











Dear Educator:

Does it seem as if every time you walk down the aisles of your local supermarket you find a food product on the shelves that you hadn't seen before? It's not your imagination. New foods are being developed and tested every day, then brought to market by companies that have spent millions on research and development, hoping for a successful launch.

This guide and the accompanying video, *From Concept to Consumer: Food Product Development*, have been designed to help your students understand the process of developing and marketing a new food product, as well as to encourage them to consider a career in food science. Since food science encompasses many different disciplines, this guide also includes lessons with applications in various areas of science (chemistry, biology, etc.), family and consumer science, business and marketing, language arts, and many other subjects. See the Integrated Web graphic on page 3 for more information on how this program fits into various curricula.

As you will see when you view the video and review this lesson guide, there are five phases to developing and marketing a new food product. Known as the 5 D's, they are Decide, Discover, Define, Develop and Deploy. However, within each phase there are many different steps. Space and class time limitations do not allow us to fully explore all of them. However, this unit is flexible and will allow you to extend any of these lessons and explore those steps that fit within the available class time and your students' abilities (e.g. see "Introduction to the Food Industry," a self-study program for grades 6-12, found at www.ift.org).

The video is designed to stimulate student interest in this project, and activities have been developed for participation by the entire class and/or individual teams... whichever works best in your particular situation. Teacher answers to questions to be posed to the class are provided in a different-colored ink.

We hope you and your students enjoy this behind-thescenes look into food science careers and new food product development.

Sincerely,

Career Guidance Committee Institute of Food Technologists (IFT)

Purpose and Objectives of IFT

Food science applies the principles of science to the production, research, development, packaging and improvement of the food we use, eat or buy.

The Institute of Food Technologists (IFT) is a scientific professional society with a worldwide membership of more than 28,000. The purpose of the Institute is to "support improvement of the food supply and its use through science, technology and education." The objective of the Institute is to "promote programs, implement proposals, and provide guidance consistent with, and in support of, the Institute."

Funding for development of this videotape and collateral materials has been provided by the Institute of Food Technologists Foundation. Additional educational materials and information about careers in food science, may be obtained by contacting:

Career Guidance Department Institute of Food Technologists Phone: 1-800-IFT-FOOD www.ift.org

Some of the materials available to teachers include: Information about new products, services, legislation and developments: online research and magazines; meetings and expositions. Under Continuing Education and Professional Development, there is information on continuing education, higher education courses of study, awards, grants, scholarships, online employment services, job listings and career education materials.

Food Science as a Career

Food science professionals meet a basic human need ensuring a safe, abundant, nutritious and flavorful food supply for the world. It's a career that carries great personal reward, challenge and variety, and food scientists are in great demand.

Opportunities exist in government, private industry and academia. Food scientists work in government regulatory agencies such as the Food and Drug Administration (FDA). and the Department of Agriculture (USDA), with commercial food companies and suppliers and the food service industry. Students considering a career in food science should have a strong interest in the sciences, especially biology and chemistry. College courses include nutrition, food chemistry and food microbiology.

For more information about careers in food science, visit www.ift.org or call the Institute of Food Technologists at 1-800-IFT-FOOD

Content Outline

Decide:

This unit is divided into seven lessons, determined by the 5 D's, as follows:

Discussion, pre- and post-viewing questions Video: Lesson I Brainstorming, decision on new food product to

research and develop

Discover-Part I: Competitive product review Lesson III

Focus groups Discover-Part II: Lesson IV

Fitting consumer needs Lesson V Define:

Lesson VI Develop: Formulation, packaging, labeling,

government regulations

Lesson VII Deploy: Advertising, promotion, and marketing

#6 Sensory Evaluation Worksheets: #1 5 D's/Ideation Session

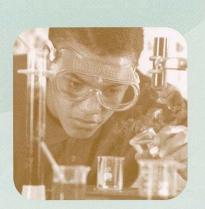
> #7 Microbial Lab/Shelf Life Experiment #2 Brainstorming Guidelines

