing/undressing</td>
<td>0.7</td>
</tr>
<tr>
<td>Sitting in classes</td>
<td>0.4</td>
</tr>
<tr>
<td>Writing</td>
<td>0.4</td>
</tr>
<tr>
<td>Dancing</td>
<td>3.8</td>
</tr>
<tr>
<td>Walking</td>
<td>2.0</td>
</tr>
<tr>
<td>Walking rapidly</td>
<td>3.4</td>
</tr>
<tr>
<td>Driving a car</td>
<td>0.9</td>
</tr>
<tr>
<td>Piano playing</td>
<td>1.4</td>
</tr>
<tr>
<td>Typewriting</td>
<td>1.0</td>
</tr>
<tr>
<td>Housework</td>
<td>1.2</td>
</tr>
<tr>
<td>Swimming</td>
<td>7.9</td>
</tr>
<tr>
<td>Ping-pong</td>
<td>4.4</td>
</tr>
</tbody>
</table>

What's New in Home Economics, February 1972

- It takes 3500 extra calories to produce a pound of body fat.
- "Most adult women need 2000-2200 calories a day; men need 2200-2600. But an adult who wants to lose weight steadily should limit himself to 1200-1400 calories a day. A person who is more active or willing to lose weight more slowly can take in a bit more."
  Dr. Fredrick J. Stare, M.D., Chairman, Department of Nutrition, Harvard University, quoted in Readers Digest, February 1973.

- During growth periods, (infancy, adolescence), calorie needs are high. They drop off after growth is accomplished. (Exceptions are during
All food contains calories so no matter what you eat it is potentially fattening. However, some food contains more concentrated calories than others.

Calories are measurements of potential energy in foods or measurements of energy expended in activities.

Some feeding practices of mothers of infants may lead to overweight or problems of weight control later in life for those so treated.

Many people often mistakenly give food as a reward or to show love to children as well as adults, thereby building up a psychological need which later causes trouble when frustrations, disappointments, and problems are dealt with by eating, or overeating.

Fad diets may be dangerous to your health.

Fad diets may cause an immediate weight loss but usually the dieter tires of the fad and goes back to his poor eating habits, only to

Look up the calorie content of favorite foods in "Nutritive Value of Foods" — USDA Handbook.

Interview a pediatrician about trends in feeding babies. Some doctors are recommending skim milk in baby formulas.

Discuss the popularity of using food as a show of affection; e.g., birthday cake, desserts if you eat everything on your plate, a big meal to celebrate a special occasion, offering food in friendship.

Experiments by Dr. Jules Hirsch at Rockefeller Institute in New York showed that overfeeding in infancy creates an overabundance of fat cells and these fat cells were overfilled. Once the fat cells were established, they remained into adulthood. The adult cannot get rid of the fat cells; he can only hope to reduce the amount of fat within each cell, making reduction of weight much more difficult.

Some doctors believe that the constant loss then regaining of weight is such a strain on the body that they recommend no dieting for their

SOURCE

pregnancy and lactation at which time from 200 to 1,000 calories may be added.

Protein and carbohydrates (sugars and starches) contain 4 calories per gram, while fats contain 9 calories per gram, over twice as fattening for the same weight consumed.

Protein and carbohydrates (sugars and starches) contain 4 calories per gram, while fats contain 9 calories per gram, over twice as fattening for the same weight consumed.
<table>
<thead>
<tr>
<th>UNDERSTANDINGS</th>
<th>SUGGESTED PUPIL AND TEACHER ACTIVITIES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>regain the weight he has lost. Sometimes this is so discouraging he gains more than he lost!</td>
<td>Investigate how some safe, successful weight reducing groups work, such as: - Weight Watchers - Take Off Pounds Sensibly - Diet Workshop</td>
<td>overweight patients unless they can keep off lost weight.</td>
</tr>
<tr>
<td>Since weight control is a lifelong project for most people, the only real solution is the establishment of totally new eating patterns.</td>
<td>Read and discuss the article: &quot;Ten Common Misconceptions about Overweight and Dieting,&quot; by Gerald M. Knox, Better Homes and Gardens, June 1972.</td>
<td>Most of the successful groups mentioned emphasize new eating patterns of low-calorie but satisfying foods coupled with group therapy, giving emotional support through a trying period.</td>
</tr>
<tr>
<td>Among the many misconceptions about overweight and dieting are these: - gland problems cause obesity (rarely true) - crash diets are the best ways to lose weight - fat people eat the wrong kinds of food - fat people are gluttons - snacks don't count as calories</td>
<td>Find examples in art, history, or literature in which plumpness was desirable; Rembrandt's portraits of the burgers of Holland depicted people who were prosperous and fat; Dickens' rich men were plump.</td>
<td>Very few overweight people have gland trouble. As mentioned above, a new eating pattern is needed.</td>
</tr>
<tr>
<td>Society's view of obesity has changed through time; at one time &quot;portliness&quot; signified prosperity, and a woman's well rounded figure, &quot;desirability&quot;; now overweight is viewed as a danger to health and as cosmetically unattractive.</td>
<td>Some illnesses associated with overweight are: - hypertension (high blood pressure) - atherosclerosis (hardening of arteries) - diabetes - heart trouble - varicose veins - gallstones</td>
<td></td>
</tr>
<tr>
<td></td>
<td>View the filmstrip, &quot;Changing Attitudes Toward Weight Control,&quot; from local Cooperative Extension Office.</td>
<td></td>
</tr>
</tbody>
</table>
UNDERSTANDINGS

