

Arena, Echols co-authors

Book is 'A Common Sense Guide to Good Eating'

By David Williamson

A working mother of two, who calls herself "a great believer in self-education," has written a book that she hopes will help clarify many of the basic principles of good nutrition.

Barbara Echols, who coordinates special and regulatory programs at the medical center, said inspiration for the book came to her one afternoon in 1974 when she took her teenaged daughters shopping for blue jeans.

"I noticed that many of the other youngsters who came into the shop were overweight," she explained. "That

surprised me, and I began to wonder how much young people know about weight control and nutrition."

Generally glossed over

Echols asked her daughters, their friends and people who worked near her office at Duke. She then circulated a questionnaire among students at a local high school.

"What I found was a conspicuous lack of knowledge about the relationship between diet and health," she said.

Nutrition, it turned out, was either not taught in schools at all or generally was glossed over in classes on home

economics and physical education. The stores she canvassed were loaded with books on the latest fad diets, but none of those volumes seemed to present a balanced picture of the subject.

Arena co-author

It was then that the former medical technologist decided to write her own book. After two years of research, the result is "The Commonsense Guide to Good Eating," a 174-page paperback just published by Barron's Educational Series, Inc., of Woodbury, N.J.

Dr. Jay M. Arena, professor of pediatrics and a nationally-recognized

authority on accidental poisoning, served as co-author.

The first chapter of "The Commonsense Guide to Good Eating" asks and answers seven questions designed to let the reader test his or her own knowledge about proper eating. The second explains recommended dietary allowances and discusses why the body needs protein, fat, vitamins, minerals, water and roughage.

Fat good in moderation

Fat, for example, is used for energy reserves, internal organ padding and heat

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Duke University

Medical Center

Intercom

VOL. 25, NO. 47

DEC. 1, 1978

DURHAM, N.C.

Study could help cut cost of finding cancer

By William Erwin

Physicians at the Comprehensive Cancer Center have begun a series of studies that could save money and time for patients getting cancer examinations.

By showing how to save money for these patients, the studies could also help hold down the cost of health insurance for perhaps millions of other Americans.

The studies will compare three ways of diagnosing cancer — computerized tomographic (CT) scanning, gamma camera scanning and ultrasound. Duke radiologists want to learn which method, or combination of methods, proves most useful for finding certain types of cancerous tumors.

Dozens of pictures

A CT scanner works much like a regular X-ray machine. Instead of taking one picture, however, it takes dozens as its X-ray tube rotates around the patient.

Sensitive detectors arranged in a circle around the patient record how much X-ray energy is absorbed by each part of the body. A computer then puts this information together and draws a cross-sectional picture of the body's interior.

A gamma camera produces a different kind of picture. It shows how much of a substance tagged with a radioactive tracer is taken up by parts of the body. As the tracer is absorbed by an organ, it forms an image of the organ when a detector passes over the patient.

An ultrasound machine sends sound waves into the body. These waves bounce off structures inside the body just as sonar waves bounce off objects underwater. The returning echoes are picked up by a sender-receiver probe and are converted into a cross-sectional picture.

Patients involved with the study will

already have had their tumors diagnosed. Since doctors will know where the tumors are, they can see which diagnostic machine or machines give the most helpful pictures at the lowest cost.

"We'll be defining the extent of disease, showing changes, following the disease after treatment and finding new areas of spread," said Dr. Charles E. Putman, director of radiological activities for the Cancer Center.

"We're interested in early detection, eventually. We're also interested in cost-savings and cost-effectiveness. All of these modalities are expensive. Hopefully, we can save patients some money."

Free exams in study

A CT scan normally costs about \$250, Putman said. A gamma camera scan costs about \$125 and an ultrasound exam costs about \$100, he said.

Patients admitted to the study groups, however, will get their examinations without charge. They will be referred by their personal physicians.

