combine to increase the likelihood of toxemia regardless of any weight gain or loss.

The NAS-NRC panel also questions the common practice of restricting salt intake and prescribing diuretics to reduce fluid retention.

**Pregnant women** generally have increased levels of body fluids; Dr. Shank observes that this is due in part to a substantial rise in blood volume, and with it, fluid volume. Mild edema, or fluid retention, manifest by swollen ankles, for example, is a common but not serious effect of pregnancy. It appears to be unrelated to the basic disease process of toxemia.

Experiments with rats indicate that pregnant animals need reasonably substantial levels of salt. The same may be true of women. Diruetics, they report, should not be given routinely but only when there is clinical evidence that they are needed.

Taking still another swing at traditional medical practice, the NAS-NRC investigators declare routine use of vitamin and mineral supplements "of doubtful value," excepting only iron and folic acid. They recommend an iron supplement of 30 to 60 milligrams a day and a daily dose of 200 to 400 micrograms of folic acid. □

QUARK THEORY

## Trouble from N*

The predictions of the quark theory of elementary particles have proven quite accurate, but more sophisticated experiments are causing trouble. Experimenters are finding now and then that what they previously thought was one particle is really two. "The more resolution we have," says Dr. Kwan Wu Lai of Brookhaven National Laboratory, "the more complicated the picture becomes."

**The most celebrated** of such split particles up to now is the $A_2$ meson (SN: 11/1, p. 410), which raises serious doubts about the adequacy of the present quark theory to explain it. Now a Brookhaven experiment confirms the existence of another split, in this case the N* meson. The experiment was done by Dr. Lai and Drs. David H. Crennell, James Louie, J. Michael Scarr and W. H. Sims. The experiment confirms, they say, that a meson of 1,730-million-electron-volt mass, which they call the N* (1730), exists and is a different particle from the previously known N* (1680) of 1,680-million-electron-volt mass. They don't yet know enough about the spin and parity properties of the new N*, says Dr. Lai, to determine whether the splitting of the N* presents the same sort of problems to the theorists as does the splitting of the $A_2$. □

SCIENCE NEWSBRIEFS

### Yellow light for saccharin

At the request of the Food and Drug Administration, the National Academy of Sciences-National Research Council convened an eight-man panel to investigate the safety of saccharin, the artificial sweetener used in combination with cyclamates until the latter were banned as a hazard (SN: 10/25, p. 369). For the present at least, saccharin will not go the route of its former companion. On the basis of available data, the NAS-NRC panel ruled that normal use of saccharin "does not pose a hazard." At the same time, they pointed out that available data are incomplete and called for further research. □

### Lunar quakes

For years lunar scientists have disputed whether the moon's interior is hot or cold. Now from the seismometer left on the moon by Apollo 12 astronauts last November at the Ocean of Storms, evidence seems to be reinforcing the hot-moon theory.

According to Dr. Gary Latham of Columbia University's Lamont-Doherty Geological Observatory, seismic signals recorded at the site show that moon quakes are occurring each lunar month, at the time of perigee, when the moon is closest to the earth.

The quakes are apparently triggered by the tidal strain and Dr. Latham seems certain that these are produced by activity within the moon, probably a mile beneath the surface, and indicate a hot interior.

The seismometer transmitted 160 signals during seven months. Of these 14 were indications of lunar quakes, according to Dr. Latham. The others were probably caused by meteoroid impact. □

### Mercury polluters

When the Federal Water Pollution Control Administration last month proclaimed mercury pollution to be a widespread problem in the United States it said it was initially asking industries voluntarily to stop discharging mercury into waters (SN: 7/11, p. 34).

They failed to comply fast enough to suit Secretary of the Interior Walter J. Hickel. Hickel announced last week that the Justice Department will file charges against 10 United States industrial plants for "discharging sufficient quantities of mercury into the nation's waterways to constitute a serious hazard to public health.

"This is just the start," Hickel said in releasing the names of the companies, which included Allied Chemical, Olin Mathieson and Georgia-Pacific Corp. "We are developing hard evidence against a number of other companies." □

### Genetics study

To date, some 2,000 diseases are recognized as being either caused by genetic disorders or having a genetic component.

The House of Representatives has adopted a proposal for establishing a national task force in genetics. The bill, allocating $10 million to back a panel of scientists, including representatives of the National Institutes of Health, now goes before the Senate.

The suggestion for a task force in genetics came from the National Cystic Fibrosis Research Foundation in New York. Cystic fibrosis, one of the most common of genetic diseases, affects one of every 1,000 newborns, and one person in 20 is believed to carry the gene for the disease. □

### Drug bill

The House Subcommittee on Public Health last week recommended legislation limiting the Justice Department's authority to regulate drug research (SN: 7/25, p. 62) and to classify drugs as subject to abuse. Much of the power would be assigned to the Department of Health, Education and Welfare.

Justice opposes any restriction of its power to classify drugs, favoring a Senate-passed version making HEW simply an adviser to Justice on drug classification.

Another House bill, reflecting Justice's preference, was reported this week by the House Ways and Means Committee. Considerable horse-trading will take place before a final House version of the controversial Drug Abuse Control Law emerges. Then further compromise will be required with the Senate, if any drug abuse control legislation is to emerge from Congress this year. □

### Oral diabetic drugs

Scientists from 12 universities in the United States spent the last eight years studying oral antidiabetes drugs taken daily by close to a million persons with mild diabetes (SN: 6/20, p. 596). They concluded that these drugs offer no benefits but pose a risk of cardiovascular disease. The Food and Drug Administration has ordered drug manufacturers to rewrite the labels on these compounds, reporting the university group view.

The Canadian Government finds the United States action premature. Calling the study "inconclusive," and "far from satisfactory," Dr. Jeffrey Bishop of the Canadian Food and Drug Directorate says that the FDD plans no action similar to the FDA's. In fact, the FDD advises patients to continue taking oral antidiabetes compounds. □