

and nervous system, as well as to muscle. Fatigue in muscle will fatigue all the body, as the fatigue acids, now known as carbonic and lactic, go directly to the brain and vice versa. Our men on duty are engaged in what might be termed a muscular vocation, and the question of endurance is of vital importance.

Efficiency should be the great aim. This condition of efficiency is most affected by four factors,—worry, sleep, exercise, diet. To the latter factor we will give most attention, as the others are usually beyond our control. Worry is to be expected, lack of sleep looked for, and exercise the rule of the day and often the night as well. The highest state of physical efficiency therefore should be the guide's password, and in proper diet is found the secret of retaining and holding this condition.

Dietetic discoveries in the past ten years have added much to our knowledge of food values, so that today we are compelled to believe that a high state of mental efficiency and physical endurance may be attained on a diet containing little flesh food. Several studies along this line have been made, the most remarkable results being secured by Prof. Fisher, of Yale University. The experiments consisted of endurance tests made on forty-nine persons, representing two contrasted types of dietetic habits.

There were three groups; first, athletes accustomed to a high protein and full flesh dietary; second, athletes accustomed to a low protein and non-flesh dietary; (protein being that substance used to build muscle tissue); then third, sedentary persons accustomed to a low protein and non-flesh dietary.

There were three tests: the first, arm-holding; second, deep-knee-bending; third, leg-raising.

The first comparison—for arm-holding—showed a great superiority on the side of the flesh abstainers. Even the maximum record of the flesh eaters was barely more than half the average for the flesh abstainers. Only two of the flesh eaters succeeded in holding their arms out over a quarter of an hour, but fifteen of the thirty-two abstainers exceeded the limit. Of these, nine exceeded an hour, four exceeded two hours, and one exceeded three hours. In respect to experiment two—deep-knee-bending. If we take the number