

Life & Health

THE NATIONAL HEALTH JOURNAL

January

1935



Read—

COLDS

ARE YOU CHAINED
TO A COFFEE CUP?

CLOTHING THE SMALL CHILD

LEAFY
VEGETABLES

HAVE YOU HAD
A PHYSICAL EXAMINATION?

HEALTH HABITS FOR YOUNG WOMEN



HEALTH MAKES LIFE WORTH LIVING

TEN
CENTS

The EDITORS' COMMENTS

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Health Resolutions for the New Year

LIFE AND HEALTH takes this seasonal opportunity to wish for our many friends a New Year filled to the brim with the priceless boon of exuberant, superabundant health.

Many are not more than 50 per cent efficient in accomplishment because of a corresponding deficiency in health. No one is satisfied merely to remain alive or just to continue to breathe. "Length" is not the only dimension of life and may not be the most desirable. There is also breadth, depth, and fullness which make the life worth the living. Without vigorous health and a good surplus of physical and nerve energy, these larger objectives of living are unattainable.

What New Year's health resolutions might one make which, if consistently translated into daily living, would give a maximum assurance that one might expect to enjoy 365 days of 1935 without loss of time or money occasioned by (acute) illness? We would suggest the following:

Resolved, 1. That I will become more intelligent regarding health matters, and to this end will make a more careful study of that fascinating subject, the human body and the laws which govern normal functioning of its various organs and which determine physical peace.

2. That I will do as well as I know, making my knowledge of the laws of life and health a guide to daily conduct and practice.

This is a large order, and is just where most people fail. Many seem to regard health as a matter of random chance, or accident, failing to recognize that the laws which govern health and perpetuate life are as definite, as accurate, and as unfailing in their operation as are the laws of physics and chemistry—laws of gravity, of heat, of light, of electricity, of sound, or of chemical reaction.

It is literally true that most individuals can do more to improve their health than the most learned physician can do for them. Health is not something that can be spooned from bottles or taken out of pill boxes. It is a crop which is reaped as the result of the right kind of seed sowing.

3. I will allow nothing to pass my lips in food, in drink, or in air that will poison the current of life, the blood stream. This will at once settle for me the liquor problem, the tobacco question, also the use of all caffeine stimulating beverages, such as tea, coffee, etc.

4. I will make a study of diet, of optimum body nutrition, and will select and supply to my blood factory a well-balanced menu of natural foods, fruits, grains, and vegetables, with dairy products, which because of their high mineral content, keep the blood and tissues alkaline,

and also supply an abundance of the various vitamins as well as all the elementary food principles in purest form; substituting these better foods for the highly acid, poorly balanced, low mineral, low vitamin flesh foods, which because of their waste products, urea, uric acid, etc., excite and overstimulate, imposing an excessive burden upon the liver and kidneys, and are not infrequently the direct carriers of tuberculosis, cancer, ptomaine poisoning, parasitic (tapeworm), and other diseases.

5. Recognizing that rhythm-regularity is the keystone of the arch of health, I will have a specified time for each meal and will take no food, such as fruit, candy, nuts, ice cream, etc., at irregular intervals or between meals.

6. No machine can long function efficiently if dirt, debris, or clinkers are allowed to accumulate and clog the mechanism. The human body is no exception. I will, therefore, endeavor to keep my body clean, both inside and outside, and to this end—

- a. I will secure good daily bowel elimination.
- b. I will drink five or six glasses of water each day.
- c. I will take at least two soap and water cleansing baths each week.
- d. I will maintain a good posture as an aid to deeper breathing and better elimination of poison through the lungs.

7. Daily physical exercise, preferably in the open air, is essential to a balanced blood circulation, to good digestion, to normal respiration, to efficient elimination of body wastes, and to restful sleep. I will, therefore, spend an hour or more each day in exercise out of doors.

8. Such negative emotions as fear, worry, anxiety, discontent, distrust, poison the springs of life and invite disease. The positive emotions, as hope, courage, confidence, joy, faith, love, and a firm trust in God, promote health and prolong life. I will therefore cultivate a wholesome, happy mental outlook, and will endeavor each day to contribute something to increase the joy and happiness of others.

A. W. T.

The New Department

WE present on page 15 the new department, The Mothers' Counselor. Each month it will contain practical health messages for mothers. LIFE AND HEALTH is often described as the health journal for the whole family. This new department will give added force to this description.

On page 21 will be found an announcement regarding the February issue, and also other information you will wish to have.

PEARLS OF CHARACTER



LOVE, JOY, PEACE, LONG-SUFFER-
ING, GENTLENESS, GOODNESS,
FAITH, MEEKNESS, TEMPERANCE

by Alonzo J. Wearner+

THOUGH a beautiful character may well be considered altogether priceless, it is not to be acquired without a price. Like the pearl, which is the result of the oyster's covering some annoying foreign body with a substance called naacre, a goodly character is the product of agitation. This fact is in itself the greatest comfort and consolation to us in this present trial-filled life. There comes into the life entirely uninvited—God knows—some grating grievance. It may be an aggravating pain, a chronic illness, a physical infirmity, or perhaps a constitutional weakness. Our physician is summoned, and with all the resources of modern medical science to aid him, he may succeed in overcoming it. Healing is brought about by the cooperation of the human with the divine. God heals; the physician has but learned to cooperate with certain divine laws. God expects us to use the reason, intellect, knowledge, and resources provided for this. With all these efforts we mingle our prayers. We bow in humble submission to God's will, for He knows what is best for us. It may be His purpose that the trouble remain, and we continue to bear it.

This was the apostle Paul's experience, for he tells us, "There was given me a thorn in the flesh, the messenger of Satan to buffet me, lest I should be exalted above measure. For this thing I besought the Lord thrice, that it might depart from me. And He said unto me, My grace is sufficient for thee: for My strength is made perfect in weakness. Most gladly therefore will I rather glory in my infirmities, that the power of Christ may rest upon me."

Thus some bodily infirmity is often allowed to continue its work for the good of the soul. The naacre of God's promised grace is given in sufficient quantity that the irritating substance or circumstance may be coated over

and over, again and again, day by day. So is formed in the inmost soul of the tender in heart, quietly, yet surely, a precious pearl of character, which is in the sight of God of great price. His promises of grace are written over all in brightest rainbow hues.

Let us examine closely a few of these most precious pearls. Paul has given us a string of them lovely enough to grace the life of the true Christian. They are named "love, joy, peace, long-suffering, gentleness, goodness, faith, meekness, temperance."

Love comes in three qualities. The third quality of love is the most common, "Love those who love you." The second quality is, "Love thy neighbor as thyself," and the first quality, "Love your enemies, bless them that curse you, do good to them that hate you." Which of these requires the most grace to develop fully, we all know by experience. This love is not effeminate, not a sentiment or a feeling merely, but a mighty principle of Christian living.

Joy—where can you find one who has not known sorrow? "Weeping may endure for a night, but joy cometh in the morning." The joy of the morning far outweighs the weeping of the night, so soon forgotten.

Peace is the gift of heaven, the greatest need and desire of earth. A conscience at peace with God and man, how precious! "My peace I give unto you," promises the Prince of Peace.

Long-suffering, according to Webster, is "bearing injuries or provocation a long time with patience." The development of this precious trait of character requires much time, and cannot be had without bearing in-



G. W. JOY, ARTIST

The story is told of a merchantman who found one pearl of great price, and to buy it sold all that he had. The pearls of character are far more precious.

juries. Whatever the nature or extent of the provocation may be, God's grace is sufficient. James by inspiration writes, "Let patience have her perfect work."

Gentleness and goodness are a pair developed together. Let me illustrate: In a home far in the interior of China, where I enjoyed stopping in my travels, lived an elderly couple with one son, both devout Christians. This one son was an adult in years and mental powers, but as a two-year-old in body development. For all these years, with a mother's love, she had tenderly nursed this helpless babe. To know that mother—once a heathen—was to gain a richer knowledge of the meaning of the words "gentleness" and "goodness." Such traits of character reach out to bless neighbor and stranger alike.

Faith is akin to trust. Perhaps these pearls are best developed from the "thorn" of unemployment and poverty. No doubt ridicule and persecution do the same work. By these we learn to trust in God alone. When in adversity we feel that He is caring for us still, faith is thus increased and strengthened.

Meekness is humility's twin—the primary graces of a true Christian. Should not our blundering errors and mistakes keep us developing these pearls? Moses, it is said, was the meekest of men. His grave error in slaying an Egyptian caused him to flee from the royal courts to tend sheep. The memory of this mistake no doubt developed meekness in Moses during his forty years of shepherd life.

