## RETYPED FROM THE ORIGINAL Quarterly Conference October 31, 1901

D. Tomlinson:- Mr. Chairman and Gentlemen:- In opening the discussion of this subject, I think it best to confine myself to the consideration of the application of the principles discussed by the writer of the paper to our public institutions. In considering the subject of diet in connection with the inmates of our public institutions for the insane and defective; we have first to recognize that we are dealing with a class of individuals who are incapacitated physically as well as mentally. Therefore there are certain elements which inter into the consideration of a dietary for them which are peculiar to their condition. Among these, not the least important, is the influence of their unfortunate mental condition upon their habits of eating: whereas from the standpoint of their physical condition, we have only to remember that the same degenerative process which is going on in the nervous system is also affecting the general organism, interfering with the performance of its functions, and lessening its capacity to digest and assimilate food.

Five years ago we undertook the study of this subject from the point of view of the influence of food upon the mental condition of the patient. First with relation to nutrition; then as to the prevalence of indigestion, even among those who were apparently well nourished, and the influence of this indigestion upon their mental condition, and the progress of recovery. A certain number recent cases were selected; who on account of the nature and extent of their mental disturbance, either refused food, ate indifferently or bolted their food. An examination was made of the stomach contents at different intervals after the taking of food. It was found that the process of digestion was very much prolonged in all of them, and that occasionally undigested food remained in the stomach fully 24 hours. In all of the cases where food had been refused; examination of the gastric fluids showed, as a rule entire absence of the digestive ferments, and presence of numerous bacteria, especially those which cause putrefaction. This same obeyance of the function of digestion was present in all cases of marked depression and in most cases of great excitement. Even in those cases where the patient took food with apparent relish; the examination of the feces showed that about 50% of their bulk was composed of undigested food. As a control experiment we took a certain number of chronic cases, who bolted their food, or who ate indifferently and were very much disturbed, filthy in their habits, and destructive. The same conditions were found in these cases, usually accompanied by marked dilation of the stomach and either diarrhea or obstinate constipation.

In the meant time we had established a diet kitchen where the nurses were taught to prepare food properly, and serve it attractively. The class of cases above referred to were put on a properly selected and carefully prepared diet; with the result that, without any special medication, digestion and nutrition improved, and even among the chronic cases; their habits became better and they were less disorderly. Every success brings its

troubles however, and we encountered a serious difficulty in the strenuous objection offered by our recent cases, when they had to go to the general dining room to eat.

Out of theses studies grew an effort to provide for the class of chronic cases referred to above, and those who were indifferent to their food, a dietary which would not tax their digestive power seriously, and which would be in a measure pre-digested. I devised from some old utensils we had in use a low temperature cooker, and into this was put crushed bones, along with chopped meat. On account of the nature of the cooking we were enabled to utilize all sorts of scraps and odd ends. The scraps were chopped fine, so that they might be the more thoroughly cooked. The water was kept at a temperature not above 180° and cooking continued for 12 hours. At the end of that time the bones were taken out. To this mass was added vegetables which also had been chopped fine, and the cooking process was continued for 12 hours more, with the temperature at 200°. At the end of this time both meat and vegetables were reduced to a pulpy mass, which, when properly seasoned, was not only nutritious and easily digested, but also very pleasant to the taste. This soup was given to the class of chronic patients referred to, for dinner, with a piece of bread. In order to balance the ration they were given porridge of some sort for breakfast, and corn starch, tapioca, or corn meal pudding for supper with milk. All of these puddings were made by prolonged cooking at a temperature of 212°.

It was found that these people thrived greatly on this dietary and what was better still, their habits and behavior became better. Unfortunately it was difficult to have this method of cooking carried out properly because the cooks were not willing to take the necessary trouble, or to give the process the proper attention. However we now have over 200 patients on this dietary, all of them are doing well, and we are feeding them more economically at the same time that we are feeding them better. An amusing experience in connection with the establishment of this dietary was the strenuous objection on the part of the nurses; who thought that because the patients did not have anything to chew, they were not getting enough to eat.