#8 Marketing the Product #3 Supermarket Safari

#4 Screening Tool: Conducting #9 Glossary and Food Science Careers

a Market Survey #10 Summary

#5 Formula for Success



Lesson II

Curriculum Integration

Science

The following are just a few of the universal science education standards met by this program. They also parallel the NSTA standards, which you may review online at http://books.nap.edubooks/0309053269/html/index.html

Nature of Science

- 1. Understand that science, technology and society are interwoven and interdependent.
- Describe the scientific process as involving scrutiny, skepticism, curiosity and verification to solve problems.
- 3. Review and edit the laboratory report of their peers, with emphasis placed on sense of responsibility, commitment to peer review, truthful reporting of the methods and outcomes of investigations, and making the public aware of the findings.

Science Process Skills

- 4. Make well-reasoned decisions based on available data and alternatives, and predict/weigh the consequences of those decisions.
- 5. Demonstrate the use of inquiry techniques such as formulating valid questions and hypotheses, making predictions, planning and executing experiments, making careful observations, classifying, interpreting and analyzing data, and drawing plausible conclusions.
- 6. Understand and communicate science content and concepts using accepted oral and written formats.
- 7. Collect, record, graph, compute and analyze the significance of a variety of data.
- 8. Use appropriate mathematical skills in solving problems.

Habits of Mind

- 9. Demonstrate the ability to think critically and creatively.
- **10.** Consistently seek and make connections between what is learned in school and real-world life.

This program also meets the appropriate National Standards for Family and Consumer Education, as follows. All the standards may be viewed at www.facse.org

Consumer Services

3.5: Demonstrate skills needed for product development, testing and presentation.

Food Production and Services

- **8.0:** Integrate knowledge, skills and practices required for careers in food production and services.
- **8.1:** Analyze career paths within the food production and food services industries.
- 8.2: Demonstrate food safety and sanitation procedures.
- **8.3:** Demonstrate selecting, using and maintaining food production equipment.

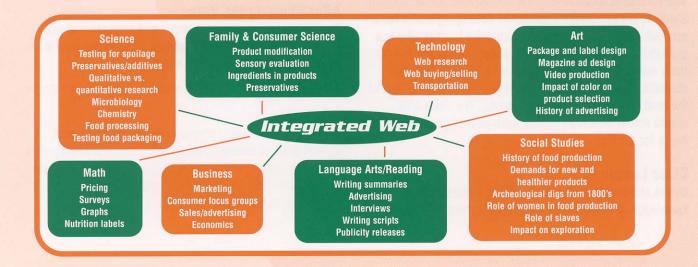
Food Science, Dietetics, and Nutrition

- **9.0:** Integrate knowledge, skills and practices required for careers in food science, dietetics and nutrition.
- **9.2:** Apply risk management procedures to food safety, food testing and sanitation.
- **9.5:** Demonstrate use of current technology in food product development and marketing.
- **9.6:** Demonstrate food science, dietetic and nutrition management principles and practices.

Nutrition and Wellness

- **14.4:** Evaluate factors that affect food safety, from production through consumption.
- **14.5:** Evaluate the impact of science and technology on food composition, safety and other issues.

You will also see that this program fits into a wide variety of subject areas. Please note the following Integrated Web:



Lesson I: Video (1 session)

Objectives

- To identify the process used in the development of new food products for the marketplace;
- · To demonstrate how food scientists work;
- To create an awareness of food science as a potential fulfilling career.

Major Concepts

- Food product development is one of many career areas of food science.
- It is a team effort and requires input from many sources.
- The consumer is an important component of food product development.

Outcomes

- Students will become aware of food science and careers in the profession.
- Students will understand and identify the five stages of food product development.
- Students will realize that food-product development comprises many disciplines.