(Continued on page 18)

* Chaplain, St. Helena Sanitarium and Hospital.



Are You Chained to a Coffee Cup?

The Fallacy of Depending on Stimulants

SOME time ago I had under my care a prominent State official. The second day after his arrival at the institution, he called me to his room and said, "Doctor, something is wrong; evidently the treatments do not agree with me. I have a headache. In fact, I ache all over. I cannot apply my mind to the work that I must do."

Knowing he was a user of coffee, I said to him, "Governor —, it is not the treatments that are responsible for your condition, but the fact that you have had no coffee since coming here."

He ridiculed the idea and said, "No, that cannot be it."

"Well," I replied, "let us have a demonstration."

I ordered a cup of coffee prepared for him. A half hour after drinking it he came to my office all smiles, and said, "Doctor, you were right. I feel like a different man."

Then I said to him, "This is the best evidence I can present to you that coffee is harmful. A good thing can be given up without suffering; but not so with a drug, whether that

drug is cocaine, morphine, nicotine, or caffeine."

Caffeine is used because it is supposed to relieve fatigue. Let us see what coffee actually does. Does it relieve fatigue? In the human body we have certain cells that are capable of storing up energy somewhat as a storage battery is capable of being charged with electricity. It is during the sleeping hours and rest that these cells are charged with energy granules. During the working period the stored-up energy is liberated and utilized in doing brain and muscular work. When the cells are almost depleted, fatigue is felt. This is a warning to stop and give nature a chance to rest and replenish, or recharge, these cells.

If, however, at this point a cup of coffee should be resorted to, the fatigue would disappear and mental or muscular work could be again resumed. Coffee does not recharge these little batteries with a new supply of energy. What does it do? It merely makes the person unconscious of his real condition and need, and makes it possible to squeeze out a few of the extra energy granules that nature would have held in reserve as a margin of safety, just as a wise businessman retains in the bank a certain sum to be drawn upon in case of an emergency. The man, therefore, who depends upon coffee to keep fit is headed toward physical bankruptcy.

Caffeine does not impart energy. It irritates the brain cells and nerve centers. This temporarily imparts increased action to the heart and muscular system, and strength seems to be increased. Imagination becomes

more vivid. This seeming improvement is, in fact, merely nervous excitement. It is the same feeling the fever patient experiences when his temperature rises. He becomes talkative and feels quite fit. When the stimulation produced by the cup of coffee subsides, then there is felt a corresponding degree of languor, and another cup of coffee is demanded.

In the absence of coffee, a cigarette will answer the same purpose if it may be found. Since coffee cannot be carried about during the day and the cigarette can, the cigarette is resorted to. It is not surprising that practically all cigarette addicts are found to be coffee or tea drinkers. The use of coffee naturally leads to the use of tobacco and cigarettes. Both are habit-forming drugs.

The tired, worn-out mother, feeling the need of something to spur her on, or the society woman who wishes to maintain a feeling of fitness, having made the discovery that a cup of tea or a cup of coffee serves this purpose, naturally resorts to its use. She imagines it imparts strength, but the cigarette will serve the same purpose. It is, therefore, not surprising that the use of cigarettes is becoming prevalent among women since this discovery has been made.

These stimulants possess no nutritive properties. They answer the same purpose that the whip does to a worn-out or tired horse. The whip is a poor thing to depend upon to keep in trim, and yet that is what these women are doing when they resort to that delusive cup day by day. Dependence is placed on the cup of tea or coffee until nervous exhaustion reaches the point where medical ad-

* Member of the medical staff, Washington Sanitarium and Hospital.



by
Daniel H. Kress, M. D.+

vice, and possibly a stay at some medical institution for rest and treatment, is necessary.

Nervous exhaustion is a disease that is becoming extremely common in countries where dependence is placed upon these beverages to keep fit. One of the chief causes of nervous exhaustion, insomnia, and mental exhaustion among women in America, I believe to be the dependence women place on these beverages to keep them up and about.

During the last forty-five years I have been connected with medical institutions where no coffee is served to patients. During that period I have been able to observe the effect of withholding coffee upon scores of patients. In every instance I have found it results temporarily in the lessening of mental and muscular fitness, and invariably headache and mental and muscular weakness are experienced.

That tea and coffee are far from being the harmless beverages they are represented to be, will be seen from a report given out by the New York Life Extension Institute. Out of 16,552 men examined by the Institute, excessive use of alcohol was considered to be responsible for 7 per cent of the physical impairment, while coffee and tea were assigned as a cause of 40 per cent of these ailments and impairments.

In his book, "How to Make the Periodic Examination," Dr. Eugene Lyman Fisk, of the Institute, says:

"Coffee is essentially a drug; that is, in itself it has no food value or

nourishing principles. Its effects are mainly due to an alkaloid, caffeine, which is used in medicine as a nerve and heart stimulant, although its use is being much restricted because of its uncertain effects. In this it resembles tobacco. . . . Caffeine is now given chiefly in emergencies, and is no longer combined with headache remedies, since the Hygienic Laboratory at Washington has shown that it increases the depression or poisonous effects of such drugs.

"The ill effects which may in the long run be produced by this powerful drug taken habitually for many years, even by the supposedly healthy, have never been measured, but it is not uncommon for people who have taken coffee and tea for many years without apparent ill effects suddenly to develop a susceptibility to these drugs, suggesting that there has been a slow damage to the nervous mechanism of the heart or to some other part of the nervous system."

The evil effects of tea drinking, with the benefits accruing from abstinence therefrom, are clearly set forth in the following letter written by John Wesley, the founder of the great Methodist Church:

"After talking largely with both men and woman leaders, we agreed it would prevent great expense as well of health as of time and money, if the people of our society could be persuaded to leave off drinking tea. We resolved ourselves to begin and set the example. I expected some difficulty in breaking a custom of six and twenty years' standing; and the first three days my head ached, more or less, all day long, and I was half asleep from morning to night. The third day, on Wednesday, in the afternoon, my memory failed me almost entirely. In the evening I sought my remedy in prayer. On Thursday morning my headache was gone, my memory was as strong as ever, and I have found no inconvenience, but a sensible benefit in several respects, from that very day to this."

A short time ago there appeared an article in the daily papers, stating that a certain firm in Great Britain made the discovery that their workers could do more and better work when permitted to smoke during a certain portion of their working hours, and hence the firm determined to allow them three quarters of an hour in the morning, and the same amount of time in the afternoon wherein they might smoke. Tobacco trusts made the most of this in advertising their

wares, just as the coffee interests have done in advertising coffee.

Every one knows that tobacco is not a food. It does not add strength to either mind or body. It does not enable a worker to do better work. It does, however, enable a *smoker* to do better work. The need of tobacco is not felt by one who is in a normal condition. The nonsmoker does not feel the need of a smoke in order to do better work. In fact, a smoke would unfit him for work. Tobacco enables the *smoker* to do better work for the same reason that a dose of morphine enables a morphine addict to do better work than he is able to do if deprived of it. The same is true of the coffee addict.

The fact is that a healthy person does not feel the need of tobacco, coffee, or any other drug. He does not feel the need of either a mental or a muscular whip, and the one who feels the need of being whipped up is in a run-down condition. It is especially unwise for such a one to depend on a stimulant to keep *feeling* fit. He needs, not whipping up, but building up. The reason why we in America have so many nervous and mental diseases is because these drugs, instead of rest and relaxation, are so habitually resorted to, to relieve fatigue.



SAYS DOCTOR KRESS:

Several years ago, in Australia, I was driven to the station in a cab. The horse stumbled along in a lifeless way, with head down. Fearing I would be late to the train, I said to the driver, "What is the matter with your horse?"

He replied: "I have been taken in on him. Three days ago, when I purchased him, he was a spirited animal. He stepped along with his head up and needed no urging. I later discovered he had been drugged, and two days after my purchase he was in the condition you see him in today."

The drug given to the animal, whatever it was, acted as a whip, just as coffee does to the worn-out and exhausted society woman. The horse made an energetic showing, and did better work while under the influence of the drug; but when deprived of it, his true condition became apparent. He needed building up, not whipping up. This is equally true of the one who finds coffee a necessity to keeping fit.

Have You Had a PHYSICAL

by W. W. Bauer, M. D.+

A Discussion
of an Important
Aid to Preserving
the Health

THERE has been a great change in the health situation in the United States during the last fifty years. We no longer fear epidemics as much as we used to, though some diseases of a contagious character have not yet been controlled. The average length of life has been increased; that is, the age at death is greater than it used to be, by twenty years or more. These gains are due largely to life saving in early life, especially the partial conquest of infant mortality and the contagious diseases of childhood. A person who has reached or passed the present expectancy of life, which is now fifty-nine years for men and sixty-three years for women, is not likely to live to a greater age than did similar persons a generation or two ago. In fact, the evidence indicates that the upper limits of life, far from having been pushed to higher levels, have actually been lowered. Therefore our principal concern today is over the deaths which occur among persons who have reached or passed middle life.

