

"The letter T means that the organs referred to were found to be tuberculous ; it is, however, to be noticed that these animals were fed with two different lots of tuberculous meat, and it is impossible to decide which lot was most infective. But there is no doubt of the fact that cooking the meat in the manner described failed to destroy its infectivity."

"In another series of experiments, four lots of guinea-pigs, four in each lot, were fed on tuberculous material which had been cooked by being placed in cold water, the meat having been cut into slices half an inch thick and two inches square. The vessel containing the meat was put over a small furnace, and the water was gradually brought to the boiling point. The meat was kept boiling for fifteen minutes in one case, and thirty minutes in the next instance. Two lots of guinea-pigs were fed several times on the meat which had been kept boiling for fifteen minutes, and the other two lots with the meat which had been cooked thirty minutes. All of them were killed after several weeks and found to be free from all traces of tubercle. It appears therefore that thorough cooking is effectual in destroying the activity of tubercle virus. But it is also evident that such thorough cooking as was effected in this case could not be applied to large joints, nor to any kind of meat without entirely destroying its flavor."

#### HOW THE BACILLI OBTAIN ENTRANCE TO THE SYSTEM.

Where the bacilli of tuberculosis as of any other disease obtain entrance to the system, they do it by one of two ways. Arrived on the mucous membrane of either the respiratory or intestinal tracts, they find temporary lodgment, and escaping, we must assume, the agencies hostile to their entrance, pass in through the delicate limiting membranes of the epithelial cells in the walls of the bronchi and the alveoli of the lungs, and of the absorptive villi of the intestines. Within this limiting membrane is the innumerable mesh-work of minutest blood capillaries and lymph vessels. As the blood in the lung capillaries is in the most intimate contact with the air beyond the limiting membrane, and as apparently there is no selective influence present, the bacilli pass indifferently into the venous or lymphatic current of these minute vessels.

Where entrance is by the villi of the intestines, the bacilli previously taken in with the food, will have remained in and passed on with the chyle into the circulatory system by the chyloferous lymphatic vessels, and probably to some extent by the venous capillaries of the villi.