Introduction

Food scientists are involved in nearly everything related to the food we eat. In addition to helping to ensure that our food is safe and healthy, they also help create new food products. When you see green ketchup on the supermarket shelves, or new types of cereals, you can be sure a team of food scientists helped bring those items from an idea to the marketplace. They work in multi-disciplinary teams with suppliers, nutritionists, sensory analysts, analytical chemists, marketing specialists, flavorists, microbiologists and food engineers to meet the public's demand.

This video will show you the process of developing a new food product and how all the various disciplines come together for a successful result.

Video Description

Students are assigned the project of developing a new food product. One of the students has an older brother who is a graduating food science major at college. He offers to help them with their class project, and with his guidance, the students learn and execute the various steps that are part of the food product development process. The video also shows actual food scientists at work as they prepare new foods for testing.

Class Lesson

Before showing the video to the class, assess the students' knowledge of new food product development by asking them

the following questions. Write their answers on the board. The following is some information from the video to help stimulate discussion.

A new product is one that is totally new, or a different version of something already on the market. New products are developed because of



demand stimulated by changing lifestyles, convenience, health or fitness, changing demographics and other reasons as determined by market research. Some new food products include green ketchup, Go-Gurt (yogurt in a squeeze tube), packaged lunches for kids, etc.

The new product must be carefully formulated, tested and meet many different government standards before it can go to market. Even then, many products don't succeed even though they have gone through the entire process.

Pre-Viewing Questions

- **1.** How would you describe a new food product? What are some new food products you've noticed recently?
- 2. Who and what do you think determines which new products go on the market?
- **3.** How do you think a new food product gets to the marketplace?
- 4. Have you ever participated in a consumer survey? How was the survey conducted? (Example: Were you stopped in a mall to answer questions? Asked questions on the phone?)
- 5. Do you know if that product eventually went on the market?
- **6.** Why do you suppose some products fail and others succeed?

Ask students to keep these questions and their answers in mind as they watch the video.

After Showing the Video

Review the pre-viewing questions and answers and ask students to answer those questions again to see how their answers differ. Then ask the following questions:

- 1. What are the five stages of product development? Decide, Discover, Define, Develop and Deploy.
- 2. Which food industry people would be part of a new food product development team? Suppliers, nutritionists, food scientists, packaging specialists, sensory analysts, analytical chemists, marketing specialists, flavorists, microbiologists, food engineers.

Lesson II: Decide/Ideation (1-2 sessions)

Objectives

- · To discover and understand the benefits of teamwork.
- To become familiar with, and apply, teamwork and communication skills.
- To apply brainstorming skills in the decision-making process.
- · To develop an idea for a new food product.

Major Concepts

- The results of the team can be greater than the sum of the individuals.
- Interpersonal communication is essential for team effectiveness.
- · Brainstorming is an effective problem-solving tool.

Outcomes

- · Understand the benefits of a team.
- Use brainstorming to identify a potential new food product.

Introduction

New food products are being developed every year. They need to appeal to a particular market segment or niche. The appeal might be health or fitness, convenience, age, status, sex appeal, etc. Now is your students' chance to DECIDE on their own new food product by holding a brainstorming/ideation session. Students will work in teams and then present their ideas for class discussion and decisions.

Teachers Please Note

For easier implementation of this program, we recommend that you have students adhere to the following criteria:

- The new product may contain no more than four different ingredients, plus herbs and/or spices, and/or food-grade chemicals.
- The new product must start with an existing food from the grocery shelves.
- The new product must be formulated with items found on the grocery shelves. Only food-grade chemicals may be used.
- The new product must be easily formulated and developed in the classroom.
- All necessary safety precautions must be taken in class.

Team and Class Activity - Team Brainstorming and Class Decision

Team Brainstorming

Display products or pictures of products that fit a particular market niche. (Example: sports drinks, children's cereals, power nutrition bars). Hand out and

review Worksheet #1, 5 D's/Ideation Session and Worksheet #2 Brainstorming Guidelines.

Divide the class into teams and review the brainstorming guidelines. Ask each team to decide upon both a leader and a note-taker. Students will use the worksheet to help them brainstorm ideas for a new food product, and decide on one or two to present to the class.