The total of deaths per unit of population has been steadily declining in the United States, maintaining a low level even through the depression years. But the character of the causes of death has changed. In infants, for example, where the diseases of diarrheal character used to head the list of causes of death during the first year, we now find that premature birth is likely to be highest, while pneumonia and related infections are close behind, if not leading. Tuberculosis, which used to be at the head

of the list of deaths from all causes, is now sixth or even lower; while heart disease, cancer, apoplexy or "stroke," pneumonia, and kidney disease are found higher in the list. Diabetes deaths among persons over fifty are on the increase. As the average age at death has advanced, so has the picture changed in the shifting of emphasis from diseases of the young to those of the older age groups. Great interest has been aroused in the reasons for the change, and especially in what can be done about it.

The diseases of younger age groups are, for the most part, acute in character; that is, they appear suddenly, run a relatively brief course, and the result is quickly determined in favor of death or recovery. Tuberculosis, of course, is a prominent exception. The diseases of older persons, on the other hand, are more likely to be insidious in onset, relatively slow in progress, and ultimately either disabling or fatal. Their causes are not always apparent, or, when they are known, they are likely to be rooted in the more or less distant past. It was this differentiation between the characteristics of the two types of diseases that caused Dr. Horace Dobell, an English physician, in 1861 to suggest that "thousands of people, believing themselves to be in health, are nevertheless, undergoing . . . early, occult, and evasive stages of defect in the physical state. I wish then to propose . . . that there should be instituted, as a custom, a system of periodic examination to which

they should submit themselves and to which they should submit their children." His suggestion, like many another new idea, was ignored. About 1900 Dr. George M. Gould of Philadelphia made a similar suggestion, but nothing came of it.

It was in 1917 that a group of life insurance executives was challenged by Dr. Eugene Lyman Fisk, then director of the Life Extension Institute, to put the matter to the test, and find out whether or not life could be extended, and of course profits increased. The principal sponsors of the health examination idea in commercial fields have been the Life Extension Institute and a number of insurance companies, some of which offer the examination free to certain classes of their policyholders. In 1922, the periodic health examination was endorsed by the American Medical Association and the National Health Council. So the American Medical Association prepared a manual of instructions on how to make the periodic health examination, and a blank for the use of physicians desiring to make such examinations. For a time there appeared to be a lively interest in the subject, but this seems to have died out to a great extent even before the beginning of hard times in 1929. There may be a number of reasons for this.

In the first place, none of us appreciate our blessings until we lose them; this is true especially of health. The healthy person will not usually be bothered much about his condition. Another factor is that the examination has often been made too extensive and therefore too expensive, or at least the lay public has been led to believe that it must be expensive, largely because of the advertising of health examinations highly elaborate in character, coupled with "health service" for a year, by a commercial organization; the prices ranged from



KEYSTONE PHOTO

* Director, Bureau of Health and Public Instruction, American Medical Association. Written especially for LIFE AND HEALTH.

Health examinations should begin in infancy. The importance of measuring up to certain standards in weight, etc., is now recognized, and to this should be added the regular physical checkup.

EXAMINATION?



EWING GALLOWAY, N. Y.

One of the benefits of a periodic health examination is to discover physical ills before they become chronic or beyond help.

\$25 to \$125, and of course many persons got the idea that such prices must be expected. With a large family, the cost would be prohibitive for all but the well-to-do.

Probably the most important reason why the periodic health examination did not become popular was that it was not whole-heartedly accepted by practicing physicians, despite the endorsement of the American Medical Association. There are even today many doctors who quite frankly do not believe in periodic health examinations, and among them are many whose opinions command respect. Their reasons may be summed up briefly as follows: The implied promise of true life extension cannot be fulfilled; the discovery of hidden sources of disease cannot always be accomplished; too much information about his own body is not usually good for a patient, especially if he has a tendency toward introspection; assurance of good health for any extended period in the future cannot be given.

Initial enthusiasms sometimes lead to optimism which later experience does not justify. We know that the periodic health examination will not accomplish much that was hoped when it was first proposed, but that does not mean that it must be re-

garded as worthless. We must modify our attitudes, and in the light of what experience has taught us, use the instrument for what it is worth, and in ways which will be most effective.

To be truly worth while, the periodic health examination must be begun at the beginning of life, that is, during the period prior to birth. The new life must be supervised through correct prenatal care of the expectant mother. After birth, systematic supervision in health as well as disease must be continued through the infancy, preschool, and school years, through adolescence and adult life, to old age.

The frequency may well be different at different ages. In infancy the examination should be monthly for the first six months, every two months until a year old, twice in the second year, every three years from two to twenty, once a year from twenty to thirty, once in four years from thirty to forty, once in two years from forty to fifty, and every year from fifty years on. In addition, however, a physician should be consulted between examinations whenever there is any change which seems significant or which is not understood, in the function, appearance, or sensation of any part of the body.

Such a combined procedure may well afford an increased security against sudden and unexpected development of serious or disabling illness. It will not be likely to add to the maximum span of that person's life, but may reasonably be expected to aid him in attaining as nearly as possible the maximum span possible for him.

It has been shown that groups who have been examined periodically have lived longer, on the average, than those not so examined.

The examination need not be elaborate, unless the doctor discovers conditions which require further investigation by means of special technique or apparatus. A good history of the patient's health experience and an adequate physical examination are the basic requirements, and any competent physician should be able to meet them. When special examinations are required, he can refer the patient to those who are expert in such special lines. The fallacy in institutes and clinics which routinely make special examinations which are only occasionally significant, is that they needlessly complicate the matter, increase the expense, and often confuse or needlessly alarm the patient.

An important point about the periodic examination, too often violated, is that the patient should not have a detailed report of the findings. He is not, as a rule, able to interpret them. It has been said that every man ought to know his blood pressure. I do not think so. All he needs to know is that his doctor knows it, among other things, and has advised him in the light of that knowledge as well as other points which the doctor is able to weigh, but the patient usually is not. The dividend which the patient gets from a periodic health examination is the wise advice of his physician. Impressive detailed reports may be definitely harmful. Many a sleepless night can be charged to too much information given out to a patient inclined to worry; in numerous instances the ultimate outcome proved that the fears were groundless. Anyway, carrying the worry is part of what your fee to the doctor covers.

This reasonable program, then, may well be commended to one who wishes to add greater comfort and efficiency to his years, and possibly a few years to his life—a periodic health examination, plus a visit to the doctor when the functioning, the sensations, or the appearance of any part of the body seems abnormal.

Read What

Loleta Simpson, M. D.,

Says About

GOOD HEALTH HABITS

For Young
Women

Especially
Those in
COLLEGE

concerning health which have caused thousands of failures in life. One of these is that because a child has always been delicate, or not particularly strong, she never can be otherwise. But there are many instances of those who have had a poor start, becoming, by practicing good health habits, stronger than the one who started out robust, but who disregarded such laws.

The basis of all education is health. The better the body, the better the mind. Yet in advocating a simple, effective health program we usually find the work considered as an extra, to be introduced into the schedule provided it does not interfere with other requirements.

Captain your work. Plan a program. But one should be captain and pilot of his own program, and be ready to make it meet his real needs, however these may have changed since the plan was made.

We have only a certain amount of energy; and if it is spent in one way, it is not available for use in any other way. The best results are obtained from a program consisting of a period of hard work with undivided attention, followed by a thorough rest period. The greatest waste comes from fooling along with the energies only half under control. I have observed several students who were so



J. C. ALLEN

An education is the business of every young person. Yet to make the years of training useful in later life, there must accompany the program of study a program of health.

THE human body is a remarkable mechanism; it will stand an extraordinary amount of abuse, and still show comparatively high efficiency. The lengths to which

a young woman can go in neglecting health is sometimes a great discovery to her, but it has its limit, and she should be helped to learn how to conserve her forces rather than to exploit them.

There are certain wrong notions

* Staff physician, Emmanuel Missionary College.

anxious to succeed that they could not be persuaded to take sufficient time for rest. Without the necessary rest they were only half doing their work; therefore they were neither accomplishing what they should, nor getting their rest for the next day's duties, and the result was a failure.

