amour is per day for an adult doing an ordinary day's (muscular) work, supposing neither to gain nor loose weight.

Albuminoids, 4.2 ozs.; Fats, 2 ozs.; Carbo-hydrates, 17.6 ozs.

Professor W. O. Atwater, of Washington, U.S.A., who has written a splendid series of articles in the "Century" for 1887, on the subject of foods, to which I am largely indebted for material in these lectures, estimates that an average man doing muscular work requires—

For moderate work, Albuminoids, 4.4 ozs.; Fats, 4.4 ozs.; Carbo-hydrates, 14.4 ozs.

For hard work, Albuminoids, 5.2 ozs.; Fats, 4.4 ozs.; Carbo-hydrates, 14.4 ozs.

Professor Parkes says that the food required for a healthy adult is: For laborious occupation, Albuminoids, 6 to 7 oz; Fats, 3.5 to 4.5 oz; Carbo-hydrates, 16 to 18 oz; Salts, 1.2 to 1.5 oz.

At rest, Albuminoids, 2.5 oz; Fat, 1 oz; Carbo-hydrates, 12 oz; Salts, .5 oz.

The harder the work the more nitrogenous (albuminoids) should the diet be.

The heat of the body in order to be maintained necessitates the combustion of a large proportion of the food, probably about $\frac{9}{10}$ of it. This heat, together with the work expended internally in the functions of the heart, respiration, &c., and the external muscular action in locomotion and other voluntary work, represent an amount of energy calculated at about 3,400 foot-tons, *i.e.*, the force required to raise 3,400 tons 1 foot high. The heat of the body represents in amount that required to raise 48.4 lbs. from the freezing to the boiling point, or in mechanical power would be sufficient to raise 150 lbs. through a vertical height of 8½ miles. All this must be provided for by food and oxygen before making any demands on the system for muscular or brain labour.

Fish as a Brain Food.

I may here allude very briefly to the common, but erroneous, opinion that brain work requires or is benefitted by a liberal fish diet. This has arisen from statements made to the effect that thought and brain work in general used up a large quantity of phosphorus, and secondly, that fish supplied in abundance this element. Neither of these assertions appears on investigation to be true. The brain tissue consumed by