Class Decision

Team leaders will write their team's best ideas on the board and discuss their merits. After all the teams have presented their ideas, the class will come to consensus on the food product they all want to develop.

Naming the Product

Now that the new food has been determined, the class should brainstorm a working name for the product.



Lesson III: Discover - Part 1

The competitive market (1-2 sessions)

Objectives

- To conduct a competitive product review.
- · To understand the importance of market research.

Major Concepts

- A competitive product review helps to discover the competition and defines what the consumer wants or needs.
- Such a review is one of the components for successful product development.

Outcomes

- To compare and contrast qualitative vs. quantitative research (see #5 under "Class Lesson").
- To be able to identify the competition.

Introduction

Once an idea for a product to be developed has been generated, we need to identify the competition for that product. This can be done with either qualitative or quantitative research. Supermarket product research helps identify the competition, while focus groups help narrow the parameters for the new product even further.

Class Lesson

- 1. Define "competition."
- 2. Discuss the pros and cons of competition.
- 3. Ask the students to name some products that are in competition with each other. Children's cereals, sports drinks, Pepsi Cola®, Coca Cola®, athletic shoes, others.
- 4. What does each product do to attract customers? Stresses the benefits, uniqueness, appeal to a particular audience.

5. Discuss the difference between qualitative and quantitative research. Qualitative research is based on data collected through observations. Quantitative research is based on numbers and statistics.

Class Activity - Learn about the competition

- Students will brainstorm which products might be in competition with their product. Students are to keep notes.
- Review Worksheet #3 Supermarket Safari, with the class. Discuss each heading and how and where students may be able to find the information needed to complete the worksheet. (The class may develop their own product information sheet according to the food product they wish to investigate.)

Group Activity - Surveying the competition

Assign a group of students to survey a neighborhood supermarket to see if there are other foods similar to, or exactly like, the food product selected by the class, on the shelves. Have them complete the *Supermarket Safari (Worksheet #3)* or the product information sheet developed by the class. Students will check labels for ingredients, note sizes and types of containers, and where the product is situated on the shelf.

Students will summarize and report to the class.

Class Discussion

How do these findings impact on the potential success of the product selected by the class? How is this information going to help you on your product development? What do you have to discover next and what tools are you going to use?

Lesson IV: Discover - Part 2

Planning & conducting a consumer focus group (2-4 sessions)

Objectives

 To apply market research by using screening tools and conducting focus groups.

Major Concepts

- Screening is one step and an important component for establishing successful focus groups.
- Focus groups help identify product strengths and weaknesses.

Outcomes

- To understand the use of a screening tool and how to construct one.
- To apply this screening tool as the first step in conducting market research.
- To employ a focus group to establish a market point of view.

Introduction

Market research is important for the success of any product. Correctly identifying the market, or target audience for your product, conducting focus groups and employing the results by adapting the product, help to ensure success. When these steps have been completed, the product developer is ready to use the results to define and refine the product.

The first research step is identifying the target audience. This is done by asking a series of screening questions, either on the phone, in person, by mail or email. This helps identify the people who would, or would not, ordinarily buy the product. Then focus groups are conducted to learn more about how the new product might be received and accepted by the public.

Class Lesson

- **1.** Discuss the differences between screening tools and focus groups in market research.
- **2.** Discuss why screening is important for the success of focus groups.
- **3.** List the components of a screening tool. Age, socio/ economic group, section of the country, rural/urban, likes/dislikes, lifestyle, habits, product use, etc.
- **4.** Discuss the meaning of target market or market segment. Give examples of target markets. Teens, children, retirees, athletes, teachers.

Class Activity - Screening the potential market

Ask students to discuss the type of people [market(s)] they believe would be most interested in purchasing their new food product and how they could find those people in school or at home. Example: if they decide the product might be purchased by athletes, young teenagers (12-15), and/or

people who are health-conscious, what questions should they ask to identify these people? How and where could students interview them?