In college work it is, as a rule, not the severity of the scholastic requirements that causes failure, but faulty health habits. In infancy the baby's habits are practically perfect; but from infancy on, faulty habits creep in one by one throughout the whole period of growth and development. The longer the girl is in school, the more faulty, usually, are her habits, and consequently, on the whole, the poorer her health.

Proper weight for height is the best single measure we have of physical fitness. The weight line during the period of growth and development is perhaps as useful in reflecting the condition of health as is the temperature chart in illness. Any change in weight toward the normal can be brought about only by an increase in health intelligence. By health intelligence is not meant merely the knowledge of the rules of health, but health intelligence is measured by the way we apply those rules in our own lives. The choice and preparation of food alone will not determine the nutritional value to the individual. The habits of the individual when eating, a cheerful environment, a healthy mental attitude, sufficient exercise, and proper elimination of waste,—all help to determine how much of the food eaten will be utilized.

Sufficient time should be given to meals. It is the time that it takes to eat breakfast that most college girls begrudge. To many, sleep in the early morning is more desirable than food. Going without breakfast is an important contributory cause of tuberculosis, yes, and of many other diseases; for it markedly lowers the individual's resistance to infection. No matter how badly a person needs sleep, the short nap taken at the expense of breakfast will never repay for the damage done.

We find the college student obliged to assume a responsibility for which her previous training has not fitted her, and called upon to exercise a self-restraint for which she has neither aptitude nor desire. Previously she has been under home care. In college she is left to decide whether she will eat the foods she knows to be best or only those she likes,

whether she will eat whenever she feels like it or wait till mealtime. The girl who learns self-control in attaining health receives an education of the greatest value for life, comparable to no other subject in the curriculum.

Nothing more need be said here concerning the choice of a diet—most of us do not practice nearly all we know; but this one thing is sure, if you will eat fresh, green vegetables and fruit every day for eighty or ninety years, you certainly will not die young.

Our posture is one means of proclaiming to the world whether we are a failure or a success. Who ever saw a round-shouldered girl appear well dressed, even though she wore the finest dress that could be made? There is great physical, mental, and moral benefit to be derived from a correct posture. It also tends to promote grace and dignity, self-possession, courage, and self-reliance.

A great deal of energy is wasted by the assumption of a bad posture, which causes the student to become fidgety, and to shift about in her chair. Sit in a straight chair for study. Slumping down in a so-called easy-chair is not conducive either to concentration or to comfort. Never study lying down, as this strains the



J. C. ALLEN

Start the day right with a nourishing breakfast. Other plans should be made to fit this, for the morning meal is the most important, and does more to build resistance than the others.

muscles of the eye and causes early fatigue. Many a time when we think we are in no condition to study, and change about from one piece of work to another without finishing anything, all we need is to buckle down to one job, and the work we are then able to accomplish will surprise us. It is very important to train the mind to

active, intensive attention as you work, and the studying time will be much shortened, thus giving time for rest and healthful recreation.

Fatigue is diminished capacity for doing work. It stamps the personality with pepleteness, and marks the face with lines and drooping muscles. Actual ability to work, as well as the desire to work, is lessened by fatigue. In order to become the hero of the day, you will have to get some sleep at night. Most adults need an average of eight hours' sleep a night. Persons who lose much sleep are pale because the red corpuscles do not have time for renewal. The idea that a change of occupation is rest, is sometimes overworked. If a girl is tired, she should not force her energy to exertion of any kind. A complete rest is needed. Muscular fatigue is more than an exhaustion of the muscles; it is a depletion of the nervous system as well.

All functions of the body are benefited by exercise, and they all suffer from the neglect of it. Exercise should be strenuous enough to cause deep respiration. Few of us realize the benefits to be derived from deep breathing. "A good respiration soothes the nerves; it stimulates the appetite, and renders digestion more perfect; and it induces sound, refreshing sleep."

It is easy for sedentary workers to form the habit of superficial, shallow breathing, especially if they stoop over their work. The blood is not purified as it should be, and waste, poisonous matter accumulates. The skin becomes sallow, the brain is clouded, and the whole system is depressed. Such individuals become an easy prey to infection.

Much more benefit is derived from exercise which is enjoyed than from that which is taken from a sense of duty—merely endured. Yet there is danger of spending too much time in recreational exercise, and often it is necessary to learn to enjoy useful forms of exercise in which we do not at first find pleasure.

It is impossible to have health when the extremities are habitually cold. Many who do not properly clothe the extremities during the cold weather insist that they are warm, and they really are, but they are using most of their energy to keep warm, and do not have the resistance that they should have. Often the reason that a slender, delicate girl cannot gain weight is because it takes all her energy to keep her body temperature

(Continued on page 16)

THAT MOST COMMON AILMENT

CONSTIPATION



"Drink at least five or six glasses of water a day"

by
Charles H.
Wolohon, M. D.*

frequent, liquid stools are the result.

In constipation just exactly the opposite obtains. The bowel content is retained longer than usual, the absorptive element is thus enhanced, and the stools are consequently drier and harder than normal. Sometimes they may resemble a sheep's stool, with round or segmented conformation. This is due to nothing other than the excessive dehydration just mentioned.

There are two principal types of constipation—the spastic and the atonic. In this brief discussion I shall leave out the various obstructions and other organic affections of the gastrointestinal tract, such as tumors, adhesions, etc., and shall consider only the common cases of constipation. In atonic constipation the bowel is flaccid and relaxed. It has little tone, and lacks in expulsive force and muscular power. Of the spastic type of constipation the reverse is true. In the latter the bowel is contracted, overactive, and has an excess of tone. It is not my purpose to discuss these two types of constipation separately, but simply to deal with a few of the errors which are generally responsible for most of the cases of constipation.

The greatest factor contributing to constipation is neglect of the call of nature. There are nerves in the walls of the sigmoid and rectum which are activated by distention of the lower bowel, and the arrival of the mass excites these. This stimulation traverses the spinal cord to the brain, where it is interpreted as a desire to defecate. If this appointment is met, the act is completed; if neglected, these sensitive nerve endings presently become fatigued, and no longer flash the red light that elimination is in order. Constantly disregarded over a period of time, these benumbed nerves no longer transmit their impulses intensely enough to register in consciousness; there is no light at all.

Here is a common story that doctors hear from their patients: Yes, the patient is constipated. Time and again he has tried for a day or two to move his bowels naturally, but

WITHOUT the slightest assistance on our part, digestion and assimilation take place; and by the same beneficent forces the waste products are delivered to the very end of the colon. Nature has planned that final disposal should represent a blending of the automatic and the voluntary control. Through the sphincter mechanism, the last few inches of the bowel are placed under our own management. It is our part to attend to this much. We can do no more; surely we should do no less. Again is demonstrated the truth of the old adage, "To err is human;" almost every case of chronic constipation is a dismal testimony to the unreliability of man.

Constipation is defined as inefficient or infrequent movements of the bowels. This definition is broad enough to include those cases where the bowels do move a little, but where the movement is not adequate.

Many people have the idea that the colon is a garbage receptacle. This is far from true. Dr. W. J. Mayo, of the Mayo Clinic, says: "We eat with the jejunum and ileum, and drink with the ascending and transverse colon," which is to say that we eat

with our small intestine and drink with our large. The food current is chiefly liquid when it gets into the large intestine, and there it is reduced to a semisolid consistency through absorption of the fluid which the body needs. Inasmuch as such a vital function is performed by the colon, it can easily be seen that it has some other part to play in the body economy than merely being a reservoir for waste products. True it is that the lower end of the colon acts as a storehouse for the feces which are ready to be eliminated, but this rôle has been magnified to the exclusion of other important functions.

The consistency of the stool is a resultant of two factors. One is the rapidity of the passage of the material through the gastrointestinal tract, and the other is the rate of absorption. Ordinarily there is such a balance struck between these two influences that the stool is semisolid, soft, and pasty.

One can easily see that if the rate of passage through the large bowel is hastened, the stools may be liquid, and this is what happens in diarrhea. Due to irritation, the bowel is stimulated to greater activity, and the material moves through faster; there is a diminished absorption time, and

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failed to get results. Usually, after he misses one day, on the next he will take a cathartic and his bowels will move adequately. The day following there will be expected another copious passage, but such will not be, and becoming alarmed at the supposed terminal congestion, he will take a purge again. Thus the natural rhythm is disturbed, a vicious cycle started, and the habit begun.

Any one who will consider the matter at all carefully will realize that if he takes a cathartic one day, his bowels will have been so thoroughly emptied that there will be insufficient material collected by the next day to give the normal stimulus to evacuate, always remembering that it is the distention of the lower bowel that produces the impulse. The right thing to do is not to take a cathartic, but to wait until the material arrives at the terminus before attempting to unload the cargo.

