

It still remains a fact that the average brightness of the adult population as measured by psychological tests, is no higher than that found among school children in the teens, Dr. Thurstone pointed out. "But bright children," he said, "undoubtedly continue to grow in intelligence beyond the conventional so-called adult level of fifteen."

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#### SOLVING THE RIDDLE OF INSULIN

Insulin, the extract from the pancreatic gland, that was first prepared by Banting and Best at the University of Toronto three years ago and since used extensively in the treatment of diabetes, may soon be made by synthesis in the chemical laboratory, according to a statement by Prof. Treat B. Johnson of Yale University at the American Chemical Society meeting recently.

Prof. John J. Abel of Johns Hopkins University, who has been studying the structure of the natural insulin, has come to the conclusion that it is an "auto-oxidizable sulphur compound, probably of the thio-peptide type." This means that it is an unstable substance similar to ordinary albumin in composition but simpler in structure. Prof. Johnson announced that research has been started in the Yale laboratories on the structure and reactions of this kind of compound in the hope that it may lead to a method of making it artificially, or to the discovery of a substitute of value in medical science.

Insulin belongs to the class of secretions of the ductless glands, known as "hormones", which in minute amount circulate through the blood and control bodily processes. Insulin is the hormone that regulates the utilization of sugar from which the muscles obtain their energy. In diabetics it is lacking but may be supplied by injections of the prepared insulin.

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#### SUN BURN RAYS OF SUN GROWING STRONGER

The ultra-violet radiation of the sun, invisible rays of too short wavelength to be seen, but which are responsible for tanning people's skins and which also affect photographic films, is increasing with the rise in the number of sun spots. This is the conclusion of Dr. Edison Pettit, astronomer at the Mt. Wilson Observatory, in a paper read before a recent meeting of the American Astronomical Society.

Dr. Pettit's studies have been concerned with the ultra-violet waves about one-seventy-five-thousandth of an inch long, just a little shorter than the deepest violet rays visible to the eye, which are about one-sixty-five-thousandth of an inch in length. As glass absorbs the ultra-violet rays, it has been necessary to use quartz lenses, and the amount of radiation is measured by means of a thermocouple, a device which gives a minute current when light, either visible or invisible falls on it, the exact current being measured by means of a delicate galvanometer.

The method used has been to compare the ultra-violet radiation which passes through the quartz lenses and a thin film of silver, with green light passed through similar lenses, a green celluloid filter and a thin layer of gold, a series of measurements being made, first of the ultra-violet and then of the visible green light. The whole apparatus is attached to one of the observatory's