

chemistry. Cholesterol is found in many foods, including whole milk and egg yolks. It is also manufactured in the body and is a constituent of gallstones.

Pushing along this line, scientists are using cholesterol labelled with radioactive carbon to learn more about how the body handles this fat-like chemical. In other studies, scientists are working with heparin. This chemical is an anti-clotting agent, already being put to good use to prevent dangerous blood clots in veins and arteries. But heparin has another property, that of clearing fats from the bloodstream.

This property is being studied to see whether heparin can be used to fight and perhaps forestall the deposits of fat-like cholesterolin artery walls and thus, if possible, to prevent atherosclerosis.

High Blood Pressure

Another kind of artery trouble is that which brings on high blood pressure. In this condition, the very small arteries at the ends of the blood vessel system constrict. Pumping blood through the narrowed bores of constricted arterioles takes a higher pressure. If the pressure remains higher for a length of time, it starts trouble in heart, brain and kidneys. The constriction of the littlest arteries and consequent high blood pressure may have many causes, operating alone or together. Nervous and emotional factors, hormones from the various glands, including the adrenals, and changes in body chemistry, even sodium from the salt in the diet, all seem to be involved.

Surgery in which certain nerves are cut, new drugs and diet have all helped lower blood pressure in many patients. One big need now is some method or test or series of tests to tell what is causing the high pressure in a given patient. Then doctors would know better what to prescribe.

All this research takes money as well as men. For that reason the American Heart Association this month is campaigning for new funds to finance new research to solve the big heart problem.

Science News Letter, February 12, 1955

TECHNOLOGY

Embroidery Machine Sews by Remote Control

► DEVELOPMENT OF an experimental embroidery machine that sews patterns by telegraphic orders was disclosed at a meeting of the American Institute of Electrical Engineers in New York.

The machine's needles respond to electronically punched tape at an average rate of 500 stitches per needle per minute. The color, direction and length of each stitch registers in the device in the brief time lapse between needle movements.

Control of the device is possible from anywhere in the embroidery plant, or from an office or studio miles away, Louis Casper, research engineer of the Electrotex Corporation in New York, said.

Science News Letter, February 12, 1955

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