

should be retained. Both professions should be very cautious to avoid premature application of findings that are not supported by sound observation and experimental evidence.

Dr. Barker concludes with a decided rap at what he calls pseudo-research in medicine and its special branches including dentistry. The general haste to rush into print with results that are not sound is harmful to both the public and the less well informed practitioners. The intellect and imagination of the research worker should be of high order and the work should be under the direction of experienced investigators. The mistakes of work so conducted will be fewer and less serious than those of workers of less ability and experience.

The face of the medical profession generally should be set against pseudo-research that is irresponsibly undertaken and is inaccurately conducted, declared Dr. Barker. It is, he said, a degradation to science and misleading to the public that the true scientist tries to serve.

SALMON FOUND GOOD GOITER PREVENTIVE

Canned salmon is the latest addition to the list of "healthy" foods we are urged to eat. N. D. Jarvis and Drs. R. W. Clough and E. E. Clark of Seattle report to the American Medical Association that salmon, both fresh and canned, on account of the amount of iodine it contains, should be as effective a preventive of simple goiter as milk products, fruits and leafy vegetables.

Analysis of various foods undertaken at the University of Washington shows that while several sea foods such as seaweed, oyster and lobsters, have more iodine than salmon, the latter is the cheapest and most available food of a high iodine content on the market.

STATIC RECORDED BY AUTOMATIC INSTRUMENT

Most radio fans are not sufficiently fond of static to want to keep a careful record of it, but since the intelligibility of a radio signal in a receiving set is determined by the ratio of the strength of the signal to the intensity of static, radio engineers want to know its ups and downs.

In a new instrument devised by H. T. Friis, an engineer in the Bell Telephone Laboratories, the static is made to write its own record.

Instead of measuring directly the amount of static, Mr. Friis uses a specially constructed receiving set in which the output, due to the static, is kept constant. This is done by an amplifying system which increases or decreases the amplification according to the weakness or strength of the static. Such a system is necessary, rather than a constant amount of amplification with measurement of the output, because the static varies so greatly in strength. According to Mr. Friis, the change

is generally as much as from one to a hundred ⁱⁿ a day and sometimes from one to ten thousand, so that with constant amplification it would be difficult to avoid overloading the tubes.

A fluxmeter, an instrument to measure the quantity of electricity, is connected to the receiving set in place of a loud speaker. When the pointer goes past certain limits, either too high, or too low, an electric contact is made which takes out or puts in some amplification. A pen, connected with a sliding contact that regulates the amount of amplification, writes on a moving strip of paper the line which indicates the amount of static.

Mr. Friis states that the invention of the instrument is too recent to have yet given any comprehensive data, and he suggests that by using a slowly rotating loop antenna in the set, not only the intensity but the direction of the static may be automatically recorded.

HEREDITY AND GLANDS INFLUENCE CANCER

Cancer is caused by the related operation of several factors, rather than by a single cause. This is the conclusion reached by Dr. Leo Loeb of Washington University, after many years of research on breast cancer in mice.

Since 1910 Dr. Loeb has been collaborating with Miss A. C. E. Lathrop of Granby, Mass., on inbred strains of mice in order to determine what effect family predisposition has on the incidence of spontaneous cancer. Recently Dr. Loeb's results have been verified by Dr. C. F. Cori of the Institute of Malignant Diseases in Buffalo.

Briefly Dr. Loeb believes that hereditary disposition, in the case of mammary cancer in mice, plays a very important role in the spontaneous development of the disease, but that heredity alone is not decisive. The presence of certain internal secretions is essential to supplement or cooperate with the animal's innate sensitivity. When these secretions are withheld, the animals do not so readily develop the disease - a discovery that may have important practical bearing on efforts to prevent cancer or at least to lower the cancer rate among human beings.

In dealing with the causes of cancer, the problem always narrows down to the question, what makes this particular group of cells grow so outrageously. Various causes have been and are continually being suggested to account for this misplaced energy, from microorganisms to the psychic condition of "worry". It is known that continued irritation of a mechanical or chemical sort can induce cancer, but the spontaneous development of the disease, the sudden rush of energy, the "will to grow", on the part of a particular group of cells, for no visible reason, is extremely baffling.

Dr. Loeb established the fact that among mice, inbreeding of different strains produce families with distinctly different degrees of susceptibility to cancer of the mammary gland, which is the most common form of cancer among mice. He felt convinced, therefore, that heredity plays an important role in the spontaneous