How do cathartics act upon the bowels? Most of them act by irritation of the lining of the intestinal tract. The irritation of mucosa (the bowel lining) stimulates the bowel to contract, "whipping up" the peristalsis, and thus producing an evacuation. Other cathartics, which we call salines, as Epsom salts, act by absorbing water from the lining of the bowel, which, combined with the irritation they produce, causes rather copious, watery stools. Doctors everywhere unanimously agree that this habit of taking laxatives and purgatives is damaging to the intestinal tract, creates the vicious cycle, and perpetuates the constipation.

Nervous influences certainly play a large part in the production of constipation. Many have remarked that when they are on a sight-seeing trip or when there is an especially strong mental or emotional stimulus, they will not have a desire to defecate. Yet later they will find that the bowel movement had arrived at the terminus on time, but they were not conscious of it. The mental influence inhibited the impulse, and there is quite marked constipation. There is no denying the fact that strong emotional states through nervous unbalance are capable of tying our bowels up in spasmodic knots at times. Worry about any one of the multitude of things which we consider it our privilege and pleasure to be troubled over, even to perplexity about the bowels themselves, is an intestinal irritant. That is in a region completely missed by any cathartic I know of.

It thus becomes plain that if one is going to obtain results, his mental attitude must be changed. He must come to realize that his gastrointestinal tract will operate normally if he gives it a fair chance. To clarify this, let us use the illustration of the department store and its freight elevator faithfully delivering the goods to the fleet of waiting trucks on the street. When the loading facilities are good and the mechanism is kept in repair, no one worries as to whether the merchandise will ultimately get down to the street floor and be delivered to its destination.

Like the elevator operator who picks up his goods from the floors as he descends, we, too, are sure when we eat with gusto a hearty meal that our intake facilities are in good operating condition. An equivalent awareness that all through the thirty feet of intestinal "floors," so to speak, there is nothing to impede the passage of the freight, makes it a foregone conclusion that the unloading facilities, if untrammelled and not subjected to meddlesome interference, are perfectly adequate to unload the waste. Once thoroughly believed, this fact will go a long way toward a smooth and regularly operating mechanism. Just why we become possessed with the idea that the sphincter, the purse-string muscle, is out of order, is hard to say.

Now what are we to do about the constipation? Some of the most important things are made obvious by the foregoing discussion. Regarding the matter of diet, along with well-balanced meals one should be careful to eat two or three bulky vegetables every day—lettuce, spinach, broccoli,

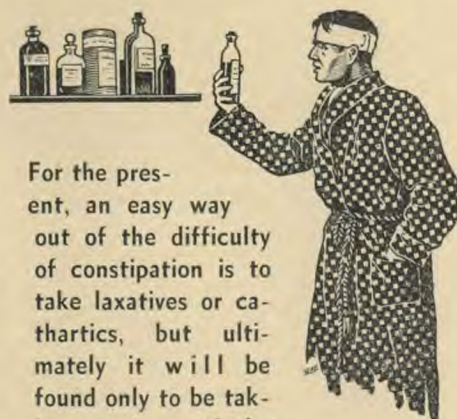
or foods of this type. Whole-wheat bread is good for most cases, but not for all; and fruits, especially prunes, figs, dates, or raisins, which supply the laxative fruit acids and bulk, are effective in inducing the bowels to function normally.

There are, it is true, some who do not do well on a diet which contains roughage. Such should have a bland diet of no roughage, low residue, with puréed foods for a time to relieve the irritation, gradually working to a normal diet. However, I am speaking of the average, and for such the suggested program will give good results. Some cases may need mineral oil and agar-agar, either or both combined, or psyllium seed, for a time, to help establish a routine. However, these are the exception. Drink at least five or six glasses of water a day, as insufficient water drinking, which favors undue drying, tends to constipation.

Then, most important of all, have a regular time to go to the stool; preferably this should be just after breakfast, as then the strong peristaltic movements are at the zenith. This appointment should be met regularly, and nothing should be allowed to interfere. After nature has faithfully seen to it that the food has been digested and absorbed and the waste deposited at the very exit of the intestinal tract, none of which things we could do for ourselves, surely we will not fail to be prompt to cooperate in evacuation. The first day the bowels may not move; however, do not be alarmed, but wait quietly until the next day. Then, if there is no movement, while sitting on the toilet take a small, low enema of a quart or less of warm water, and so continue until the bowels move regularly without the water. This plan, if faithfully tried over a period of time, so as to establish a habit, will work in almost every case.

Those discouraged by the strength of faulty elimination habits of years' standing, and with a negative attitude thereto, may find that the guidance and inspiration gained by contact with the staff of a health-teaching hospital will mark the inauguration of better things.

In conclusion, may I say that taking laxatives or cathartics is only postponing the evil day—the day of reckoning. Let us choose a more rational solution of the constipation problem, and seek to restore normal bodily function by changing our attitude and habits of life to conform to nature's pattern.



For the present, an easy way out of the difficulty of constipation is to take laxatives or cathartics, but ultimately it will be found only to be taking one horn of the dilemma instead of the other. Eventually the piper must be paid the price of laziness and neglect.

C O L D S

IT has been said on good authority that more time is lost from work on account of colds and their complications than from all other diseases taken together. Certainly the "common cold" is the most common of all diseases which afflict mankind. Many people consider a cold a very minor ailment, and make no effort to prevent it or to care for themselves during the attack; but when we consider the numerous complications which may result from a cold, it becomes apparent that it is not a trivial condition.

The study of the prevention of colds leads first to a consideration of the cause. Formerly the weather was thought to be of primary importance in causing colds, but now it is known definitely that the problem is one of infection. Just as truly as whooping cough is contagious, so colds are contagious. Cold weather, in the absence of the specific germ, cannot produce the disease. Arctic explorers do not have colds until they return to civilization.

For forty years or more, scientists have been studying with their microscopes the bacteria found in the nose and throat of those suffering from colds. Early in the study it was found that those in apparently perfect health frequently harbored the same variety of germs. This naturally cast considerable doubt on the idea that these germs were the cause of infections in the nose and throat.

In recent years many further experiments, both in man and in apes, prove beyond a shadow of doubt that a specific, filtrable virus (that is, one that will pass through the finest stone filter) is the primary agent involved in causing colds. This virus can be grown in the laboratory, and kept alive for months under artificial conditions. It still maintains its virulence, and typical colds can be experimentally produced in man or apes by putting a drop of the solution containing the virus in the nostril of healthy subjects.

Recently proof seems available that influenza, the newest relative to the common cold, is produced by the com-

bined effect or interaction of a filtrable virus causing colds with a certain specific bacteria which alone is quite harmless.

There are other factors in studying the cause of disease, aside from establishing the identity of the infecting organism.

1. Seasonal variations of the virulence of the infecting germs are well known. In September and October, January and April, there are usually epidemics of respiratory infections.

2. The variation in resistance of different individuals to infection is very striking.

3. The amount of infectious material introduced is important. For example, if you were in a closed room all day with a person with a fresh cold, you would be more liable to catch the cold from him than if you were there only a few minutes.

4. Climate has more bearing on the complications of a cold than on the disease itself.

5. Abnormalities and disease in the nose and throat have little effect on colds, but have considerable effect on the complications.

6. Perhaps the most discussed factor is the effect of exposure, fatigue, habits of dress, diet, etc., on a given individual's resistance or immunity to colds. It seems that adverse conditions, fatigue, unaccustomed exposure to cold, especially of parts of the body, may temporarily lower the resistance.

It was hoped that by the use of various recognized therapeutic measures, such as special diets, cold baths, sun baths, quartz light, etc., the resistance of susceptible persons could be "built up." The results, however, have in most cases been disappointing. In very extensive and well-controlled experiments at Johns Hopkins recently, the effect of vitamins A and D, quartz light, hygienic sleeping conditions, clothing, cold baths, exercise, and the like, in susceptibility or resistance to respiratory infections, was studied. They did not find that any of these play an important part in determining the incidence of colds. Colds are as com-



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Colds are six times as frequent in winter as in summer.

mon in robust athletes as among persons of sedentary habits. There is only apparent contradiction in these results to certain established principles. These measures all have their place in treating certain diseases, but in a person who is in good health their use does not increase his immunity.

We must recognize that a good physique is no substitute for im-

THEIR CAUSE AND PREVENTION

by T. Gordon Reynolds, M. D.



and are as common
in sunny California
as in snowy Maine.

munity. On the other hand, a run-down condition may impair resistance or immunity which otherwise might be sufficient to protect from the disease. Vaccines made from the ordinary germs found in the nose and throat are of some value in preventing the complications of colds, yet many physicians consider that they are of no value in preventing the cold itself.