Height-weight charts are merely guidelines to the "right" weight, since it is hard to determine whether your body is small, medium or large build.

Weight control with a loss of not more than two pounds a week is probably safe for the individual to try on his own; however any greater weight loss should be under the guidance of a doctor.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

Consult recent height-weight charts for the age group in your class to determine the validity of the charts for your group. Some charts are included in this module.

Survey the latest "fad" diets in magazines, books, on TV shows, etc. Recent typical fad diets include:
- Zen Macrobiotic Diet
- Air Force Diet
- Drinking Man's Diet
- Grapefruit Diet
- Water Diet

SOURCE

A test measuring the amount of subcutaneous fat with calipers can determine whether your weight is made of fat or muscle.

Many of the fad diets actually promote habits that can be detrimental to your health, such as eliminating carbohydrate foods and increasing proteins and fats—which not only strain the kidneys but increase cholesterol levels.

"If you get any help from these reducing pills, I'D like to know too."
Keep in Trim
Desirable Weight
For Young Men

By IDA JEAN RAIN

Two decades ago Height-Weight-Age Charts were discontinued. Those charts were misleading in that they encouraged a man to say, "For my age I'm entitled to weigh ...

Since the average adult tends to gain, naturally this increase is revealed in weight statistics. But this doesn't make it normal, for concomitant statistics show that when pounds mount with birthdays, the number of birthdays is cut short.

Current charts are based on averages and these statistics show the weight picture as it is today. But averages do not necessarily represent standard weights for health. On the basis of mortality figures, the weight that is normal for your height and build at age 20 is your desirable weight from then on.

The height-weight data from American College Health Association studies were used for analyzing the height-weight relationship of young adults. These measurements were made on about 160,000 students entering 103 colleges in 34 states.

The resultant chart was computed by Dorothy W. Sargent at the time she was a nutrition specialist with the Human Nutrition Research Division of the U.S. Department of Agriculture. Here is the chart for young men:

<table>
<thead>
<tr>
<th>Height (in.)</th>
<th>Underweight</th>
<th>Slender</th>
<th>Normal</th>
<th>Stocky</th>
<th>Overweight</th>
<th>Obese</th>
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<td>177</td>
<td>192</td>
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<td>220</td>
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</table>

Height is without shoes, weight without clothing. The middle column, headed "normal," represents the average. Using this norm as a standard:
- Slender is 7.5 to 15 per cent less than normal.
- Underweight is 15 per cent or more below normal.
- Stocky is 7.5 to 15 per cent more than the normal.
- Overweight is from 15 to 30 per cent above normal.
- Obese is 30 per cent or more above normal.

Although not representative for prevailing weight-for-height of an older population group, these values for young men 21 to 29 years of age may be used for estimating the desirable weight for men of average skeletal frame, muscle mass and fatty tissue.

Why not consult with your own doctor as to the weight that is best for you? Clip and save this chart if you wish to keep it for reference.

Schenectady Gazette, April 22, 1972
# Women
## Desirable Weights for Height

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<th>HEIGHT</th>
<th>SMALL FRAME</th>
<th>MEDIUM FRAME</th>
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<td>62 inches</td>
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USDA Yearbook of Agriculture 1969
<table>
<thead>
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<td>178 pounds</td>
<td>195 pounds</td>
</tr>
</tbody>
</table>

USDA Yearbook of Agriculture 1969
. Many diet pills may be dangerous to your health.

. Some other "weight reducing miracles" may not be dangerous but may be deceptive and cause the consumer loss of weight — in the pocketbook!

