



# Editorial



## New Nutritional Standards

The Food and Nutrition Board of the National Research Council published the first table of recommended dietary allowances in 1943. The intake levels were designed for the maintenance of good nutrition of healthy persons in the United States under the conditions existing at that time. The recommendations were not proposed as optimal levels of intake, because our present state of knowledge does not permit a statement as to the optimum levels; nor were these meant to be permanently fixed, because the values were considered tentative or approximate.

Based on this yardstick, many very significant nutritional studies were performed and could be compared. The third revision, 1953, includes several important changes.

Again, it should be clearly understood that the levels of intake recommended are those which, in the judgment of the members constituting the board, are merely desirable goals toward which to strive in planning diets and food supplies. They are not requirements, because they represent more than the minimal needs to prevent overt dietary deficiencies. In many instances the nutrient intakes are higher than the average requirement for the healthy individual but lower than the amounts usually needed in disease states or in the following rehabilitation period.

Perhaps the most important change is a new method of calculating the estimates of caloric requirements.\* The present system takes into consideration factors of sex, age, body size, and climate, as well as activity.

\* Shank, R. E.: Revisions of the Recommended Dietary Allowances *J. Am. Dietet. A.* 30: 105, 1954.

The method of calculation is as follows: Reference is made to the "standard" man or woman; that is, a person twenty-five years old, living in a temperate climate, with a body weight of 65 kilos for the man and 55 kilos for the woman. This standard person is engaged in moderate physical activity—neither sedentary nor indulging in excessive physical exertion. Examples might be light industrial worker, painter, delivery man, or a woman who is an active homemaker or a shop sales person. On the basis of eight hours of physical activity and four hours of sedentary activity in a mean environmental temperature of 50° F., the standard man would need a total caloric intake of 3200. Similarly, the standard woman would need 2300. At age forty-five, the caloric requirement for the man drops to 2900; and at sixty-five years of age, it drops further to 2600. In each case the calculation is based on the same height and weight. In the case of women, for the same age groupings the caloric recommendations are 2100 and 1800.

Similarly, when there are changes in weight, an allowance is made on the basis of the alterations from the standard weight, so that whereas it is recommended that the 65-kilo man get 100 per cent of the caloric allowance, it becomes 111 per cent if he weighs 75 kilos and 89 per cent if he weighs 55 kilos. In the case of women, it is 113 per cent for a 65-kilo woman, as compared with the 55-kilo standard, and 86 per cent of the total calories for the 45-kilo woman.

One deducts from the caloric requirement 5 per cent for an additional ten years of age above the standard, and also 5 per cent for a

mean external temperature 10° higher than the standard. That is, for each 10° C. increment in mean environmental temperature, one calculates a decrease of 5 per cent in the caloric requirement.

Caloric allowances are estimated on ideal weight and not on actual body weight.

In the third trimester of pregnancy, 400 calories are added. The caloric requirement during the earlier period of pregnancy is relatively unimportant. Lactation, on the basis of 850 ml. of milk daily, adds 1000 calories to the requirement.

One interesting development is the reduction in the calcium allowance from 1 Gm. to 0.8 Gm. per day. The allowances for iron

and vitamin A remain unchanged. The previous system of allowing 0.5 mg. of thiamine per 1000 calories was continued, since it seems to provide a desirable margin of safety.

The recommended level of ascorbic acid is three to five times that needed for protection against gross scurvy, but it was decided that these earlier recommendations should be reaffirmed and retained in the new list.

One other significant development has been the acceptance of certain nutrients—vitamin B<sub>6</sub>, biotin, pantothenic acid, and vitamin B<sub>12</sub>—as essential nutrients for man. However, at this time no quantitative allowances are given.

S. O. WAIFE

---

#### *Making of an M.D.*

“The entrant to medicine must be picked for his ability, his enterprise and his integrity. I should like to add, though I fear to do it in these days, when every man is as good as every other only better, that he should be picked for his cultural, social and biological background. He should in his training be taught the whole store of knowledge of the past, that is, he should be securely grounded on orthodoxy. He should be tested mercilessly before he is sent out to practice. But when he is finally approved, he must be allowed the complete freedom of an individual. He will meet many puzzles; he must worry them out by the light of his previous experience, and he must act in any way he believes to be right. He will be consulted by his patients about their spiritual, domestic and business troubles as well as about their illnesses, and because the troubles of the mind and those of the body are inextricably interlinked, he must do his best to help and his advice must come from his own knowledge and experience and not merely reflect the voice of authority.”

—Sir Heneage Ogilvie. *The New Zealand Medical Journal* 52: 322, 1954.

---

#### *Jealous Specialists*

“Much of the eccentric path traced by human progress has . . . been due to the basic law that the wrong idea sponsored by the right person has a better chance of gaining acceptance than the right idea sponsored by the wrong person. For all human beings are conservative and flock together into little, secure groups, with each group closing its ranks in the face of threats from other groups. It is a truism that to the shoemaker shoes are all and shoes are perfect, with a perfection which can be improved upon only by shoemakers. Shoemakers, therefore, are somewhat uncritical of shoes, but when a carpenter, seeing shoes with an unbiased eye, is cogently critical, his criticisms are brushed aside, however valid they may be. In compensation, however, the shoemakers will tolerate considerable eccentricity in shoemaking from one of their own professional group.

“For ‘shoemaker’ read ‘physician or surgeon,’ and for ‘carpenter’ read ‘surgeon or physician.’ Then look and understand the devious ways of advance in the medical arts and sciences!”

—*The Medical Press* 231: 239, 1954.

