

tions the quantity of nitrogen is universally sufficient.

#### Dinner.

No. 1.—Bread and cheese. Carbon 1,150 grains; nitrogen, 66 grains; cost 1½d. Bread, 8oz.; cheese 1 oz.

No. 2.—Suet pudding, bread, and cheese. Carbon, 1,496 grains; nitrogen, 74 grains; cost, 1½d. Flour, 4 oz.; Suet, ½ oz.; skimmed milk, ½ pint; bread, 4 oz.; cheese, ½ oz.

No. 3.—Rice pudding, bread, and cheese. Carbon, 1,673 grains; nitrogen, 83 grains; cost 1½d. Rice, 3 oz.; skimmed milk, 1 pint.; suet ½ oz.; sugar, ½ oz.; spice, and salt; bread, 3 oz.; cheese, ½ oz.

No. 4.—Fish. Carbon, 1,387 grains; nitrogen, 101 grains; cost, 1½d. Fresh herrings, 9 oz. (2); dripping, ½ oz.; potatoes, 8 oz.; bread, 3 oz.

9.—Faggots, peas pudding, bread and cheese. Carbon, 1,513 grains; nitrogen, 140 grains; cost, 2d. Liver 3 oz.; bacon, 1 oz.; herbs and peas, 3 oz.; bread 2 oz.; cheese, ½ oz.

11.—Irish-stew and bread. Carbon, 1,568 grains; nitrogen, 72 grains; cost, 2d. Meat, 3 oz.; potatoes, 12 oz.; onions, 1 oz.; bread, 4 oz.

12.—Hasty pudding, herring, and potatoes. Carbon, 2,144; nitrogen, 119 grains; cost, 2d. Flour, 6 oz.; skimmed milk, ½ pint; water; treacle, 2 oz.; 1 herring; potatoes, ½ lb.

Two of these largely exceed the standard quantity in carbon, viz., Nos. 2 and 12; whilst four, viz., Nos. 2, 4, 9 and 12, exceed it in nitrogen. No. 1 is quite insufficient for a man, whilst No. 12 is much more than enough.

#### Supper.

1.—Oatmeal brose, as at breakfast.

\* 2.—Milk porridge. Carbon, 1,034 grains; nitrogen, 61 grains; cost, 1d. Skimmed milk, ½ pint; oatmeal, 2 oz.; bread, 2 oz.; fat, ½ oz.

3.—Bacon and bread. Carbon, 1,250; nitrogen 43 grains; cost, 1d. Bacon, 2 oz.; bread, 5½ oz.

4.—Tea, bread, and butter. Carbon, 670 grains; nitrogen, 29 grains; cost, 1d. Tea, ½ oz.; sugar, ½ oz.; skimmed milk, ½ pint; water, ½ pint; bread, 4 oz.; butter, ½ oz.

5.—Coffee, bread, and butter. Carbon, 925 grains; nitrogen, 42 grains; cost 1d. Coffee, ½ oz.; sugar, ½ oz.; skimmed milk, ½ pint; water, ½ pint; bread, 5½ oz.; butter, ½ oz.

In each of the first three there is an excess of the standard requirement, whilst the fourth corroborates the fact already mentioned, of the impossibility of providing an economical dietary where tea and butter are introduced.

For those who cannot afford even so cheap a diet as the foregoing, Dr. Smith recommends Indian corn, meat, pease, bread, buttermilk and skimmed milk, as affording the largest amount of nourishment at the least possible cost.

In regard to the dietaries of charitable Institutions, the author affirms some general principles which ought to be adhered to in their management:

A.—There must be a proper apportionment of the food according to sex and age. This is a subject of much difficulty, since there are no scientific data which refer to each year of life; and the relative wants of a man and woman vary with the size and activity of their bodies, rather than simply with sex, so that even a scientific man can only make a near appreciation to the truth. At present the reduction in the dietary for a woman, from the normal dietary for men, varies from half to a quarter, and it is only until a boy reaches the age of sixteen that he is considered to need the dietary of the man, and in both, I think, the dietary allowed is much under the requirement. From a consideration of the products of nutrition which pass out of the body, I do not think that the average dietary for women ought to be less than nine-tenths of that for men, neither being employed at hard labour.

The importance of the apportionment to age is exceedingly great, for it is only during the period of youth that growth progresses, and for healthy and suitable growth there must be sufficient food, and hence if the latter be withheld the former is deficient, and from the finality of the period of growth the loss can never be regained. Hence it is of far greater consequence that there should be abundant food given to a youth than to an adult, since the former can never regain his loss, whilst the latter can tolerate with comparative impunity, much variation from his proper nourishment. I have entered at length into this subject in my work on "Health and Disease, as Influenced by the Cyclical Changes in the Human System," which may be found in our library, and I shall now only state that, in my opinion, above twelve years of age the dietary allowed ought to be that of a man; from the age of ten to the age of twelve, that of a woman; and that below ten years and above one year of age, there ought to be three scales of dietary embracing the ages from two to five, from five to eight, and from eight to ten, or, as it is far more natural, the dietary under the age of ten should be unlimited in quantity.

B.—The food supplied should be, in nature and variety, similar to that which they will obtain in later life. While it is a fact of the highest interest that the body can adapt itself to a great variety of circumstances to which it had not been accustomed there can be no doubt that the changes are attended by risks, and that there are those who suffer from or sink under them, and in a wide point of view are not desirable. Hence, I would train up the body of the child as it shall be nourished when it becomes a man. I need not particularise the foods with which all are familiar, but precise information on this point will soon be supplied. As to variety of food, there can be no doubt that, within limits, it tends to improve the relish for and assimilation of food, and hence to increase nutrition, whilst beyond those limits, as we see amongst the well-fed classes, it lessens the appetite and the quantity of food that is eaten. Our ordinary habits do not seek for much variety at the first and last meals of the day, whilst one unvarying food at dinner would soon become unacceptable. Yet even in that there is less diversity than at first sight appears, since all the food may be wound up under the terms, meat, potatoes, pudding; and