. Investigate advertised weight reduction aids in magazines, TV and radio ads. Some in recent years have been banned because of danger or deception, e.g., inflatable spot reducing belts and pants, vibrators for spot reducing; some have little or no value, e.g., steam cabinets, sweat suits — the only loss is from water which is immediately replaced with a drink of water!

. Ask your local Consumer Protection Agency for examples of other deceptive weight reduction practices common in your area.

. Amphetamines, a common ingredient in reducing or diet pills are stimulants or pep pills, which may be habit forming, and a "tolerance" built up so that an increasing amount is required for the desired effect. A dependence on drugs may result and the dieter never learns to control his food intake on his own.


. The math or science department in your own school probably has metric equipment such as meter sticks, scales, flasks, beakers, etc. Ask to borrow these to compare with common U.S. measuring devices such as yardstick, cup and quart containers, etc. Many measuring devices such as rules show both metric and U. S. systems.

HOW ABOUT LABELING AND THE METRIC SYSTEM?

. Metric measurements are being used frequently on labels to indicate contents as well as in RDA statements.

. It is expected that the metric system will become the standard measuring system in the U. S. in the near future.

. Have students familiarize themselves with metric equivalents for common things that are important to them, e.g., their own weight in kilograms, their height in centimeters, normal room temperature in Celsius, etc.
UNDERSTANDINGS

In order to get used to the metric system gradually, most measurements will be given in both systems for a long while. (See the recipe for a Metric Cake in this module.)

Many containers for food already have metric amounts in addition to pounds and ounces.

Metric measurements are frequently used on labels to indicate contents and RDA requirements met.

It is expected that metric measurements will become standard within a few years.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

Have a quiz game with two or more teams competing against each other, or time, to convert American measurements to metric measurements; use "flash cards," or "Jeopardy" categories with different points for more or less difficult conversions.

View the filmstrip, "Think Metric," from your local Cooperative Extension office.


SOURCE

Students who sew can see metric measurements printed on patterns, young men who tinker with cars or bikes may have metric tools.

People brought up under the metric system in Europe, or vacationers there can talk about commonly used measurements.

Have students familiarize themselves with metric equivalents; find out what the closest measurements are in the American system.

View the filmstrip, "Think Metric," available from your local Cooperative Extension Office.

See the metric conversion tables included in this module.
Metric is based on Decimal system

The metric system is simple to learn. For use in your everyday life you will need to know only ten units. You will also need to get used to a few new temperatures. Of course, there are some metric units which most persons will not need to learn. There are some metric units with which you are already familiar: those for time and electricity are the same as you use now.

**BASIC UNITS**

- **Meter:** a little longer than a yard (about 1.1 yards)
- **Liter:** a little larger than a quart (about 1.06 quarts)
- **Gram:** about the weight of a paper clip

<table>
<thead>
<tr>
<th>Unit</th>
<th>Comparative Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meter</td>
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<tr>
<td>Yard</td>
<td>1 yard</td>
</tr>
<tr>
<td>Liter</td>
<td>1 liter</td>
</tr>
<tr>
<td>Quart</td>
<td>1 quart</td>
</tr>
</tbody>
</table>

**COMMON PREFIXES**

(to be used with basic units)

- Milli: one-thousandth (0.001)
- Centi: one-hundredth (0.01)
- Kilo: one-thousand times (1000)

For example:

- 1000 millimeters = 1 meter
- 100 centimeters = 1 meter
- 1000 meters = 1 kilometer

**OTHER COMMONLY USED UNITS**

- **Millimeter:** 0.001 meter diameter of paper clip wire
- **Centimeter:** 0.01 meter width of a paper clip (about 0.4 inch)
- **Kilometer:** 1000 meters somewhat further than 1/2 mile (about 0.6 mile)
- **Kilogram:** 1000 grams a little more than 2 pounds (about 2.2 pounds)
- **Milliliter:** 0.001 liter five of them make a teaspoon

**OTHER USEFUL UNITS**

- **Hectare:** about 2½ acres
- **Tonne:** about one ton

**TEMPERATURE**

Degrees Celsius are used

- 40°C = 40°F water freezes
- 0°C = 32°F body temperature
- 37°C = 98.6°F
- 80°C = 160°F
- 100°C = 212°F water boils

For more information, write to: Metric Information Office, National Bureau of Standards
Washington, D.C. 20234
### A HANDY METRIC CONVERSION TABLE

<table>
<thead>
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<th>To Change</th>
<th>To</th>
<th>Multiply By</th>
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</thead>
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<td>millimeters</td>
<td>liters</td>
<td>0.04</td>
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<tr>
<td>centimeters</td>
<td>inches</td>
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<td>cubic meters</td>
<td>cubic yards</td>
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</table>