If it were possible to carry out similar methods in the preparation of all food, using some modification of the Aladdin oven, and a scientific dietary such as described by the writer of the paper; there is no doubt but that our patients would be better and certainly more economically as well as intelligently fed. However, there are several serious difficulties in the way. In the first place the importance of a scientifically selected and properly prepared dietary is not appreciated. The patient and his friend think he should be fed as he was at home, and as a proper dietary would be much less bulky and contain less meat than the average farmer is accustomed to have; the hospital would be accused of niggardliness. In the next place it requires time and skilled help to properly cook food; our institutions have neither. A meal has to be served for from 1200 to 1800 people within a period of two hours. You can figure for yourselves from your experience of large gatherings, how many people would be necessary to serve such a meal properly, and how many would be required to cook it. The people we have to do this work come to us from the farm or small household; they have had no training and they do not stay long enough to get any; so that we are almost constantly doing our work with untrained and indifferent help; who take no interest in their work, because they do not know how to do it intelligently and so it is to them only irksome manual labor; to be gotten through with as quickly and with as little effort as possible. The people who serve the food on the tables are the same; besides they have characteristically American objection to waiting on any

one, if the waiting is a duty. The cooking and serving of food is a fine art, as much as is music or painting. But in this country our puritan ancestors have left us the tradition that eating is a vulgar necessity, and that the time spent in properly preparing and tastefully serving food is wasted. Sidney Smith once said "The Lord made the food but the Devil made the cooks". My personal experience leads me to agree with this stricture as applied to the majority. Another serious handicap in our hospitals, is the impossibility to diversify the food to suit the different kinds of patients. There are those who are indifferent, those who do not want to eat, those who bolt their food, and those with impaired digestion. All of them are seated together and have to be served alike; and it is here that the greatest sin against economy is committed. The careless serving of the meal, without regard to the condition of the patient, is what fills the slop barrel. For instance, the patient who takes little exercise requires little food; but he sits down at the table beside the man who has worked out of the doors all day, and they both have the same kind and amount of food. The man who is indifferent sits idly at the table. Next to him is the man who bolts his food, and he takes not only his own but the portion of his neighbor; and with the small number of employees who through ignorance do not think of these things, he is unheeded. I never have found that our patients were neglected through wanton disregard of their welfare, but rather through ignorance, and the indifference which springs from it. To feed these people properly would require that they be classified in the dining room according to their condition; that their food be selected and prepared with a similar object in view, and that each one have personal attention during the meal. I know that this way of looking at the matter will be called visionary; but I have found in my experience that every thing which is done for the welfare of our patients: the result of which can not be weighed or measured, is called visionary and more especially so if it costs money. It is with a public institution as it is with a hotel. The visitor is more impressed by the furniture and decorations which he sees, than with the provisions for the comfort and welfare of the quests, which he does not see. To properly prepare and serve the food in our hospitals would require a more or less complete change of methods, and a rigid supervision of the work of the kitchen by one who not only knows how to cook, but also how to diversify the methods of preparation, and serve the food in a way to make it attractive. Then he should be given competent and sufficient help.

With regard to the relative amount of food used in different institutions, there is much to be said about methods of comparison. Unfortunately, while the statement that figures never lie may be true; the use figures are often put to destroy the truth. There is nothing so fallacious as per capita statistics, but they are clung to because they enable people to make sweeping deductions, and save them the trouble of finding out for themselves. I know from experience that I can feed 1000 people on practically the same amount of food that is bought for 900. That is, the amount of food that would be wasted, in the feeding of the 900, would feed the other 100. In providing food for large bodies of people the larger the number, the smaller will be the relative amount. This is illustrated by the fact that, other things being equal, a family of three people will have a relatively larger butcher's bill at the end of the month than will a family of five people; and so it is with public institutions. The statistics of a small institution always tell against it; because in the form of per capita, the smaller the number of people who are averaged, the greater will be the charge against the individual. This fact is what tempts the state to establish

large institutions, and sanctions the criminal procedure of overcrowding: Money is apparently saved to the state.

Indirect cost is no more appreciated than is indirect taxation. Therefore it is not to be expected that there will be any immediate reform in the directions referred to by the writer of the paper; because such reforms will cost money and require skilled help to carry them out; while the benefit and profit to accrue are in the future. I am willing to admit that the mechanical part of cooking can be done by any one who is imitative, and starts early enough in life; but when it comes to showing an intelligent interest in the preparation and serving of food; in the arranging a dietary so as to make it satisfying and at the same time inexpensive, you must have some one who is more than a mechanic; some one who sees more in the art of cooking than the manual labor involved.

(Applause)

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