

PHYSIOLOGY

New Thymus Gland Extract Speeds Sex and Growth

Mysterious Organ of Youth Visits Effects on Later Generations and May Speed Growth of Animals Practically

ONCE THE MOST mysterious part of the body, the thymus gland, which is closest to the heart of any of the endocrine organs, is now proved surprisingly to develop sexual precocity and speed up growth.

Practical applications to animals, perhaps even man, is foreseen because of an acceleration of the effects that occur as succeeding rat generations are given thymus extract injections. For instance, the future might see cattle raised in half the usual time.

Dr. Leonard G. Rowntree, formerly of the Mayo Clinic, since 1932 director of the Philadelphia Institute for Medical Research, uncovered this hidden effect of the thymus. He followed a lead given by Adolph M. Hanson, a Fairbault, Minn., physician, who in time snatched from a busy practice made an extract of the thymus gland and reported that it seemed to lower blood pressure in the animals with which he worked. Dr. Rowntree was investigating this effect in rats when he discovered sexual and growth effects.

Daily Drops Injected

Injected daily with drops of powerful thymus extract, rats are affected markedly. Not so much the rats that first receive the injections, except that their families were more numerous. And their children's children, also treated with thymus extract, show little effect. But in the third generation, and in the fourth and fifth generations, sex came rushing earlier with more force, and size and growth were extraordinarily developed at early ages. The great granddaughters were rushed into parenthood by the physiological push of the thymus treatment. A third generation rat became a mother at 42 days and a fourth generation rat became a father at 29 days. They were correspondingly big and well-developed. Rats without benefit of thymus do not become parents until 50 to 70 days old.

Translated from rat to human terms, this means that girls or boys might be-

come sexually mature at the age of 8 or 10 years, if they, their parents, grandparents and great grandparents had been treated with thymus extracts.

An ounce-weight pinkish mass in the upper chest of children, the thymus has hitherto interested physicians principally because it sometimes chokes little babies to death. It dwindles to seeming insignificance when the boy or girl develops the sexual attributes of maturity. Numerous earlier investigations had failed to show a function of the thymus gland.

Sweetbreads are Thymus

All animals from primitive fishes up to and including man have thymus glands. Calves' thymus glands are sweetbreads. It is from these that the Hanson extract is made. But you can eat this table delicacy without any worry that it will be forcing your grandchildren and great-grandchildren into early parenthood. Scientists long ago tried feeding thymus gland material to animals without any results.

Sexual precocity is perhaps the most striking effect of Dr. Hanson's thymus extract but general growth and development of the rats are also dramatically forced and they are unusually gentle and easy to manage. The third generations of the thymus-treated rats weighed a third again as much at birth as the average newborn rat. They could hear and they cut their teeth on their second day of life. By the fourth day their eyes were open and their bodies completely covered with hair. And they mate and bear offspring at a third of the age of their grandparents.

Only Way

In no other way can such effects be obtained. Growth alone might possibly be attained with vitamins but not precocity in rate of development and activity. Another important point is that the bones in thymus-treated rats are perfectly normal for their size regardless of age. This is not the case in ab-



SPRING: AN IRONIC SYMPHONY

A Midwestern editor with an eye to ironic contrasts had his photographer concoct this photograph of his smoke-choked city as seen from a blossom-crowned bluff on the opposite side of one of its rivers. But the story is not unique: any one of a hundred cities in the soft-coal regions has a place where its veil of poison smoke may be regarded by a thoughtful citizen through a veil of hawthorn or wild crab-apple petals. . . . Eventually, of course, the smoke abolishes the petals.

normal size caused by some other gland effects.

Plunged headlong into maturity and old age, the thymus-injected rats lived faster and more furiously. They had faster and more merry lives at the expense of their youth. The blood count of the injected rats was the same as that in much older normal rats.

Since it is our human desire to live long, it may prove desirable to lessen the thymus effect in order to promote long life and a postponement of old