To change Fahrenheit to Celsius or Celsius to Fahrenheit temperature use the following formula:

\[
F = \frac{9}{5} C + 32
\]

\[
C = \frac{5}{9} (F - 32)
\]

A Centigrade degree is almost twice as large as a Fahrenheit degree. Therefore, the divided space on a thermometer between boiling and freezing is 100 "units" on one scale and 180 "units" on the other — almost 2 to 1. Since one scale starts at 0 at freezing and the other starts at 32 you must either add or subtract it to find conversions.
METRIC CAKE

18-20 slices

.5 kilogram flour (2-1/4 cups)
.25 kilogram sugar (1 cup)
10 grams baking powder (2 tsp.)
5 grams salt (1 tsp.)
.125 kilogram soft shortening (1/2 cup)
5 milliliters vanilla (1 tsp.)
5 egg yolks
110 milliliters milk (1/2 cup)
55 milliliters milk (1/4 cup)

Preheat oven to 185°C or 350°F.

Grease pan and line with wax paper. Use 24x12x8 centimeter (9"x5"x3") loaf pan.

Sift together into bowl: flour, sugar, baking powder, and salt.

Add shortening, vanilla, egg yolks, and milk. Beat 2 minutes.

Add remaining milk and beat until blended. Pour batter into prepared pan. Bake 60-70 minutes in moderate oven 185° Celsius (C), 350° Fahrenheit (F). Cool and frost.
Food Crossword

DOWN

1. is green and grows in stalks
3. red fruit with many seeds inside, sometimes used in salads
4. front breast part of a cow
6. used in salads or pickled
8. uncooked
9. finely ground wheat
12. meat from a cow
13. meat comes from them
14. not canned or frozen
15. nutrient gotten from meat or nuts
17. ground beef
22. planted to grow new plants
25. grows underground, red and white root
26. grows underground, strong odor induces tears
28. ready for eating
30. small animal who'll eat your lettuce
32. grow underground in a shell
33. come from a chicken
36. meat from pigs
37. bony meat, usually barbequed

ACROSS

2. edible plant without seeds
5. fish sometimes used on pizza
7. green leafy vegetable used in coleslaw
10. a type of squash
11. bean with a very high protein level
16. small, tangy, red roots
18. shortage of food
19. needed for plants to grow
20. food group containing breads and
21. artificial climate for growing tomatoes and mushrooms
23. sweet potatoes
24. sensible eating leads to good
27. main ingredient for growing healthy plants
29. strong odor, used as a flavoring
31. fruit with same color as name
32. baked from flour, used for sandwiches
34. yellow citrus fruit
38. green leafy vegetable, high in vitamin A

BY
Debi DiDonna
Mont Pleasant High School
food crossword

by Debi DiDonna, student,
Mont Pleasant High School
<table>
<thead>
<tr>
<th>UNDERSTANDINGS</th>
<th>SUGGESTED PUPIL AND TEACHER ACTIVITIES</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOW DO YOU DECIDE HOW MUCH TO SPEND FOR FOOD?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>. People have different ideas on what is important to them and what they want to get out of life. Thus the amount they are willing to spend for food will vary.</td>
<td>. Role play a series of skits with members of each group expressing different viewpoints about how much money to spend on food, and what emphasis it should have in their lives. Some suggested situations:</td>
<td>Have each role play member think through his or her character and think up a viewpoint and arguments or statements that sound like that person's point of view— even if they don't necessarily agree with the actor's own ideas.</td>
</tr>
<tr>
<td>. Seeing another person's point of view by putting yourself in his place for a while is an effective tool for understanding and communication. Talking with others or eating together may explain why their food values differ from yours.</td>
<td>. Roommates who share expenses for everything, (including food), but not all eat every meal in, some bring friends in to eat, one loves to cook and spends lots of time and effort at it; another detests cooking but performs her share of this duty.</td>
<td>There are no right or wrong answers in role play situations— the main aim is to encourage thinking in an area not thought through before.</td>
</tr>
<tr>
<td>. Some convenience foods cost more than the same foods prepared from &quot;scratch.&quot; One must weigh convenience against cost.</td>
<td>. Gourmet cooking may be an art, a relaxation, a hobby or an outlet for some people. For others it is a chore.</td>
<td></td>
</tr>
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<td>. A meal eaten out at a restaurant costs more than eating at home. The pleasure of this experience must be weighed against other values in life.</td>
<td></td>
</tr>
<tr>
<td>. A meal eaten out at a restaurant costs more than eating at home. The pleasure of this experience must be weighed against other values in life.</td>
<td>. Gourmet foods, specialty items, and &quot;health&quot;</td>
<td></td>
</tr>
<tr>
<td>. Gourmet foods, specialty items, and &quot;health&quot;</td>
<td>. The area of Values and Goals has been explored in written and audio-visual areas by J. C. Penney Co. To get further ideas on these topics write or call your nearest J. C. Penney store.</td>
<td></td>
</tr>
</tbody>
</table>

108
UNDERSTANDINGS

foods, cost more than the ordinary foods.

