

DIET AND FOOD CONSIDERED IN RELATION TO STRENGTH AND POWER OF ENDURANCE, TRAINING AND ATHLETICS.

By Alexander Haig, M. A., M. D., F. R. C. P., Physician to the Metropolitan Hospital, and the Royal Hospital for Children and Women. Fourth edition with seven illustrations. Philadelphia: P. Blakistons Son & Co., 1012 Walnut street; Toronto: Chandler & Massey. 1902. Price, \$1.00.

DR. HAIG is widely known through his book on "uric acid as a factor in the causation of disease." This little volume on diet and food has now reached its fourth edition in the short space of four years. The author points out the relation between urea and albumen in the production of force. The urea excreted by an active adult in 24 hours is $3\frac{1}{2}$ grains to the pound of body weight. It requires 3 grains of albumen to produce these. Taking the weight of an active adult at 150 lbs. the amount of urea per day would be $150 \times 3\frac{1}{2}$, or 525 grains, and this again multiplied by 3 will give 1,575, or the grains of albumen required daily by such a person. Those living a sedentary life will eliminate about 3 grains of urea per pound old people about 2 grains, while children will produce from 8 to 10 grains of urea per pound daily. This will give the keynote to the amount of albumen required as food at the different ages and under different conditions. If sufficient albumen be not supplied, rapid emaciation results. It would thus appear that an active adult requires 10 grains of albumen per pound of body weight daily, and that 9 grains would be the least that he could do with safely. If the amount of albumen in the diet falls below 9 grains per pound of body weight per day the person becomes weak and is readily fatigued. This tends to destroy his appetite and weaken him still further.

The author then goes on to show that fatigue is due to a general dearth of albumen in the blood, or to a condition in the blood that leads to its defective circulation through the tissues. If there be sufficient albumen in the food and the digestion is good and yet the man fatigues readily the case is too much uric acid in the blood. This excess of uric acid in the blood prevents the albumens in its reaching the tissues, and hence the fatigue. In bringing about the maximum state of endurance, the author urges a diet consisting almost entirely of vegetable products, with the minimum of animal matter.

The book is a most interesting and instructive one. Dr. Haig does not make a book by reading other men's books, but by first making original investigations. There is therefore the flavor of originality about his writings that lend a peculiar pleasure to their perusal. We can advise the study of this book with much confidence.