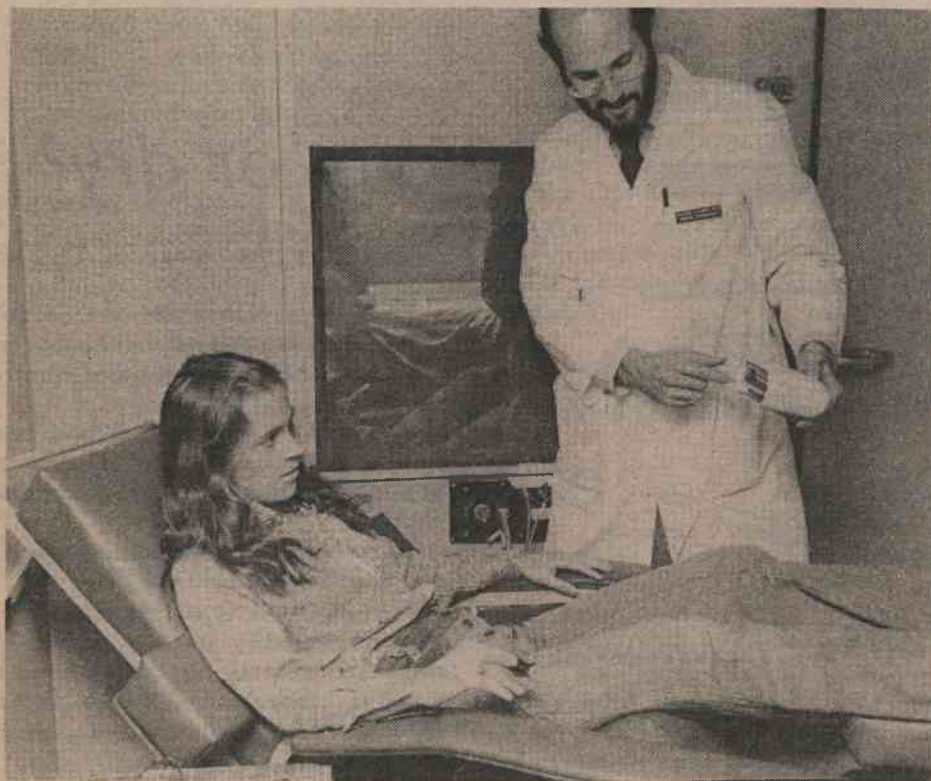
Dr. Carl E. Ravin, Duke's clinical director of imaging, said the current "technological explosion" in diagnostic methods makes it confusing for doctors to try to choose the best method for patients with suspected tumors.

The confusion results, Ravin said, because "nobody has looked critically at what these modalities will do individually or in combinations to produce the information we want."

May have four, but need only one

A patient with possible liver cancer, for instance, may have four or more different diagnostic examinations, he said. "In fact, he may need only one, but we don't know

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"COLD" CHAMBERS—Dr. Richard Surwit, director of the Behavioral Physiology Laboratory, and Angela Lanz, research technician, demonstrate the use of a chamber in the laboratory. The soundproof chamber will be used by some patients who participate in a study of Raynaud's Disease, a painful cold hands ailment. Lanz has a band taped on her finger which is connected to the digital temperature feedback unit Surwit is holding. The unit flashes in digital numbers the temperature of the patient's finger. (Photo by Parker Herring)

Have cold hands? Just relax

By Parker Herring

A Duke psychologist is looking for 40 people with cold hands.

Dr. Richard Surwit, associate professor of medical psychology and director of the medical center's Behavioral Physiology Laboratory, is seeking subjects to test a technique which he says can help sufferers of a painful cold hands disease.

The technique consists of relaxation exercises which train victims of Raynaud's Disease, symptomized by cold hand attacks, to warm their hands.

Think warm

An article recently published in the Journal of Behavioral Medicine reports results of similar behavior modification studies done by Surwit when he was at Harvard. These results indicate that Raynaud's Disease patients can raise the temperature of their hands by relaxing and thinking warm thoughts.

"Data from these studies show that relaxation techniques increased blood flow in the fingers of Raynaud's patients, even during prolonged exposure to cold," Surwit noted.

The psychologist said he has successfully used the techniques to treat

patients who had mild cases of Raynaud's Disease and others who were more severely afflicted, including one patient for whom doctors were considering amputating her fingers.

"Eighty percent of the Raynaud's Disease patients I've treated show both decrease symptom severity as well as increased hand temperature," Surwit said.

Cold, stress

The chronic cold hand attacks of Raynaud's Disease are stimulated by cold and/or emotional stress. During an attack, the fingers change colors, turning first white, then dark blue or deep purple and finally a bright red.

Women are five times more likely to have the disease than men, and Raynaud's commonly begins when a person is in the late teens or early 20s, Surwit said.

Victims of Raynaud's Disease have cold hands because there is not enough blood flowing to their fingers, and blood flow is controlled by the sympathetic nervous system (SNS), he explained.

"The same neuromuscular pathways that carry signals from the brain to close blood

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