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SLEEP

Psychologists, physiologists and philosophers admit that they do not know what sleep is, but all agree that it "knits up the raveled sleeve of care," and that it is "Nature's sweet restorer." Sleep has been called "the gentle sister of death," but a better term would be, sleep the mother of life, because there is no cessation in the functions of the vital organs during the unconscious hours and the new life, or renewed vitality that is conceived and nurtured during sleep, is born with the awakening.

There have been various theories regarding the physiology of sleep. One is that it results from anemia of the brain, but this does not account for the phenomenon, though sleep may oftentimes be produced by a hot foot bath or a general warm bath, measures which, by drawing blood to the extremities and to the surface of the body, no doubt decrease the amount of blood in the cerebral circulation.

THEORY OF FATIGUE TOXINS

Just why a period of unconsciousness should be a part of the cycle of the day, no one has yet explained satisfactorily, but that it is necessary, and one of the most

important functions of the body, every one knows. The theory that sleep is due to the effect of the normal products of fatigue on the brain is surely plausible. With each beat of the heart, with each inhalation of air into the lungs, with each movement of any part of the body, and with mental activity of any kind, there are oxidation and other chemical changes in the tissues, the waste products of which must be eliminated, or auto-intoxication and death will result.

Nature has provided that the waste products (true toxins) of fatigue be removed from the muscles and from the brain through the venous radicles and lymphatics, but not all of it can be thrown off at once; so there must be a period of rest when the elimination of the fatigue toxins, largely through the lungs, is greater than their production. So that we poison ourselves every day; and in sleep receive the antidote, i. e., the inhalation of an excess of oxygen over the needs of the body during rest, while there is greater elimination of carbon dioxide than is formed when there is no mental or muscular activity. But these chemical changes that occur during sleep do not account for all the good effects that follow the daily periods of unconsciousness.

THE HUMAN BODY AN ELECTRICAL STORAGE BATTERY

Some one has likened the human body to a storage battery that is charged with electricity at night while the machine which it runs is resting, and is discharged in all kinds of mental and physical activities during the day. Since every atom of the body is made up of electrons, and it is claimed that all energy is electrical, there may be actual truth in this apt illustration, but the mechanism of the dynamo which charges the billions of cells of the body with electricity during sleep has not been explained. One thing, however, is certain,

the charge in the battery will be low and incapable of driving the human machine very far if enough time is not given for recharging during sleep.

The oft-quoted aphorism "eight hours for work, eight for recreation, and eight for sleep" seems based on sound physiological reasoning. This does not mean that every person should sleep exactly eight hours each night; but with the average man that is about the amount required to maintain health and efficiency; and the man or woman who departs far from that rule will pay the penalty, a part of it in impaired efficiency the next day, with an accumulated dividend of suffering in the years to come.

HEALTH PLEDGE FOR WOMEN

Goethe, in his "Law of Caste," said: "No race can rise above the level of the mothers of its men." He referred particularly to morality. It is equally true that the physical well being of a nation depends upon the muscular development and personal hygiene of the women who bear and nurture its children. This self-evident truth seems to have been lost sight of to a great extent until recently, when the physical training of girls and women is being stressed, though not yet to the extent that the subject deserves.

It augurs well for the future of the American people that there seems to be an awakening of the need for the physical development of women. Among the agencies which are helpful in teaching girls and women personal hygiene, a much neglected subject in American schools and colleges for women, are the summer camps that have sprung up in all parts of the country, particularly near the large cities and in the mountains of North Carolina. It is wonderful how much a few weeks' stay in one of these camps will improve the girl, or young woman, who has never been required to take physical exercise and who

has lived the life largely of an indoor animal.

The United States Training School for Women has organized a number of camps similar to the Plattsburg idea of General Leonard Wood. The training at these camps is said to be very excellent and the pledge, taken by those who enjoy their privileges, if it were followed out by all the girls and women of America, would result immediately in a great decrease in sickness and death, and in a few generations of women, who lived up to its obligations, there would develop the supermen and women that have been dreamed of by many nations. This pledge is reproduced below, and it seems worth while suggesting that doctors make the effort to have this pledge adopted by girls in the schools, the teachers of which they know, and by the women's clubs of their communities. This pledge is so well prepared, and covers so fully the health needs and responsibilities of women, that it might be called the eight commandments of personal and public hygiene.

HEALTH PLEDGE OF THE U. S. TRAINING CORPS FOR WOMEN

As a member of the United States Training Corps for Women I hereby pledge myself in the interest of the health of the people of the United States to the following:

1. To endeavor to keep myself in good physical trim by:
 - (a) Proper breathing exercises.
 - (b) Setting-up exercises.
 - (c) The use so far as may be practicable of a wholesome, well-balanced diet.
 - (d) Cleanliness and care of the mouth and teeth.
 - (e) Regular bathing—daily when practicable.
2. To dispose of the secretions and the excretions from my body in a sanitary manner.
 - (a) By smothering my coughs and sneezes so that the droplets will not be deposited directly on the bodies of other persons.
 - (b) By practicing consistently the most cleanly methods practicable to prevent sputum and the excretions from the intestines and kidneys from being scattered about so as to be a menace to the health and comfort of others.
 - (c) By having my hands clean when handling foods for myself or others.
3. To protect myself from dangerous dirt (and tactfully to encourage others so to protect themselves) by: