

FRENCH RADIO USED TO PROMOTE ESPERANTO

Radio has come into the field as a means of spreading the use of Esperanto, the language designed for international use. The Esperantists of Europe have long seen in the new method of communication the best possible agency for popularizing their language. With the cooperation of Radio-Paris, one of the principal French broadcasting stations, the new tongue is to be given voice by wireless for the purpose of gaining Esperanto recruits among the millions of European radio fans.

In Europe, unlike the United States, there is great confusion of tongues for the listener-in. The countries are densely crowded and a single message will have an audience made up of the users of a score of languages.

This condition has given the Esperantists their opportunity. Through the agency of Radio-Paris a series of fourteen lessons in the universal language are being broadcast, and a prize of 1000 francs has been offered for the best Esperanto student among listeners-in.

MALE SEX GLANDS SUCCESSFULLY TRANSPLANTED

For the first time in history of scientific research male sex glands in lower animals have actually been transplanted and made to persist imperfectly normal condition. The announcement was made recently at the University of Chicago where Prof. C. R. Moore has solved a problem that has been troubling biologists since 1796.

Dr. Moore has developed a technic that has enabled him to transfer male sex glands from one laboratory animal, such as a rat or rabbit, to another of the same species but of a different age. This transferred tissue has developed a blood supply from a set of blood vessels that does not normally supply it, has grown for months under new conditions, and on removal for examination has been found to have carried on its normal function.

Dr. Moore explains the work as follows, revealing the difficulties involved in his experiments and those that have preceded him.

"Despite a more or less intensive study of sex gland transplantation for many years past by biologists all over the world, the conditions underlying the successful incorporation of such tissues removed from one animal to another, or from one place to another in the same animal have not been well understood.

"The work involved the separation of a very delicate piece of tissue from its normal environment and its normal blood supply, and the transfer of it to another animal or another locality in the same animal. Unless the tissue meets conditions sufficiently favorable to enable it to establish a new blood supply it will very soon die and be removed by the protecting mechanisms of the body as any foreign body might be so disposed.

"The female sex gland has been transplanted with considerable success for many years, and in many cases retained its normal condition and function, but the male sex gland of mammals has been found more difficult to work with on account of its very sensitive nature. Until recently it has never been transplanted, even from one place to another in the same mammalian organisms with anything like persistence in its normal conditions.

"With the knowledge gained from many different lines of investigation during the last seven years, facts have been uncovered and so utilized that I am now able to announce the persistence of portions of the male sex gland of mammals in a perfectly normal condition.

"The male gland transplantation in mammals has been studied by many European workers and persistence of some structures of it have been obtained for the past twenty-five years. The tissue persisting, however, has never been found in a normal condition. Structurally it has been altered very considerably and has never been found to carry on its normal function of producing mature sex cells. It has been considered impossible, up to the present time, to so far carry over from one animal to another the male sex gland of the mammal and to obtain its incorporation so that it could carry on its normal function of producing germ cells."

OLIVE OIL MADE CURE FOR RICKETS BY ULTRA-VIOLET RAYS

That such fats as olive oil and lard may be activated by exposure to ultra-violet rays and used as a substitute for cod liver oil in the treatment of rickets is shown by experiments about to be reported by the Department of Agricultural Chemistry of the University of Wisconsin in a forthcoming issue of the Journal of Biological Chemistry.

Until recent years, rickets has been a scourge among babies. Only within the past few years has science demonstrated that rickets is due to a deficiency of calcium in the bones and that the oil from the liver of the codfish will prevent and even cure the disease.

In the series of experiments now published olive oil and lard were each exposed to the action of the ultra-violet rays from a powerful mercury vapor quartz lamp for periods of time ranging from 30 minutes to seventeen hours.

After exposure to the rays these fats were fed to a group of experimental rats in which rickets had been produced and the activated olive oil and lard were found to have the same beneficial results that followed the administration of cod liver oil. Not only did the weight of the rats increase, but an analysis of the bones showed an increase in the calcium content.

Some of the activated olive oil that had been stored in a stoppered bottle showed no change in potency after a period of ten months.

It was found also that the fats might be activated by the rays from the open carbon arc, the iron arc, and by sunlight, but that exposure for prolonged periods such as seventeen hours destroyed the potency of the fats, this effect being produced even on the cod liver oil.

Eggs kept in cold storage in a frozen condition for nearly nine years still retain their power to promote growth in rats.

More than 80,000,000 swine were slaughtered in the United States last year.
