

least two directions, viz.: (1.) The introduction of a greater variety of viands, which is being gradually effected. (2.) The supply of a larger amount of fat, particularly in winter (for this purpose we have over a ton of fat bacon curing at the present time), and an adequate quantity of fruit, especially for summer. A reduction in the amount of potatoes should be made coincidently with the extra supply of fat.

When these changes have been fully adjusted I venture to think that there will be nothing for the most exacting hygienist to cavil at. The cooking is now all that could be desired. The estimated energy developed by several daily rations when oxidised in the body is shown in the following table:—

					Foot tons.
Seacliff original	...	...	...	...	3,355
" modified	...	...	...	...	3,796
English asylums	...	...	...	...	2,973
English soldier	...	...	...	...	3,542

To arrive at the energy available for external mechanical work and other purposes, that devoted to maintaining animal heat, &c. (say 2,500ft. to 3,000ft. tons), would have to be deducted from the above figures.

For detailed table see Appendix D. It will be noticed that the present Seacliff dietary supplies 3,796ft. tons of energy as compared with 3,542ft. tons for the English soldier's ration, and even this excess of 254ft. tons in favour of Seacliff is less than the reality, because the Seacliff dietary is taken on the average of men and women, and the men get one-tenth more than the women. Ever since the dietetic changes were initiated the whole of the male patients have been weighed every month, and the weight-register shows conclusively the highly nutritious nature of the new dietary. Thus seventy-five male patients were admitted during the eighteen months following the 1st January, 1890. Seven were fatally ill, and died soon after admission; two were on the round voyage, and remained less than one month in the asylum, and one was a boy of fifteen, who cannot be included in a calculation based upon adults. Of the remaining sixty-five the following table shows the changes in weight:—

Number of Patients from which Averages are made up.		Length of Time in Asylum.	Average Increase in Weight Per Man in Pounds.
24	...	5 months	9lb.
3	...	4 "	24lb.
7	...	3 "	14lb.
15	...	2 "	11lb.
16	...	1 "	9lb.

For detailed table see Appendix E. It will be seen that, on the average, male patients increase about a stone in weight in the first three months after admission. By the sixth month a standard weight is reached, and little further variation takes place in the average.

A second list has been made out of all chronic patients who had been in the Asylum six months or upwards, when the first weighing took place, and as this list includes a large number of old decrepit persons, and a few suffering from advanced bodily disease, one would naturally expect to find a diminution in average weight. Actually the table shows that the result has been decidedly favourable. Thus from the summer of 1890 to summer of 1891 there was an increase in weight of more than 11lb. per man; and from winter of 1890 to winter of 1891 an increase of over 4lb. per man. These figures are further commented upon in Appendix F.

The introduction of a bone-digester to the kitchen, at a total cost of less than £20, has resulted in a saving of over twenty pounds' worth of fat and gelatin per annum. (*Vide* Appendix G.) Until May, 1890, no use was made of rabbits. Since then, rabbits to the value of about £50 per annum have been included in the dietary, thus giving a variety, which has been highly appreciated, while effecting a saving.

With the quality of the food supplied to our patients it would be difficult to find any fault. Potatoes and other vegetables are entirely grown upon the estate, and are of excellent quality. The statement that patients are supplied with diseased vegetables is absolutely incomprehensible and preposterous. Flour and groceries are procured from a firm of very high standing; and good Ceylon tea is used, whereas formerly we had inferior Chinese tea. The meat has been specifically assailed, and it has been insinuated that an improper saving is effected by supplying patients with "fat, scraggy, and disgustingly gristly mutton," unfit for human use. To say that there is no foundation for this would be simply misleading, and it is difficult to convey how diametrically opposed such an insinuation is to the truth: The most scrupulous care has been exercised with regard to the meat supply; and, under a former contract, it was considered necessary to frequently return carcasses to Dunedin, as being below the standard which we could accept. On one occasion, actually the whole supply of beef and mutton for several days was sent back, and meat was purchased locally to supply immediate wants. Further, several letters were written by me from time to time upon the subject.

The meat received under the present contract is of a quality to which no exception could honestly be taken. I unhesitatingly affirm that no public institution with which I have been connected has been so uniformly well served as we have during the last twenty months. Only once in that time has our butcher—a very exacting patient—complained of the meat not being up to his ideas of what it should be; and even then the single carcass of mutton was objected to merely on the ground of its being rather lean and undersized. Appended is the statement of the official directly connected with the meat department. (Appendix H.)

As bearing upon the quality of meat supplied to patients, I may mention that formerly the best joints were cut off for the attendants, whereas early in 1890 a rule was made that in the case of mutton entire carcasses were to be set aside for the use of attendants, and measures were likewise taken to ensure a fair distribution of other meat. Further, it had been customary, in order to