## INTRODUCTORY

FEW THINGS are of more importance than that we should find ourselves physically and mentally equal to our day's work; but not many of us realize how largely this depends upon the food we eat.

Supposing there to be just money enough in a given family to buy the right kind and quantity of food. Now, if this money is not wisely expended, or if after the food has been bought it is spoiled in the cooking, the results will be very serious for the members of that family. They will be under-nourished, and they will suffer in clear-headedness, bodily strength and, in the case of children, in bodily development.

Surely the right condition of the body is too important to be left to chance; the best scientific knowledge, the best practical heads should be at its service, and this is the case, indeed, to a large extent in Europe, where the food of the soldiers and of the inmates of public institutions is furnished more or less according to certain rules that have been deduced partly from observation, and partly from scientific experiment.

It was only in the early forties that the first experimental agricultural stations were established; but so rapidly have they multiplied that they now number more than a hundred in Europe alone; and in these and in the laboratories of the great universities, analyses have been made of most of the foods used by men and animals, and also tests of the relative flesh and fat producing power of different foods and combinations of foods.

For years the results of these investigations have been applied with profit to the feeding of cattle; but it was a case of threatened wholesale starvation in England that first turned the attention of properly trained persons to a like study of the nourishment of human beings. During the civil war the condition of the cotton spinners in Lancashire and Cheshire, Engand, became so serious as to make government help necessary to keep them from starving, and in 1862 and 1863 Dr. Edward Smith was commissioned to examine into the dietetic needs of the distressed operatives. In his report for 1863 are found tables of the food consumed per week by 634 families, and in spite of the difficulties standing in the way of such an investigation,