For the prevention of colds the following rules should be followed:

RULE 1. Avoid infection from those who have fresh colds. Remember that when a person talks, coughs, or sneezes, he sprays microscopic droplets of germ-laden material into the air. If you are susceptible and inhale these droplets, you are quite likely to begin with a cold in twelve to forty-eight hours. Any bald man can tell you how far a sneeze will carry. Teach the members of your family to cover the nose and mouth with a handkerchief when sneezing or coughing.

The writer was in the medical department at Camp Kearney, California, during the "flu" epidemic of 1918. There were two distinct outbreaks. During the first it was made compulsory to wear masks over the nose and mouth. In less than ten days the number of new cases admitted to the hospital decreased almost to zero. After a few days it was thought the epidemic was over and the masks were discarded. But unfortunately, in a short time there were hundreds of new cases reported each day. The masks were reapplied. This time the disease subsided not to return.

If it is necessary for you to be associated intimately with one who has an acute cold, be sure that the room is well ventilated, and preferably have the wind in your favor. During epidemics of colds and "flu," if you are susceptible, avoid going to any place where people are assembled within buildings. And above all, if you have a fresh cold, stay away from such gatherings during the contagious stage. Avoid the common drinking cup. Teach your children to keep toys and fingers out of their mouths. Mouth organs, horns, and the like are potential disease spreaders. Don't take your children to visit their playmates if either they or their playmates have colds. Do not hesitate tactfully to inform a prospective visitor if one of the family has a cold.

RULE 2. Avoid unaccustomed exposure to cold and fatigue.

RULE 3. Keep your body in as good

physical condition as possible, by regular hours of sleep and a well-balanced diet. Do not overeat or undereat. Be sure that there are ample fruits and vegetables to insure proper vitamin balance and to keep the bowels regular. If possible, avoid the use of laxatives and purgatives. Experiments show that ample clothing, dry, warm shoes, and moderate exercise are better preventive measures than the so-called "hardening processes."

RULE 4. Disinfectants as a preventive measure are of doubtful value. The constant use of any disinfectant strong enough to be of value is not without danger.

RULE 5. Have any chronic disease of nose or throat corrected if possible. If your child is a mouth breather and has frequent colds, he probably should have the adenoids removed. If tonsillitis is frequent, the tonsils should be removed. If they are enlarged or appear chronically diseased, it may be advisable to remove them.

A discussion of colds would hardly be complete without a word about treatment. One experimenter during an epidemic of colds treated eighty-four persons who were working in a factory. To all he gave the same treatment, except that in every other one he failed to give the usual cathartic. He found that those who had no cathartic were back to work half a day sooner on the average than those who had the cathartic.

The most important rules in treating colds are:

1. Go to bed during the acute stage, especially if there is fever. There is less danger of complications.

2. Take plenty of fluids, preferably fruit juices.

3. The diet should be simple, with plenty of fruits and vegetables.

4. Don't take a lot of "dope." Remember there is no "cure" for a cold. If there are no complications, it will be well in three to five days. Not even aspirin, quinine, or whisky will cure a cold; they will do harm.

5. If the throat is sore, an excellent

(Continued on page 18)



Leafy Vegetables

FOR LONGER LIFE

by Martha W. Howe, R. D. M.

FOR many years the value of green leaves was not recognized, and these foods were considered suitable only for the lower animals. The superior value of leaves over stalks and seeds of plants was unknown until the classic project known as the Wisconsin Farm Experiment. This experiment was undertaken in 1911 to determine what difference, if any, existed in the nutritional value of the three most commonly used grains—wheat, oats, and corn.

Young heifers were used, one group being fed solely upon the wheat plant, including all the parts—leaf, stalk, and seed. Another group was fed likewise upon the oat plant, and another upon the corn plant. A fourth, or control group, was fed upon a mixture of the three grains. No other material entered into the food of any of the groups, except common salt, and all the groups were treated alike in every particular.

Thus the experiment started. Weeks turned to months and months became nearly a year before any difference could be seen. At this time the corn-fed group was sleek and glossy, with every evidence of well-being, while the other groups were coarse and rough looking, the wheat-fed presenting the poorest appearance of all. Reproduction results and the quantity of milk given showed even more marked differences.

At this time no reason could be given for the striking contrasts shown in the nutritional value of these three grains. The wheat seed was known to be superior to the other grains, but why such opposite results? No one could tell, and it was not until the further experiments of McCollum, Simmonds, and Pitz that in 1916 the mystery was solved. Behold, the corn plant won because of its greater amount of leafy material.

Thus the importance of leaves in the diet was established, and today no diet that is low or lacking in leafy vegetables can be considered adequate. Even young son has his spinach juice in his bottle, and his leafy vegetable when he is but a few months old.

Since the discovery that carotin, the precursor of vitamin A, is furnished in liberal amounts by the vegetables having color, and especially by the leafy vegetables, the value of these foods has been greatly enhanced. And again, since it is now definitely known that vitamin A, or carotin, in liberal amounts tends to an increase in length of life, the importance of leafy vegetables takes on added significance. Thus it will be seen that the caption "Leafy Vegetables for Longer Life," is based upon scientific facts.

Animals eat large amounts of green grass and other leaves, which gives them their necessary greens. In the case of man, whose diet contains a large proportion of seeds, it is necessary that these be supple-

mented by the leaves of other plants in which the leaves develop more profusely, namely, the leafy vegetables.

Leafy vegetables are valuable chiefly for their minerals, especially iron, vitamins, particularly A, C, and G, and roughage. Thin leaves are more valuable than thick, green leaves than pale, and raw ones than cooked.

Leafy vegetables are low in starch and sugar, therefore they are ideal for the diabetic. Being also low in fat, they are a valuable asset in the diet of those who desire to reduce weight.

The protein of leafy vegetables is of high value, but low in amount; thus they may be used freely without danger of too much protein. All leafy vegetables are alkaline in reaction. They are good sources of calcium, being the original source of, and the best substitute for, the calcium of milk.

Leafy vegetables are among our best sources of iron. They are, however, low in copper, which is necessary for the utilization of iron. Copper is needed in but small amount, and all leafy vegetables have some. This, with their high iron, gives them importance in preventing the anemia due to deficient diet and hemorrhage.

All leafy vegetables having color are rich in carotin, or vitamin A. Escarole leads all the leafy vegetables in this element, and in fact all foods thus far tested. Spinach, kale, and lettuce come next.

All the leafy vegetables, especially spinach and turnip greens, are fairly good sources of vitamin B, the vitamin which protects and nourishes the nerves, increases the appetite, and promotes digestion.

The leafy vegetables are also rich in vitamin C if eaten raw, especially spinach. Raw cabbage is a most excellent source of this vitamin, because it lends itself readily to being eaten in rather large amounts uncooked. Escarole and lettuce, even though uncooked, are low in vitamin C. Sauerkraut, if uncooked, although lower than raw cabbage, is a valuable source, because cabbage can be kept in this form a long time.

All leaves are valuable sources of vitamin G, the antipellagrie vitamin, and this is not destroyed by heat unless soda is used.

A list of the common leafy vegetables alphabetically arranged is as follows: Beet tops, Brussels sprouts, cabbage, chard, chicory, dandelion, endive, escarole, kale, lettuce, mustard greens, parsley, sauerkraut, spinach, turnip tops, and water cress. There are many so-called weeds which have edible leaves, such as milkweed, pigweed, fiddle top ferns, and others. Buckwheat leaves make a most attractive dish, and are very practical for canning. The leaf is broad and easily cleaned, and a large crop may be raised from a small patch of ground. It seems that with this array of available

greens, every one should be able to procure an abundance of these valuable foods.

A generous amount of some leafy vegetable should be included in the diet daily. Spinach should appear most often, perhaps three or four times each week. Escarole, although very high in vitamin A units, is not so well balanced in other essentials, and its use should not be stressed unless this element is definitely lacking and can be supplied in this way more easily than in some other.

At least a cupful of leafy vegetables should be included in an order, and a much larger amount may be used with profit by most people. Cooked spinach and chard are very well borne by even delicate stomachs, and raw, finely chopped cabbage can be taken when cooked cabbage cannot.

Sieved vegetables can be included in soft and liquid diets for the sick, thus insuring these valuable elements in the diet of those who would otherwise be deprived of them, and at a time when they are greatly in need of the elements they supply. Powdered dried leaves can be used in the diet of those who are able to eat only limited amounts of any food, and especially those who cannot utilize much roughage, as in the case of those having low hydrochloric acid in the stomach. Vegetable juices can also be used for the same purpose, and may be made into broths and soups.

