

A little intelligent attention given to this record will be well repaid; and I would particularly ask you to note the following points.

Nos. 1, 2, 3. The soldier in the field receives a decidedly better ration than in peace, or on light service. The increase is most notable in proteid and fat; but whether in barracks or in the field his ration is adequate; and is practically that recommended by Voit for a man of about 150 to 160 pounds weight. The proportions of each constituent are approximately correct, with exception of the fat, which is distinctly too low. This is undoubtedly a matter of economy and cannot be scientifically justified.

Nos. 4 and 5. It should be understood that the weight of the body must be taken into account in all computations of a proper ration. I have not the body weight of the individual here reported. He has more fat when at rest than when at work, which is distinctly not as it should be. Probably when on holiday, he is able to indulge in butter to an unusual extent. His excess energy demanded by labour is derived from increased carbohydrates, the cheapest source of energy.

No. 6. Is fairly well nourished.

Nos. 7 and 8. Professional work does not make such strenuous demands for expenditure of energy. It is usually better paid; hence the possibility of supplying a larger proportion of it by the consumption of relatively expensive fats.

No. 9 This labourer is better nourished than No. 4, although the energy furnished by his food is identical with that of No. 4. A much larger proportion of it is supplied by fat.

No. 10. It is evidently a big man, expending much energy. The proportion of fat in his diet is decidedly too small.

No. 11. The pugilist in training is putting on muscle. He is supplied with large excess proteid matter, and carbohydrates are kept down as much as possible. This is not a normal ration, but one suited to a special end.

No. 12. Is amply supplied with energy for very severe work. Such a ration could not be tolerated by any other than a strong man, very actively employed.

No. 13. Evidence of poverty is given by the reduction of fat in his ration.

No. 14. A clear case of under nutrition. One is reminded of the "Song of the Shirt".

No. 15. A good ration, for light work.

No. 16. Diet chiefly rice, and sadly lacking in fat.

No. 17. Emphatically under nourished. It must however be remembered that Nos. 16 and 17 are probably cases of very small men.

No. 18. Great excess of proteids as compared with the other food components. It must, however, be kept in mind that climatic and food conditions are not comparable in the case of the eskimo, with those obtaining in temperate climes.

No. 19. As contrasted with No. 18, the difference between life in Hindostan and Greenland is very evident.

APPLICATION

If what has been said is clearly apprehended, it remains but to emphasize the fact that the lowest satisfactory ration for the average man, engaged in ordinary work, must contain about 2800 calories of energy, and for a woman about 2240 calories; and that this amount of energy should be supplied by proteids, fat and carbohydrate food, in the ratio of 4.162 ounces, 1.975 ounces and 17.637 ounces, respectively, in the daily diet of man; and 3.316 ounces, 1.587 ounces and 14.110 ounces for women.

A better diet, for those who can afford it, results from an increase in the fat content, and a corresponding decrease in the carbohydrate content.

These are rather awkward numbers to bear in mind, and it is not necessary in actual life, that we should work so close to theory. Especially is this the case