

improving nutrition publications

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"Cooking for Two," "Food Is More Than Just Something To Eat," "Nutrition—Food at Work for You"—topics in the weekly food column of your local newspaper? No! These are just a sample of the many nutrition publications issued every year by the United States government, one of the world's busiest printers. The federal government spends \$70 million a year to bring Americans information about nutrition.¹ Publications are a large part of that cost. Our Extension programs depend on federal agencies as a source of educational materials.

Recent reports show that while many pamphlets and brochures are produced at the federal level, they may not be effective.² Federal priority has been on program implementation rather than evaluation.³ Because of the recent directive from USDA/SEA-Extension to document the effectiveness of Extension programs, it's important to evaluate the basic content of educational materials used.

Need for Evaluation

In September, 1977, the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the House of Representatives Committee on Agriculture began public hearings to investigate federal nutrition education programs. The staff of the subcommittee, working through the Congressional Research Service, requested an evaluation of nutrition education materials produced by federal agencies.

The evaluation team was comprised of an Extension specialist in the Department of Human Nutrition and Foods, two reading specialists in the College of Education, and graduate research assistants in Nutrition and Curriculum and Instruction at Virginia Polytechnic Institute and State

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University. Although the evaluation results reported here were limited by time and the immensity of the task, the findings merit serious consideration by Extension professionals.

Evaluation Procedures

A total of 417 pamphlets, brochures, and bulletins on food and nutrition are available from the federal government. A representative sample of one-fourth of the publications was selected randomly by the staff of the subcommittee and given to the evaluation team. Publications were supplied from the following agencies:

1. Food and Nutrition Service (USDA).
2. Federal Extension Service (USDA).
3. Agricultural Research Service (USDA).
4. Office of Child Development (HEW).
5. Public Health Service (HEW).
6. Health Services Administration (HEW).

Several tasks were undertaken before assessing the nutrition publications. Criteria for judging federal publications were established. An effort was made to choose alternative nutrition reference sources representing appropriate standards for comparison.

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The nutrition content of the publications was compared to similar content presented in current nutrition texts, journal articles, and other publications developed by government agencies, professional societies, and the food industry. To determine whether nutrition information presented was relevant to consumer needs and interests, it was compared to the results of several studies assessing consumers' knowledge, attitudes, and practices concerning nutrition. Studies chosen were conducted by governmental, industrial, university, and marketing research survey agencies during the 1970s.

What Were the Results?

Misconceptions

Although most of the nutrition material presented in the publications is correct, there were inaccurate or misleading ideas in several of the more generalized publications. Some government publications presented information in a way that might reinforce misconceptions.

For example, 98% of the population doesn't understand the concept of caloric balance or make a direct connection between food energy and calories.⁴ We often hear individuals on diets claim, "If I have to cheat, I cheat on protein." We've somehow given the public the message that protein, even in excess of body needs, isn't fattening. Carbohydrates and fats, on the other hand, are viewed negatively. Several government materials suggested that foods in the bread/cereal group were "fattening." Foods in this group are described as "providing calories and should be avoided by persons watching their weight." This may be why many of our clients classify food as "good" or "bad" based on the presence or absence of "desirable" or "negative" nutrients.

Little Nutrition Info

Only three percent of homemakers in the United States are aware of general food nutrient information.⁵ Homemakers are more knowledgeable about the handling and storage of foods than the nutrient content of foods and nutrient needs of individuals. Government publications may contribute to this situation. Many of the pamphlets we reviewed concentrated more on taste, texture, cooking methods, etc., than on nutritive quality.

Caloric content per serving is given for many recipes in government publications, but no information on nutrient content in relation to caloric intake is presented. It should be emphasized that there's the need to help people apply nutrition information in food selection. This type of information would be helpful in future publications.

How Current?

How current is the information available? There's a great deal of information available on general nutrition in government publications. Although several of the publications reviewed dealt with current issues, they lacked detailed and accurate information on the specific nutrient needs of particular population groups, including infants, teenagers, and pregnant women. More current nutrition data on these groups are needed. Many of us in foods and nutrition use government food preservation publications as a major source of information. Although these materials are extremely useful, they're not, for the most part, based on recent research. Consumers want to know the most current information.

How Well Communicate?

How well do publications communicate their message to the intended audiences? The majority of government nutrition publications have dealt with broad concepts and are addressed to the general public. One pamphlet we reviewed was directed

to physicians and pregnant women. It's difficult to supply information useful to both professionals and consumers in the same publication. Consequently, such general publications may not be effective.

The most comprehensive and appealing publications were those with a more structured format directed to one audience and focusing on one concept. Government agencies may need to abandon the generalized approach to meet the needs of the "average" consumer and develop publications focusing on a specific concept designed to meet the needs of one specific target audience.

Were Do We Go from Here?

Are we suggesting that we ignore government publications and look for better sources of information? No! Large gaps exist in the public knowledge, and government agencies have long provided the consumer with information that relates to personal needs and interests.

However, as a result of this study, we can make several recommendations for the improvement of government educational materials. Government agencies should continue to develop and distribute publications on a wide variety of topics. Target audiences should be accurately identified in each case and be a primary consideration in planning the publication.

Government agencies may need to consider the possibility of developing publications, source books, and teaching aids for professionals, rather than the general public. State Extension specialists and agents currently develop educational materials to supplement those developed at the federal level. State and local educators may be in a better position to adapt information for specific clientele groups. Government agencies should concentrate on developing: (1) educational materials addressing current, relevant consumer needs and (2) an ongoing system of evaluation for new educational materials and the updating of others.

Summary

As community educators, Extension professionals have an excellent opportunity to improve the quality of life in the nation. We must maximize the effectiveness of our information resources if we're to be effective change agents. This is unlikely to occur without greater consumer and educator participation in developing and testing educational materials.

The evaluation reported here is one of the first comprehensive studies of federal publications. It emphasizes the need for constant evaluation and updating of these publications. Government publications can help Extension professionals to

better accomplish our goals as educators. It's our responsibility, however, to evaluate such publications continually and adjust information sources to meet changing consumer needs.

Footnotes

1. L. Light, "Nutrition Education: Policies and Programs," *Nutrition Program News* (Jan.-April, 1978).
2. F. W. Richmond, "The Role of the Federal Government in Nutrition Education," *Journal of Nutrition Education*, IX (1977), 150 and U.S., Congress, House, Committee on Agriculture, Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition, *Nutrition Education Hearings*, September 27-28 and October 6, 1977 (Washington, D.C.: U.S. Government Printing Office, 1977).
3. Light, "Nutrition Education" and Nutrition Research Interagency Working Group, *Findings and Recommendations on Federally Supported Human Nutrition Research* (Washington, D.C.: U.S. Government Printing Office, Office of Science and Technology Policy, Executive Office of the President, 1977).
4. U.S., Department of Agriculture, *Homemakers' Food and Nutrition Knowledge, Practices, and Opinions*, Home Economics Research Report Number 39 (Washington, D.C.: U.S. Government Printing Office, 1975).
5. *Ibid.*