Wash leafy vegetables in warm water. Add salt to the water to remove sand and insects. Cook in the least possible amount of water. Use a tightly covered dish to assist in conserving the vitamins. Cook quickly. There is less loss of vitamins in rapid cooking even at higher heat. Do not use soda. Serve immediately after cooking.

Coleslaw.—The coarsely chopped cabbage is not practical for many people, such as those who have poor teeth or a small capacity for eating. Twice as much or more may be eaten if the cabbage is chopped or ground finely. Chopping is more attractive than grinding. Use with it a dressing made with cream or evaporated milk, honey, or sugar, and lemon juice, all in suitable proportions to meet the taste.

Leafy Vegetable Juices.—Use equal quantities of escarole, parsley, and spinach, or a combination of any three or four available. Shred finely, cover with cold water, and cook in a tightly covered dish ten to fifteen minutes. Strain, salt lightly, and serve at once, either plain or with cream or top milk.

Celery Leaf Powder.—Wash green leaves from celery and dry in the oven or by tying up in a paper bag and hanging behind the stove. When dry, pulverize with the rolling pin and sift through a fine sieve. For celery salt add one part of salt to two of powder. Other leaves may be dried and used in the same way.

Every one should make a special effort to find some way in which leafy vegetables may be added to the diet.

The MOTHERS' COUNSELOR

BELLE WOOD-COMSTOCK, M. D.



Questions for this department should be addressed to The Mothers' Counselor, Life and Health Takoma Park, Washington, D. C. Enclose a three-cent stamp in your letter.

[On this page there appears for the first time The Mothers' Counselor, a department that every mother, we feel confident, will turn to with interest each month. The department will become increasingly varied as specific questions begin to come in. Most of these questions, naturally, will be answered directly by mail, but certain inquiries that deal with problems of more general interest will be discussed on this page. In writing for counsel, the fact should be kept in mind that The Mothers' Counselor department confines itself to health questions and problems that particularly confront mothers in the rearing of their children. General medical questions will continue to be answered, as formerly, in The Family Physician department on page 19.—EDITORS.]

HOW shall I dress my child? In answering this question there are several things to be considered: (1) Cleanliness, (2) warmth and protection, (3) economy and convenience, and (4) appearance.

And such a task it is to keep the youngsters clean! Baby is sweet and immaculate up to the time of ambulatory independence, when his evident immunity to all kinds of dirt makes us wonder whether, after all, our previous solicitude had been altogether necessary. However, the looks of dirt is not the surest index as to its danger, and since we can never tell when grime and dust may be the hiding place of virulent germs, we will continue our vigilance and do the best we can to train these youngsters to habits of neatness, fingers and objects out of mouth, etc.

As to clothing, perhaps the most important reason for keeping the little garments clean is the self-respect and cleanliness of soul that it engenders. Especially should the underthings be kept fresh and sweet. A change daily of these is ideal. And whether of soft knitted material, rayon, or silk, they are so easily washed and donned again, often without ironing, that this frequent change implies little in the way of extra work. Anyway, the change should be made on alternate days or three times a week. A clean body with a fresh layer of clothing next to it, is fundamental in its influence upon character formation.

As for cleanliness on the outside, these youngsters should be dressed in keeping with their occupation, that of play. Fresh dirt upon the background of overall, coverall, or play suit only suggests the charm of childhood freedom, and is quite different from stale grime, which should never be allowed to desecrate the body or garment of the child. The best we can do, washtub or laundry must be often busy when there is a child about. It is a relief when summertime comes, and the simplicity of the sun suit or one-piece play suit lessens the need for so much washing.

The amount of clothing necessary varies with the climate and the time of the year, and with the activity of the child. The

How Shall We Clothe the Small Child?



child that is naturally active, with ruddy skin, will need much less in the way of clothing protection than the one who is of more quiet temperament. Rosy cheeks, bright eyes, and happy expression all attest to the fact of warmth and comfort, oftentimes in garments entirely inadequate for one older and more sedate.

To accustom a child to many layers of clothing is not always wise, but no hard and fast rules can be laid down in regard to this. It is safe to say that to wear sweaters and coats that may be put on and taken off as temperature varies, is often wiser than to use heavier underwear that must be retained during the heat of the day.

In warm climates and in summer months it is advantageous to dress the child in light, airy garments that will permit of a free circulation of air, and the filtering through of the sunshine and its life-giving rays. The advent of the sun suit makes it easy and practical for the child, for at least a certain time of the year, to have the benefit of exposure to vitalizing ultraviolet rays. And the sun suit for the younger child may be the ideal play suit for several months. The older child likewise, in the seclusion of

his own back yard, may also enjoy the benefits of such exposure.

During the colder part of the year even distribution of the clothing is of utmost importance. In this connection I quote the following from the *Journal of the American Medical Association* of April 21, 1934:

"It has been calculated that approximately two thirds of the entire surface of the body is accounted for by the area of the arms, hands, legs, and feet. As about 75 per cent of the heat loss from the body takes place through conduction, radiation, and convection from the skin surface, it might reasonably be expected that the extremities would assume an important rôle in both the conservation and the loss of heat. . . . It was observed that an increase in the surrounding temperature was accompanied by an augmented skin temperature; the extent of the change was least on the skin of the forehead and trunk and greatest in the extremities. The dissipation of heat was more marked in the legs than in the arms. . . . As body heat must be conserved in winter and heat is lost with particular readiness from the arms and legs, one may well view with some apprehension the current habits of dress which encourage the omission of stockings from the costume, especially among little children, whose temperature equilibrium is none too secure at best."

This suggests the incongruity of sweaters, caps, and overshoes with bare, cold knees—a picture often seen. Almost better no clothing at all than part of the body swathed in heavy garments while parts of the extremities are exposed. Normal circulatory equilibrium is impossible under such conditions.

The first change to warmer clothing may be to the long coverall and heavier undersuit. This with socks and shoes may be quite sufficient for the first cool days. As the severity of winter comes on, these must be supplemented with long stockings, heavier underwear, coats, sweaters, caps, etc. These all vary, of course, with the intensity of the winter climate. But at any rate this extra clothing must be warm enough so that the child's outdoor play is not too greatly restricted, so that rosy cheek and sparkling eye will attest to the fact of hours out of doors every day, even in snowy weather. The advent of spring should never mean soft, pasty, pale faces because of hibernation in overheated, underventilated rooms. Frequent bathing and frequent change of clothes are all the more necessary in the wintertime than in the summer, because of many thicknesses and lack of ventilation.

An individual's presentation of himself to the world is largely in the manner of his dress. This is true also of the child, although the reflection is upon his family and care, rather than upon himself. In the child's appearance there should always

be exemplified neatness, appropriateness, proper protection, and modesty.

Just as neatness and order in the home have much to do with character formation in the child, just so system and order in clothing plays its part in training the child to habits of life that make for happiness and success. Garments neatly mended and patched, with buttons sewed on, give a self-respect and dignity that mere affluence and a newness of garments may never assure. The children can be taught to help mother mend. They will delight in having their own little box of buttons, thimble, needle, and thread, and they learn early to replace the missing button. These lessons learned early make for success and thrift in later life.

The child should always have the consciousness of being fittingly dressed. This does not mean expensively so, but, as with the grownup, clothes are more easily forgotten when their wearer has the satisfaction of knowing that they are appropriate and in good taste. Children often have fancies and foibles of their own in regard to dress, and these should be recognized as far as possible. When Johnny decides that he prefers overalls to coveralls, with a work shirt like daddy's, his desires should receive due consideration. The child for a time may take particular delight in a certain color. If not too impractical, such preference should be respected. These childish desires may seem to be just notions, but their satisfaction in being dressed in the

way that they would like means as much to them as personal preference in dress means to their elders.

Then, too, the child should ever have the sense of being sufficiently clothed. To accustom the little girl, as she approaches the preadolescent age, to scanty garments that are entirely inadequate for body covering, skirts leaving the thighs almost entirely exposed, dresses that are barely more than back yard sun suits, is to give her a body consciousness that neutralizes the natural reserve which is both the charm and the protection of young womanhood. The change from childhood to adolescence often comes suddenly, and a period of a few short weeks or months is entirely too short a time in which to develop a sense of protective modesty in the girl who has always before worn the scantiest of garments. A sense of propriety can and should be developed through the years as to sufficient body covering when in the public eye, and may often be the means of assuring in the young woman the safeguard of feminine reserve which is, as ever, an important safeguard.

