

**SUBCUTANEOUS INJECTIONS OF OIL INCREASE CELL
ACTIVITY OF THE BODY—WITH ESPECIAL
REFERENCE TO THE TREATMENT
OF CONSUMPTION.**

BY THOS. BASSETT KEYES, M.D., OF CHICAGO.

Theories of Immunity.—Let us now consider some of the theories of immunity and later see how digestion of fats and injections of oil meet these theories, as they do in many particulars.

In all serum therapy in which experiments have been vigorously carried on since Koch, in 1882, published his first article relative to his discovery of the germ, it has been decided that such serums, should such a one be discovered to prevent tuberculosis, will not act so as to destroy the germ directly, but in a secondary way by stimulating to increased energy the white corpuscles of the blood, or, as Buchner puts it, that perhaps in the white corpuscles the defensive power of the blood (alexin) originates, while Metschnikoff believes their action may be due to increasing phagocytosis. How often the blood in a state of health prevents the growth of disease germs in a similar way no one would be able to compute, but it is known that even germs of the most severe diseases may be found in the secretions without having excited the disease of which they are characteristic, and it is this power which in itself constitutes immunity.

The lateral chain theory of immunity formed by Ehrlich, in 1897, has been looked upon as an hypothesis of great value in explaining natural and acquired immunity, it being based upon the specific action of toxins, a distinct toxin being formed for each substance eliminated from the body, being a bacteriolytic serum stimulated by the presence of one kind of germ or pathological substance, and being devoid of action upon another. Ehrlich also founds his lateral chain theory upon the mechanism by which the cells are nourished, this cellular protoplasm being very complex, with many combining functions, or "lateral chains," carried on by "receptors" of various forms, and according to its peculiar form is able to secure by attachment the substances called "haptophores," which it can use and for which it is said to be particularly adapted. The receptors formed for the purpose of taking up nutritious haptophores may also take up poisons and destructive haptophores as of pathological germs which have gained access into the system. Should this be the case, according to the hypothesis, the pathological germs may stop the nutrition of the cell and bring about its destruction; on the