

Aging and Eating: Good News for Some

It's called the tea and toast phenomenon — elderly people nibble on carbohydrate snacks all day, shying away from preparing full meals and suffering from a protein-poor diet. That is the picture that emerged from anecdotal studies and national surveys conducted in the United States and England over the last 10 years. It is also what nutrition scientist Judith Wurtman expected to find when she and her co-workers at the Massachusetts Institute of Technology began a study comparing the food intake of healthy older people with that of younger people.

Instead, she discovered quite the opposite. "The older people didn't snack at all . . . and their protein intake was much higher than we anticipated. It was gram-for-gram almost identical to the [protein intake] of the young," she said at a recent

seminar at the National Institutes of Health, where she presented her preliminary findings.

Wurtman's results suggest that there is no underlying *biological* reason for healthy older people to avoid protein. She says elderly people who are not eating enough protein may be doing so for socioeconomic reasons — such as not being able to afford protein-rich meals, or being too lonely to cook for themselves. Or, she suggests, there may be other biological abnormalities, such as depression or alcoholism, that influence food choice. But aging *per se* does not appear to affect protein consumption.

In past work, Wurtman and others have shown that obese people and depressed people often crave carbohydrates because their brains are deficient in a chemical called serotonin, and carbohydrates increase serotonin levels (SN:4/7/84,p.216). She had anticipated that older people would also constantly snack on carbohydrates, perhaps because they need to compensate for the loss of serotonin-containing brain cells. But Wurtman found that the study's 49 older people, aged 65 to 94 years, actu-

ally ate fewer carbohydrates than did the 33 younger people, aged 15 to 35 years. The group that ate the least-balanced meals, she says, was the young women.

Wurtman says her study is the first to monitor carefully food intake in the elderly. For several days her subjects lived at an MIT research center where their meals were cooked for them. The carbohydrates and proteins they consumed, both as snacks and as meals, were measured directly. In past surveys, says Wurtman, researchers usually estimated food consumption by interviewing subjects about what they ate. Because there were no standardized meals made available to all participants, researchers could have only a qualitative feel for the nutritional content, and some participants may not have eaten some kinds of foods because they did not want to prepare meals themselves.

Wurtman would like to use her recent results on the eating habits of healthy older people as a standard against which to compare the food choices, and hence perhaps the brain function, of elderly people with illnesses and other dysfunctions. Other researchers maintain that, for whatever reasons, a large number of elderly still eat poorly. But Wurtman's conclusion for the healthy subset of older people tested in her study is that "these people eat very well. I think that's quite reassuring."
— S. Weisburd

Cameroon: Death by suffocation

The more than 1,500 people who perished after a gaseous cloud escaped from Lake Nyos in Cameroon on Aug. 25 (SN:8/30/86,p.133) probably died of suffocation, the Agency for International Development (AID) announced at a press briefing this week. After interviewing survivors and performing autopsies on humans and animals, a medical team sent by AID tentatively concluded that the victims became unconscious within seconds of exposure to carbon dioxide, along with hydrogen sulfide compounds. They died shortly thereafter of respiratory or cardiac failure. The pathologists found no evidence that cyanide or carbon monoxide was involved in the deaths. They also determined that acids containing sulfur caused the skin burns on many victims.

In addition, according to M. Peter McPherson of AID, a geosciences team "reports that the best evidence, as of this time, is that this disaster was not the result of an earthquake or of volcanic activity." McPherson says they are still not certain what caused the normally still bottom waters of the lake to come to the surface, releasing the gas cloud. One possibility is that heavy rains in the region prior to the disaster might have caused sediments to slide and disrupt the bottom waters. McPherson says that the Cameroon government has asked the geoscientists to evaluate the hazards of other lakes in the region, and that AID has agreed to fund that study.

— S. Weisburd

Roman city yields new quake clues

In two seasons of field work at the 16-century-old Roman city of Kourion on the island of Cyprus, a team of scientists uncovered evidence of a massive earthquake that struck the outpost on July 21, A.D. 365 (SN:8/3/85,p.71). In their latest excavations at the site, the researchers have discovered the well-preserved skeletons of a man, a woman and a small child clinging together in the ruins of a house that was leveled during the earthquake.

This brings to seven the number of human skeletons uncovered in the house, the only one explored so far. "I think seven skeletons in one house indicates a tremendous loss of life," says archaeologist and project director David Soren of the University of Arizona in Tucson. The catastrophe may have been comparable to that caused by the Vesuvius volcanic eruption at Pompeii and Herculaneum in A.D. 79, he adds.

The excavation, conducted this past summer, also provided clues to another, less powerful seismic rumble that hit the area 20 to 30 years earlier. Crucial to the analysis of the earlier earthquake was the identification of several levels in an extensive courtyard. Large columns had fallen on an early level and then had been stacked up and moved aside. Apparently, the later, more devastating earthquake



Skeletons of a man, a woman and a child uncovered in house in Kourion.

hit before heavy rubble was cleared away. Surrounding structures also showed signs of partial rebuilding from earlier earthquake damage. Geologist Frank Koucky of Wooster (Ohio) College estimates that the first earthquake struck