Hand out *Worksheet #4 Screening Tool: Conducting a Market Survey.* Students may use this to guide them in formulating their questions. Caution them to keep the survey simple.

Group Activity

Since it may not be feasible to arrange a focus group with participants from outside the school, assign one or more teams to screen students on campus and select those most appropriate for the focus group.

Conducting Focus Groups

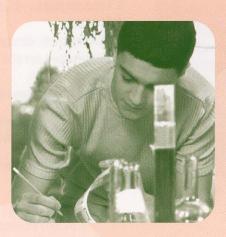
Students will arrange for a focus group, using the following criteria:

- Who will be in the focus group? (target audience)
- Where will the group meeting be held?
- How will the room be set up?
- Who will be the moderator?
- . Who will write the questions?
- What do you want to learn from the focus group?
- How will notes be taken? (audiotape, video, handwritten)
- Who will write the summary?

Ask students to summarize their plan to the class for conducting the focus groups, and then allow them to get started. After the focus groups have been conducted, the note-taker(s) will summarize and report their findings to the class.

Discuss

How do the focus groups' comments impact on your decision to market your product?





Lesson V: Define

Conceptualize what's going to be in the product and how it will fit consumer needs (2-3 sessions)

Objectives

- To apply the information discovered in Lesson IV to define the product so it meets consumer needs.
- To apply safety regulations and requirements to food packaging and labeling.
- To describe the food safety regulatory agencies and their regulations.
- · To identify mandatory information on a food label.

Major Concepts

- Pre-planning and conceptualization are vital to development of a new food product.
- A multi-disciplinary, team approach is used to define a product.
- · Packaging fulfills both a functional and marketing purpose.

Outcomes

- To use creative thinking and planning skills to determine next steps.
- To identify the members of the team necessary to define and develop a new food product.
- To create a formulation sheet, plan for sensory evaluation, describe the conditions necessary for optimum shelf life and food safety, and plan other required steps.

Introduction

This is the stage where everything about the product is conceptualized before actual development begins. Ingredients, flavor, color, fortification, etc., need to be determined. Labeling, packaging and marketing ideas are discussed. Suppliers, nutritionists, food scientists, sensory analysts, analytical chemists, marketing specialists, flavorists, microbiologists, food engineers, etc., all work together to define the product.

The product must also be safe and have optimum shelf life. Food scientists and product developers create methods to preserve our food and make it safe to store and eat. Identification of the conditions necessary for spoilage helps them to develop methods to prevent microbial growth, which leads to food spoilage.

Class Lesson

Before actually starting to develop the product, it's important to pre-plan every step of the process. Explain that students will break into teams to study various aspects of the food product development process.

Team 1

Determine ingredients, where to get them, flavor, color, etc., of product. Make sure students understand the criteria established for formulating their product. They should start with an existing food and add the additional ingredients, keeping track of amounts and percentages on the formulation sheet (see *Worksheet #5 Formula for Success* for guidelines). They also will determine the sensory evaluation process and create formats for testing (see *Worksheet #6 Sensory Evaluation*).

Team 2

Consider the type of packaging and labeling for the product. Have various types of packaging on display (cans, jars, boxes, specialty products). Explain that packaging today has become so complex that packaging engineers and food scientists are employed to create and develop materials and containers for food products.

It is unlikely that students will be able to actually "manufacture" the packaging for their product, but they should be able to draw the package to scale and even make a 3-dimensional mock-up.

Team 3

Consider shelf life and factors that cause food spoilage. Students will discuss how long they think the product they develop should remain on supermarket shelves and in home pantries or refrigerators, and how to accomplish that goal. They may want to check expiration dates on similar products for ideas. Discuss the factors that cause food spoilage, including:

- **1.** Unclean or contaminated, people, raw materials, equipment.
- 2. Outside contamination: dust, pests etc.
- 3. Food residues.
- 4. Moisture.
- 5. Time elapsed after packaging.
- 6. Temperature needed to maintain quality and freshness.
- 7. Mold formation.
- 8. Swollen or broken containers.

