

MEDICINE

Save Lives of Unborn

High vitamin C intake, combined with vitamin K, hesperidin, psychotherapy and sedative drugs as needed, enables expectant mothers with previous miscarriages to have babies.

► TENS OF thousands of lives snuffed out before birth each year in the United States might be saved if expectant mothers took more vitamin C every day during their pregnancies.

The high vitamin C intake—plus vitamins K and P, psychotherapy and sedative drugs as needed—enabled 91 out of 100 women to have babies, although these same women had previously lost four babies each on the average, Dr. Carl T. Javert of Cornell University Medical College, New York, reported at a conference of doctors and science writers in Lakeland, Fla.

In a study of nearly 2,000 patients who have lost one or more unborn babies, Dr. Javert found that bleeding of the membranous lining of the uterus occurred in 61%. This finding, plus the finding that many of the women had frequent nosebleeds, bleeding gums and bruises, gave him the idea of looking into their nutritional state, particularly as regards vitamin C.

This vitamin has an anti-bleeding action through its effect on small blood vessels. Dr. Javert compared it to a "neverleak" which helps to close any small breaks in blood vessels.

He found from blood studies that nearly half a group of normal pregnant women were deficient in vitamin C, with the amount of vitamin in their blood plasma falling to 29% of its original level by the time the baby was born. The amount was even lower in the women in the abortion

group who had bleeding from the lining of the uterus.

So he started the new program of giving vitamin K, which favors blood clotting, and large amounts of vitamin C, which helps strengthen blood vessel walls, and hesperidin, formerly called vitamin P, which also is believed to strengthen blood vessels.

He believes, from his results, that the vitamin C requirement for pregnant women set by the National Research Council is too low, and that women who have abortions or are threatened by them need even more of the vitamin.

Dr. Javert's patients get their vitamin C by drinking lots of orange juice, four big glasses daily if they have had abortions previously, in addition to pills of synthetic vitamin C, or ascorbic acid, and hesperidin.

The vitamin C treatment will not prevent all abortions, Dr. Javert pointed out, since babies are lost before birth because of several different conditions, although the largest numbers are lost because of the bleeding from maternal tissues. Fragile blood vessels, swollen and stretched during pregnancy, along with the wear and tear caused by the growing baby in the womb, may, he thinks, account for the easy bleeding and resultant abortion.

Dr. Javert's report will be presented in detail in *Obstetrics and Gynecology*. He spoke at a conference sponsored by the Florida Citrus Commission.

Science News Letter, March 27, 1954

GENERAL SCIENCE

Germ Warfare Tests

► APPREHENSION ABOUT weapons of future wars is not confined to worry about atomic or hydrogen bombs. The announcement of biological warfare tests to be conducted in the Bahamas by the British is a reminder that germ warfare, poison gas and radioactivity are possible military devices.

The Bahamas test presumably will be innocuous. The spread of material from a "germ bomb" is to be measured. Such a bomb will be more likely to be a spraying device, not an explosive. The stand-ins for pathogenic, dangerous germs will be radioactive material of relative harmlessness that can be easily traced with detection devices.

One of the troubles with germs, from the viewpoint of the spreader of them, is that they may not reach where they are supposed to go, that they may become too scattered to effectively infect, and that they

may turn around on a changing wind and attack the attacker who uses them.

There are the same troubles with poison gas. That is a reason it was not used in World War II. The more potent reason is that the Allies had great stores of poison gas ready for instant retaliation and the Nazis knew it.

Poison and germ warfare are mass weapons difficult to pinpoint in their effects. This is true even more with germs and poisons than with atomic bombs. They are total war or world suicide weapons. In the case of germs, epidemics may be kindled that would backfire on the nation guilty of starting it all.

Cobalt metal mixed in atomic bombs is another world suicide device. The intense radiation of the atomic explosion would dissipate into the atmosphere the equivalent of radium dust, lasting for many years, and

bombarding earthly living things with radiation such as can cause cancer, hereditary changes and death.

Some of these methods of warfare are forbidden by the "laws of war." The trouble is that nations like people can not be counted upon to obey the law. We must discover what might happen and how to neutralize it, in our own continuing defense.

Science News Letter, March 27, 1954

ENTOMOLOGY

Plastic Tent, Poison Gas Forge Victory Over Pest

► HUGE, GAS-TIGHT plastic tents and a poison gas have enabled the U. S. Department of Agriculture to win a complete victory over one fruit insect pest.

The Hall scale in California will soon be eradicated. Department spokesmen proudly point out that this means "wiped out in the United States, not just under control."

Though the insect has been restricted, it was potentially a serious pest to almond, peach, plum, prune and other fruit trees. It is a native of the Mediterranean and Middle East countries. In California it has been confined to orchards around Chico, Oroville and Davis.

The eradication has been made possible by poisonous hydrocyanic gas, combined with huge plastic tents that are lowered over trees. The gas is pumped into the tents and kills the insect. More than a third of all the infected trees have already been treated.

Science News Letter, March 27, 1954

ASTRONOMY

Chart Active Solar Area For Over Three Years

► FOR OVER three years, Indian scientists have kept track of a highly active, but invisible, region on the sun as it returns every four weeks. This is the longest known life for one of this type of geomagnetic storms that plague shortwave users by disrupting reception.

Another active center has been charted as returning nearly every 27 days for almost two years, Dr. B. N. Bhargava of Kodaikanal Observatory, South India, and Dr. Ali M. Naqvi of the University of Delhi, India, report in *Nature* (March 13).

Such geomagnetic storms are not related to sunspots although, like sunspots, they recur about once every four weeks, the approximate time for one solar revolution. Even though there is no visible spot on the sun to which the storms are connected, their occurrence can be plotted from effects on shortwave radio reception.

Only about every eleven years, when the solar cycle is going through a low point, or minimum, as it is about this time, can scientists chart the invisible active regions. At other times, the moderate geomagnetic storms cannot yet be separated from other solar effects.

Science News Letter, March 27, 1954