

EDUCATION

Elaine H. Asp, University of Minnesota
Joanne L. Slavin, University of Minnesota

To begin the session, we discussed how computers are being used in various educational settings in Minnesota. The use of the computer in informal nutrition education was presented, as was how the computer has been incorporated into the public school curriculum, for elementary and junior and senior high students. Uses of the computer in the training of foods and nutrition students was presented. Other health professions, such as nursing, medicine, and dentistry, are also using foods and nutrition programs in college courses and these were presented by different attendees of the session.

Various microcomputers and software were used in shopping mall settings as informal nutrition education for the public. CEREALS, a simple program distributed by the Minnesota Educational Computing Consortium (MECC), was recommended for use with the public. The program shows the user graphically how much sugar is in different cereal products. The user does not learn anything about the nutritional attributes of sugar. In other words, users will leave the program knowing that their favorite cereal is 40% sugar, but they will not know what to do with that information.

The use of Pillsbury's "Eat Smart" Apple II program at the Twin Cities Marathon was discussed. Runners were very interested in having their diets analyzed, but the nutrient analysis generated many technical nutrition questions. Fortunately, nutrition graduate students were available to answer questions. However, the experience illustrated that nutrition computer programs will not replace nutritionists, but may change their responsibilities.

Elementary school students are some of the biggest users of foods and nutrition computer programs. Some of the workshop participants described their efforts in teaching students how to use foods and nutrition programs. MECC software has been used, as has software from the University of California-Berkeley called "What's in your lunch". Games are very popular vehicles for teaching foods and nutrition concepts.

Computer camps for elementary children that included foods and nutrition programs have been conducted by some workshop participants. The Dairy Council is developing software on foods and nutrition for elementary children which should be available soon. There was some discussion about access to home computers. Obviously, some children only have access to a computer at school or camp. Educators should be sensitive to this discrepancy and not expect all children to be equally adept at using the computer.

The uses of computer in professional education was discussed during both sessions. Although there was general agreement that foods and nutrition students should have experience with computer, some programs make minimal use of the computer in professional courses. Also, it was discussed whether a separate course on computers should be developed or if computer technology should be incorporated into existing courses. Schools, such as Texas Women's University, do have a separate computer course for dietetic students. The course is team taught with faculty from both computer science and nutrition.

Although most of the groups agreed such a course would be advantageous, most universities are not at liberty to develop new courses, because of fiscal restraints. Therefore, most faculty members present described how computers have been or will be incorporated into existing foods and nutrition courses. In some schools, such as Eastern Missouri University, all graduates must be "computer literate", putting pressure on dietetics faculty to include computer concepts in their teaching. About half of the universities represented had microcomputer labs for their students, while the rest had students working on the mainframe systems. Most participants were anxious to get more microcomputers for their students to use before incorporating microcomputers into their classes.

Some time was spent discussing drawbacks to computers. Participants pointed out that computer printouts tend to be gospel, even if errors in the data base or calculation logic give gross errors. When diet analysis programs are used, students may not learn how to calculate the percentage of the RDA, if the computer does the work for them. It was agreed that students should be required to interpret the results of computer programs used in various classes, not just run the program. Many of the diet analysis programs used in college courses, therefore, may not be "user-friendly" enough for hospital staff or the public.

Directories for software were suggested by various participants. Penn State was identified as a source for a nutrition software directory. Personal Computing, the August 1983 issue lists nutrition and health software for microcomputers. Problems with software quality were debated. The June 1984 issue of the Journal of Nutrition Education will be devoted totally to computers in nutrition education.

Access to computers was a problem for some of the participants. Microcomputer manufacturers were recommended as potential donors of hardware. Aileen Eick, Mankato State University, suggested National Science Foundation (NSF) as a potential funding agency, since her school received a large grant from NSF to incorporate microcomputers into the curriculum.

The session was useful in sharing sources for software and describing successful settings for foods and nutrition computer programs. Some participants had not yet incorporated computers into their teaching situation and found it useful listening to those experienced with computers in nutrition teaching.