. Snacks, sodas, "refreshments" make up a large part of the average grocery bill.

. Shoplifting has become a major problem in all types of stores, requiring the expenditure of money for security devices. The cost is passed on to the customer in the form of higher prices.

. Unhappiness with food purchases made by another family member may be understood by taking on the role of food purchasing.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

always bringing their friends with big appetites home.

. Conduct a round table discussion, debate, or forum to cover the point of view of the store owner, honest customer, law enforcement agency, and perhaps the security police concerning shoplifting. Bring out the vicious cycle and eventual loss to all concerned. What is the difference between shoplifting and theft? Who pays for goods shoplifted? How much does shoplifting add to consumer's costs?

. With parental permission have students do the food shopping for a week, within usual budget limitations. Have the students do the planning and take part in the meal preparation for full learning experience. How did students decide which foods to buy? Were decisions made on logical or emotional levels? Have the students bring in the register receipt and describe purchases made.

SOURCE

. Have students interview store owners or managers about their real problems with shoplifters.

. Ask your local police to discuss the problem with the class—or find out punishments for offenses.

. A majority, 80 percent of more than 2,000 teenagers whose mothers work, do the supermarket shopping weekly according to a survey by Eli S. Belil, research director of Co-ed Magazine.
UNDERSTANDINGS

"Learning by doing" is the best way to learn the joys and the trials of shopping.

SUGGESTED PUPIL AND TEACHER ACTIVITIES

Pair up students to make "families." Ask each family to anticipate what their earnings will be upon graduation. What percentage of their income will they spend on food? Have them prepare and price a weekly food budget. Would they be able to purchase the quantity and quality of food desired within this budget? If not, what adjustments would have to be made? How do their estimates for the cost of food for two compare with national averages as shown on the following page?

SOURCE


"Food Is More Than Just Something To Eat," Consumer Product Information Center, Nutrition, Pueblo, Colorado 81009

Food Hotline

A special service to aid consumers with their food shopping is available from the State Department of Agriculture and Markets. The Department offers a hotline service to inform consumers on best buys, prices, and foods in season as well as why prices may change. The two-minute reports are prepared by market news reporters and can be heard in the New York City area by dialing 349-0949. The report offers price ranges found in local retail food markets, abundant foods as well as other marketing tips helpful to consumers. The message is clear, and up-to-date. It is changed twice a week; usually on Wednesday and Friday.
Cost of Food at Home, Estimated for Food Plans at Three Cost Levels, January 1974, U. S. average

<table>
<thead>
<tr>
<th>Sex-age groups²</th>
<th>Cost for 1 week</th>
<th>Cost for 1 month</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Low-cost plan</td>
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<tr>
<td></td>
<td>Dollars</td>
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<tr>
<td>Family of 2.</td>
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<tr>
<td>20 to 35 years³</td>
<td>24.70</td>
<td>31.50</td>
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<td>55 to 75 years²</td>
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<td>Family of 4:</td>
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<tr>
<td>Preschool children⁴</td>
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<tr>
<td>School children ²</td>
<td>41.70</td>
<td>53.20</td>
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<tr>
<td><strong>INDIVIDUALS⁶</strong></td>
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<td>Children, under 1 year</td>
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<td>Boys, 9 to 12 years</td>
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¹These estimates were computed from quantities in food plans published in Family Economics Review, October 1964. The costs of the food plans were first estimated by using the average price per pound of each food group paid by urban survey families at three selected income levels in 1965. These prices were adjusted to current levels by use of Retail Food Prices by Cities released periodically by the Bureau of Labor Statistics.

²Age groups include the persons of the first age listed up to but not including those of the second age listed.

³Ten percent added for family size adjustment.

⁴Man and woman, 20-35 years; children, 1-3 and 3-6 years.

⁵Man and woman, 20-35; child, 6-9 and boy 9-12 years.

⁶The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person—add 20 percent; 2-person—add 10 percent; 3-person—add 5 percent; 5-person—subtract 5 percent; 6-or-more person—subtract 10 percent.

Family Economics Review, U. S. Department of Agriculture, Spring 1974