Can your students think of other factors?
Students will review Worksheet #7 Microbial Lab/Shelf Life Experiment

Lesson VI: Develop

Formulate and package the new food product (3-4 sessions)

Objectives

- To develop the formula and evaluate the final product.
- · To create the product packaging and label.
- · To determine shelf life.

Major Concepts

- Formulation and sensory evaluation are major components of new food product development.
- Packaging fulfills both a functional and marketing purpose.
- Preventing spoilage is a major consideration in formulation, packaging and marketing.

Outcomes

- · To have a final new food product.
- · To conduct sensory evaluations.
- · To select a packaging vehicle.
- · To design a package, including label.

Introduction

With all the planning completed, it's time to go to work on actually creating the product. Food scientists often need to formulate many different versions of the product before finding one set of ingredients that results in satisfactory sensory evaluations. They even work with people outside the food science profession, such as specialists in packaging design.

Class Lesson

Regulations and laws to protect the consumer from harm and misinformation are determined by local, state, federal and international governing bodies.

Part I: Government Regulatory Agencies

Divide the class into five groups. Ask each to research one of the following regulatory agencies and report back to the class. Use of the Internet should be encouraged.

EPA - Environmental Protection Agency - regulates water, waste treatment, pest management, pesticides in food processing plants. Sets limitations on pest residue in food.

FDA - Food and Drug Administration - concerned with the safety of all non-meat and non-poultry food products, labels, inspection of food plants, imported foods, feed mills that make medicinally or nutritionally supplemented feed for animals that are then used for human consumption. Recalls unsafe or contaminated food.

NMFS - National Marine Fisheries Service - performs voluntary inspection of fish and seafood; development, management and production of fisheries; habitat conservation.

USDA - United States Department of Agriculture - inspects and grades red meat, poultry, eggs, livestock; grades vegetables, grains, and dairy products. Inspects production plants; provides education on new developments, nutritional requirements and food safety.

State/local agencies - Inspect restaurant, retail food, dairy, grain mills and any other food establishment; embargo illegal food and inspect food from state waters. Check out your State Public Health Department and State Department of Agriculture.

Part II: The Label

Once the type of food package has been selected, a label must be designed and applied. A label is the display of written, printed, or graphic matter upon the immediate container. There are over 1,000 or so pages of labeling rules that must be followed so consumers can make informed decisions on their purchases.

Have the students check out some labels from items they have at home and list what is required and optional on a label. Additional information is available on the FDA or USDA web site.



Lesson VI: Develop Continued

Group Activity

Students will return to the teams they formed in the previous lesson and work on those areas they "defined."

Team 1: Formulate the product, conduct sensory evaluations

Using the formula sheet they have created and the list of ingredients, students will prepare samples of the new food product, using Worksheet #5 Formula for Success to keep track of the amount of each ingredient in each batch. The team will do sensory evaluations of each sample (use Worksheet #6 Sensory Evaluation). When the team is satisfied with the final result, a sufficient quantity of the new food must be prepared for sensory evaluation by the rest of the class and perhaps others in the school. Students will record all evaluations and report to class.

Team 2: Packaging and Labeling

The team will create a reasonable facsimile of the type of packaging they envision for their product, or they may use an existing empty container of the type they want. Students will then develop a Nutritional Label, using an existing label as their guide or researching the appropriate government regulations.

The information panel of the label must include the following:

- · Name of the food.
- · Name and address of manufacturer
- Ingredient list (listed in descending order or predominance, spices, flavors, colors, oils grouped).
- · Net weight.
- · Nutrition facts.
- · Special information statements on saccharin and aspartame
- Handling instructions.
- Serving size (in common household measures).
- · UPC label.
- · Inspection legend/establishment number.

