

## MEDICINE

# Stress in Heart Disease

After periods of emotional stress, fatty acids released in the blood by hormones may possibly change into other forms that can pile up in the blood vessels.

► DOCTORS ARE BEGINNING to find physiological reasons that back up statistical evidence of a link between emotional stress and coronary heart disease.

Dr. Donald S. Fredrickson, research associate at the National Heart Institute, Bethesda, Md., reported to the clinical sessions of the American Medical Association meeting in Washington, D. C., that emotional stress causes a release of adrenalin and other hormones. These hormones, in turn, release fat from its storage places in the body and put it into the bloodstream.

Excessive levels of the hormones and the fats they release drop very quickly once the stress period is over. Although no direct relation between these transient free fatty acids and coronary disease has been shown, it may be that the fatty acids are changed to other forms that can pile up in a blood vessel.

There is evidence that the time necessary to clear the blood of these fatty acids after a stress period is longer in coronary patients, Dr. Fredrickson said.

Starvation causes a similar release of fat from stored tissue. However, this does not mean that an obese person should avoid dieting for fear of heart attack.

Speaking about blood fats and coronary disease in general, Dr. Fredrickson said, "The amount of cholesterol in the diet is of no importance because you cannot eat enough cholesterol."

Triglycerides are the principal form of fat we eat, he said. An average person may eat 100 grams of triglycerides a day but, by comparison, only half a gram of cholesterol.

The pertinent point is how much cholesterol or fatty acids are synthesized in the body, and how much goes into blocking or hardening arteries.

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## Child-Bearing at 35

► THE PREGNANT WOMAN of 35 is considered elderly for child-bearing by the obstetrician.

However, there are excellent reports of pregnant women having first babies at this age, Dr. D. Frank Kaltreider of the University of Maryland School of Medicine, Baltimore, reported at the clinical meeting of the American Medical Association in Washington, D. C.

High blood pressure, or hypertension, is the most prominent problem of the older mother. More than 20% among 237 older mothers studied at the University Hospital in Baltimore had some degree of high blood pressure.

The incidence of diabetes was three times

that of younger women who had borne children. Caesarean section is twice the rate of that for younger women. The delivery of a diabetic is recommended three weeks or earlier before full term.

The elderly patient is more likely to have twins and to have large babies. She is more likely to have cancer or heart disease, and she runs a greater risk of death than a younger woman.

The infant born to an older woman undergoes greater risk of death or handicap. Dr. Kaltreider said the older woman often receives only casual care if she has had previous children.

Because of dangers attending this age, she should have the best psychological and physical care.

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## Blood Pressure Lowered

► INJECTIONS of a placebo, or substance containing no medicinal properties, can lower blood pressure for nearly three years, University of Mississippi physicians reported. But the placebo in oral tablet form did not cause a decrease.

Drs. Raymond F. Grenfell, Arthur H. Briggs and William C. Holland presented these findings at an exhibit in connection with the American Medical Association's Clinical Meeting in Washington, D. C.

Their study, begun in 1956, involved 134 patients. Among 70 given injections, roughly half received a drug (hydrogenated ergot alkaloids) to reduce blood pressure,

while the other half were given a placebo. Results were comparable.

In the case of 60 patients who received tablets of the placebo and drug, those who took the drug showed a significant decrease in blood pressure but those who swallowed the placebo tablet showed no decrease.

The physicians plan to continue the study to see how long blood pressure can be lowered by placebo, and at the same time to observe whether a simple mathematical decrease is of itself valuable in improving the basic process of high blood pressure and whether the decrease halts the progression of damage to the heart and kidneys.

Among the other exhibits were two heart-lung machines, an "open cast" method of rehabilitating the surgically corrected clubfoot and a new adhesive tape that has proved successful in closing wounds and incisions usually requiring stitches.

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## SURGERY

## USSR Okays Apparatus For Abnormal Births

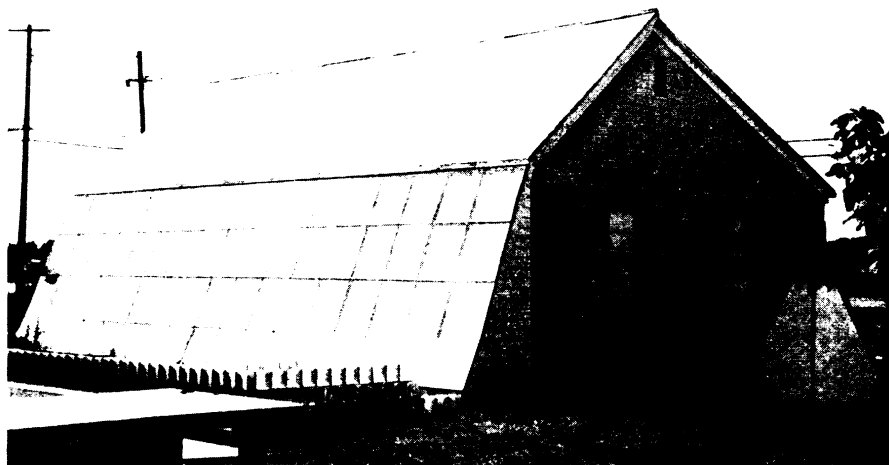
► A VACUUM-EXTRACTOR to replace forceps in abnormal childbirth has been approved for production in Russia.

Drs. G. G. Kotlyarevskaya and V. N. Aristova said the force exerted on the child's head by the vacuum-extractor during delivery does not cause any severe complications.

Cups of seven sizes make the instrument usable under varying conditions, they report in Abstracts of Soviet Medicine. The model is portable and can be used under any conditions, without electricity or centralized water supply.

In describing the apparatus, the scientists said various models of suction apparatus have been suggested many times for the extraction of the fetal head instead of obstetric forceps, one of the serious causes of brain injury.

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**SOLAR-HEATED HOME**—Last winter, Harry E. Thomasons, a U. S. Army Signal Corps employee, spent \$4.65 in conventional fuel bills to supplement the heat supplied by capturing the sun's rays in the solar heat collector on the back of his house. This system also provides for air conditioning in the summertime.