

States to take unilateral action in these areas, and Mink will likely be responsible for coordinating policy between the Administration and the Congress.

SCIENCE NEWS learned that President Ford intends to propose a total NSF budget of nearly \$900 million for fiscal year 1978, with special emphasis on basic research. The final FY '77 budget for NSF was \$773.6 million, which represented a leveling off of the downward trend of funding for basic research. In constant dollars, the support of this research has decreased 20 percent since 1967, and the new budget proposal, if passed, would be the first clear reversal of that trend.

This budget proposal may help explain the unusually warm farewells President Ford and Vice President Rockefeller received from the National Science Board, which oversees policy for NSF. Norman Hackerman, chairman of NSB, thanked Ford, in a letter, for his "strong support of U.S. science," and wrote to Rockefeller that "your personal attention" was instrumental in establishment of the new White House science adviser post. Hackerman also congratulated Jimmy Carter on his election, and the President-elect replied that "I look forward to benefiting

from your support and advice during the years to come."

On Capitol Hill, the swearing in of the 95th Congress also brought about some changes of vital importance to science. The powerful House Committee on Science and Technology lost 5 of 25 Democratic members and 7 of 12 Republican members. These included such staunch NSF defenders as ranking minority member Charles A. Mosher (R-Ohio) and James W. Symington (D-Mo.), plus arch-critic John B. Conlan (R-Ariz.).

New Republican members include Robert K. Dornan (Calif.), Hamilton Fish Jr. (N.Y.), Harold C. Hollenbeck (N.J.), Manuel Lujan Jr. (N.M.), Carl D. Pursell (Mich.), Eldon Rudd (Ariz.) and Robert S. Walker (Penn.). New Democratic members have not yet been selected.

Speculation continued to swirl about who Jimmy Carter would appoint to head the Office of Science and Technology Policy (OSTP). The director of this office is the President's science adviser, and an early appointment is expected. The leading candidate is considered to be Lewis Branscomb, IBM vice president for research, who headed a Carter task force on science policy. □

citizens to adopt more prudent eating habits, without severely harming farmers or the food industry, may be seen in experiments going on in Norway and Sweden. The Swedish government has adopted a vigorous public education program aimed at cutting down the amount of fats, calories, sugar and alcohol Swedes consume. In Norway, the government hopes to establish a broad array of subsidies, grants, price policies and other incentives to stabilize meat consumption, in favor of fish, grains and vegetables. Eight ministries are involved.

The first step in combating malnutrition—whether from overeating or under-eating—is education. The World Health Organization estimates that in Africa, half of the nutritional problems could be solved through appropriate education. In Western countries, more nutrition education is also needed for the public, beginning with doctors. One specific goal, for example, might be to encourage Americans to reduce fat consumption from the present estimated 50 percent to 35 percent.

Should such national nutrition policies be adopted worldwide, say the authors, not only would the general level of public health improve, but there would be less global competition between rich and poor countries for the available food. Rather than being converted to meat, more grain would be available for distribution to a larger number of people. □

Toward a national nutrition policy

Since diet is involved in more than half the deaths in industrialized societies, developed countries need national nutrition policies just as much as underdeveloped ones. This is the conclusion of a year-long study of malnutrition by Erik Eckholm and Frank Record of Worldwatch Institute in Washington.

The effects of undernutrition have long been recognized, they say, and many Third World countries have adopted government policies to cope with the problem. But among industrial nations, only the Scandinavian countries have begun to experiment with policies that might modify citizens' diets so as to reduce the incidence of diseases associated with overnutrition. These include diabetes, cancer, stroke and heart diseases.

The Worldwatch report, "The Two Faces of Malnutrition," cites recent evidence that both the effects of eating too much or too little may be more implicated in human illness than previously thought. The authors cite figures, for example, that indicate the minimum protein requirements needed to maintain health may have been set too low. This means that programs designed to improve nutrition for millions of undernourished people in poor countries may have to aim a little higher. Undernutrition is now blamed as a contributing factor in half of all child deaths in Latin America, with comparable figures likely in South Asia and Central Africa.

Even in the children that survive, however, malnutrition apparently contributes to mental retardation. Particularly in the

first year of life, when a child's brain grows from 25 percent up to 70 percent of its adult weight, malnutrition can cause irreparable damage.

But in industrialized countries, too, a nutrition strategy can be seen as an investment—what Eckholm and Record call "another step in the evolution of public health policies." Already many government agencies adopt pricing or farm incentive policies that affect people's diets indirectly—but these uncoordinated policies often work in opposition to each other, say the authors. For example, the U.S. Department of Agriculture is now trying to stimulate egg sales, while other agencies try to get people to cut down on their cholesterol intake.

Again, recent studies have illuminated previously unknown health effects of diet. It is now estimated that as much as 50 percent of all cancers in women and one-third of all cancers in men may be related to what they eat. High fat consumption, particularly, has been linked to cancer of the bowel, although the evidence is still circumstantial. Diet and other environmental factors may interact to cause cancer: Heavy alcohol consumption, for instance, may enhance the carcinogenic impact of other agents, such as cigarette smoke. About all an individual can do, the authors recommend, until these diverse threads of evidence are straightened out by further research, is to adopt a "prudent diet," with less fat and more whole grains, fresh fruits and vegetables.

How governments can encourage their

Japan completes breeder reactor

Japanese scientists have completed building a breeder reactor, called Joyo, according to the newspaper Asahi. The reactor, located 72 miles northeast of Tokyo, took 14 years to construct, at an estimated cost of \$85 million.

Completion of the advanced reactor means that Japan will now join the small group of nations capable of breeding plutonium fuel for use in other, conventional nuclear reactors. Plutonium can also be used to construct bombs. Other nations with large, operating breeders include Britain, France and the Soviet Union. The United States has one small test reactor operating, and its major breeder project is years behind schedule.

A Japanese government policy paper last year called for greater effort in developing breeder reactors. The present reactor will generate 50 megawatts of heat, but a Japanese breeder capable of producing 250 megawatts of electricity has already passed the planning and design stages. Japan now has 7.43 million kilowatts of nuclear generating capacity—using conventional reactors—and hopes to develop 129 million kilowatts capacity in breeders and related reactors by the turn of the century. □