Team 3: Shelf Life and Food Spoilage

Students will conduct the experiment on food spoilage, using Worksheet #7 Microbial Lab/ Shelf Life Experiment as their guide. In order not to hold up the project, this team will use the basic product with which Team 1 is working. For example, if the basic product is an existing salsa that will be altered with various other ingredients, the microbial experiment may be conducted with just the existing salsa. However, when the final product is developed, the experiment may be conducted again with the new food in its final formulation.

Lesson VII: Deploy

Marketing the product (2-3 sessions)

Objectives

- To develop a marketing plan.
- · To design graphics for the label to enhance sales.
- · To create various marketing campaigns.

Major Concepts

- Marketing involves all the steps it takes to move the food product from the producer to the buyer/user.
- Marketing is a key component for the success of any product.
- The market has become more diverse and competition has increased.

Outcomes

- To understand the components of a marketing plan.
- To employ appropriate advertising and promotion techniques to promote the product.
- To construct a method to evaluate advertising strategies.
- · To decide on a distribution method.

Introduction

New technologies and an affluent society have created a need for products that fit the food safety, lifestyle and health concerns of an ever-changing market. To help meet that need, more than 10,000 new food products have been developed every year since 1994. Many products succeed due to brand loyalty. This is generally the result of the producer delivering the same level of quality all the time. Competition for the consumer dollar relies heavily on the marketing of a particular product. Marketing includes all the steps necessary to take the product from the producer to the customer.

Class Lesson

Ask the students what comes to mind when they hear the word "marketing?" What are some of the decisions that have to be made when preparing to roll out a new food product to the marketplace? Consider and discuss the following:

- 1. Production schedule.
- 2. Where/how to test market.

- 3. Type of sales (e-tail, food service, retail, etc.)
- 4. Shipping requirements
- 5. Sales force required
- 6. Retail price
- 7. Label design/graphics
- 8. Promotions/advertising
- 9. Evaluation standards/methods

Have the students brainstorm ways products are advertised and promoted. TV commercials; magazine and newspaper ads; signs in store windows, billboards, buses, trains, etc.; ads on the radio; trailers and ads at the movies or on videos; products shown in movies and on TV shows; infomercials; cable shopping shows; cents-off coupons in mail or supermarket; door-to-door; telemarketers, internet advertising; event sponsorship, etc.

Discuss and/or show examples of these methods of advertising. Compare and contrast the various media. Have students ask their parents why they buy certain products and whether advertising has influenced their decision.

Discuss the following persuasive advertising techniques:

Testimonial - a famous person or professional group endorses the product.

Transfer - the assumption that if you use the product you will have the positive results promised by the ad, e.g., good health, beautiful skin, strong body, etc.

Glittering generality - using superfluous words to describe the product ("mm,m good").

Plain folks or elitism - identifying with the general public or making the product only for the privileged ("for the moments of your life", "a diamond is forever").

Bandwagon - inferring everyone's doing it, so you should, too.

Discuss where and how the class product should be sold.

Group Activity

Divide the class into three different groups, according to ability and interest, to create different types of advertising and promotion for the class' food product. If the groups are large, they may be divided again so that more than one item is created by each group.

Group I

Some students will create a magazine ad, an FSI (free-standing insert, such as found in direct mail promotions like ValPak), and/or a paper coupon insert in the Sunday paper. Others will design the graphics for the label, including the product name.

Group I

Students will write a script for a TV commercial. (Optional: Record it on videotape.)

Group III

Students will write words for a jingle (plus music, if possible) and a tag line for the product. They will record the jingle, if music is written, and give the tag line to Group I to be added to the product label, if appropriate.

A fourth group may be formed to work on another form of advertising they choose.

Students will use *Worksheet #8 Marketing the Product* to plan each project.

Glossary

See Worksheet #9 for words and definitions related to food science.

Summary

Use *Worksheet #10 Summary* to recap the entire project so students can see at a glance the product they produced and the steps they took to develop it.





For information on Food Science careers, contact us at: Phone: 1-800-IFT FOOD