Dress your children for health, thrift, self-respect, and charm, and you have done much toward assuring for them that presence and gentility which is necessary to all success.



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Good Health Habits

(Continued from page 9)

normal. If she would wear sufficient clothing, more of the food she eats could be utilized in building up her body, for less would then be needed to keep her warm:

The foundation of good looks is health. Indeed, it is very often actual beauty. A wrinkled, dry skin and genuine health do not occur in the same company. Cosmetics are a very poor substitute for the radiant beauty of a healthy skin.

Not only does health of the body affect the mind, but the condition of the mind affects the health, and to a far greater degree than most of us realize. Mental depression often results in disease. Anxiety and discontent invite premature old age and death. "Courage, hope, faith, sympathy, love, promote health and prolong life.

A college education is expensive. Only a small percentage of young women have the privilege of going on with their education. It is important that those who have this privilege should so live that none of their time is wasted. Unless a definite health program is followed, it is impossible to accomplish all that might be accomplished.

By giving careful thought and time to planning your program, nutrition, posture, rest, exercise, dress, and mental attitude, you will be surprised how much broader and deeper life will become.



For Boys and Girls

BY Veda S. Marsh

"Grumpety Man"

"HIGHTY-TIGHTY, Grumpety Man,
Finding fault since the world began,
Pity we haven't a giant or two
To carry off Grumpeties just like you."

So sang Joan. It really was not a very nice song to sing, and John's cross face at first appeared angry, but realizing there really was some truth in it that applied to him, he quickly recovered himself and laughed, saying,

"I guess you are right, Joan. I am rather Grumpety this morning. I don't mean to be cross to you, ever, but some days just everything seems to go wrong."

"Alice," he called as Alice came into the room with a pan of peas to shell, "can you give us a recipe that will always work, one that will always keep us from getting cross?"

"Well," answered Alice, "that depends somewhat on the cause. Sit down, little Jays, and let us diagnose your cases. Who was caught being cross this morning?"

"Oh, I was, as usual," drawled John. "This red hair of mine is always getting me into trouble."

"Everybody is not fortunate enough to have red hair to blame it onto."

"Let's see, this is Wednesday, isn't it? We might begin back about Saturday night. What did you do Saturday night?"

"Oh, Tom stayed with me Saturday night. We had more fun! We slept out in a tent in the yard. We had the best time visiting. I remember hearing the clock strike twelve and one o'clock. Then at daylight we woke up and watched a pair of robins feeding their hungry little birds."

"Well, we might say you got about four hours of sleep, and I think that is a rather high estimate. And Sunday—did you take a nap?"

"Alice, you know I never take a nap. That is just for girls."

"You may think so now, but some day you will realize that boys and men need rest as well as girls. And Sunday night?"

"Our Sabbath school class had a picnic supper at Rock Creek Park, and we had the best time. After it was too dark to play ball any longer, we sat around the fireplace and told stories, and first thing we knew it was ten o'clock."

"Oh, yes. That made it eleven or after before you got to bed, didn't it?"

"Yes. I heard the clock strike twelve as I was getting undressed. I had to tell daddy all about it after I got home."

"Yes, yes! Four hours' sleep Saturday night, and six hours' Sunday night. How about Monday night?"

"That's all right. I was not sleepy. The Jones family from California came over, and Howard and Harry and I coaxed daddy to take us swimming."

"Dad and Mr. Jones had so much to talk about, and they forgot to send us to bed, so we had a good time until eleven-thirty. But this is vacation time, Sis. You can't expect a feller to go to bed early then."

"Well, what is vacation time for, John?"

"Oh, I suppose to give the teachers a rest, and give them a chance to go to school and get a lot of new ideas to try out on us the next year."

"And how about the boys and girls?"

"Well, I think they ought to have some fun, but they should not waste the vacation sleeping. Who wants to sleep when he can find something else to do?"

"Just as I thought."

"You remember one day I told you about your heart, and how it pumps and pumps, day after day, just resting between pumps. If the heart of a grown person pumps more than about eighty times a minute, that rest period is shortened, and the heart muscle gets tired out quicker."

"All organs and parts of the body are working away hour after hour all day long. Then they need a period of rest, so the cells can rebuild the worn-out parts, and store away excess sugar and fat. This can be done best during the hours of sleep, when the body is not having to supply so much fuel constantly to keep the muscles working as they do when we are awake."

"When boys and girls are growing rapidly, the cells are kept very busy building more bone. Think how much extra work must be done to build bone and muscle so you can grow three to five inches in one year. During these years of rapid growing, boys and girls need more sleep than ever, so the body can build strong, straight bones. If they don't get enough sleep, sometimes they are stunted and do not grow as tall as they could."

"At ten years of age you need at least eleven hours each night. That means being in bed at eight o'clock and sleeping until seven the next morning."

"Well, I'm willing to try it, if it will do what you say it will, Alice. And Joan then cannot ever again call me Grumpety Man."

Sanitarium Information

On this and following pages will be found the announcements of eleven sanitariums and hospitals. "Life and Health" wishes to state that it recommends these institutions as employing the health principles set forth in this journal. Any special information that a subscriber desires regarding these or similar institutions in the United States or abroad can be obtained by writing to:

The Editor
"Life and Health"
Takoma Park, Washington, D. C.

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Pearls of Character

(Continued from page 5)

Temperance completes the string of goodly pearls. Temperance is the brother of self-control. True Bible temperance is total abstinence from all that is evil, and moderation in all that is good. Self-control grows stronger in the presence of all that tempts to overindulgence.

All who have learned to sense the true value of goodly traits of character; all who have sought, gathered, and developed these pearls in the life, will ultimately discover the one perfect, flawless character—that of Christ. Christ Jesus Himself is the one "pearl of great price." He is the "chiefest among ten thousand, the one altogether lovely." In Him is no stain of sin, no flaw of selfishness. He was "in all points tempted like as we are, yet without sin." "Though He were a Son, yet learned He obedience by the things which He suffered." His was a life of trial from the manger to the throne. To have His wonderful character imparted to us, who would not give all that he has?

Let us, therefore, not complain, nor doubt the love of God, if it so be that we must continue to bear about our "thorn." The very thing which seems to us a tragedy, a misfortune, may, if we rightly relate ourselves to it, be the means allowed by God to increase the elements of His kingdom within us. Let the heart rejoice in praise and thanksgiving for whatever means He may turn to His use in creating in us a Christlike character.

❖ ❖ ❖

Colds

(Continued from page 13)

gargle powder of salt, soda, and borax, in equal parts, can be used in the proportion of one teaspoonful to a glass of hot water as gargle every two to four hours.

6. If there are indications of complications, such as fever, earache, tonsillitis, cough, or chest pain, call your doctor.

Now to sum up: the best known facts regarding colds are the following:

1. Colds are caused by an ultramicroscopic germ, or filtrable virus.
2. A cold is a contagious disease.
3. Barring complications, it is self-limiting, and will be well in five days.
4. Practically, a cold is contagious only during the first two or three days.
5. Individuals vary greatly in the amount of immunity they have to colds. Just why, no one knows.
6. Colds are closely related to influenza.
7. Colds are six times as frequent in winter as in summer, and are as frequent in California as in Maine.
8. Exposure never produces the disease in the absence of the specific infecting germ. Conversely, the disease frequently results from contagion in the absence of any exposure to cold.
9. Unaccustomed exposure to cold may lower one's immunity to colds, and if he "catches cold," will greatly increase the number and severity of complications.
10. Colds are just as common in robust athletes as in persons of sedentary habits.



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1 can, 20 oz., 18 cents; 6 for 90 cents.

Creamilk, Dry Whole Milk, sterilized, safe
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1 lb., 32 cents; 5 lbs., \$1.50; 25 lbs., \$7.00;
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"Sun Spots"

"When the sun tans my face and hands, there are spots that remain white, irregular blotches that will not tan. Is there anything I can do for this?"

This is a not uncommon condition, and is called vitiligo. It is a disturbance of the pigment metabolism of the body, the pigment being absent in the areas that remain untanned. You do not notice it in the winter because all the skin bleaches out then, and the white areas are not easily seen. There is no successful treatment. You might stain the untanned parts with walnut hull stain. With a little experimenting you can ascertain the right amount to use, to make the spots the same color as the rest of the skin.

Constipation Treatment

"Please advise what to do for constipation."

You should see that your daily diet includes considerable of the bulk foods, such as lettuce, spinach, and other green leafy vegetables, whole-grain cereals, and whole-wheat bread. Prunes, figs, dates, and raisins are very good laxative foods. Drink at least eight glasses of water a day, two glasses of these upon rising in the morning, with the juice of half a lemon squeezed in them. Have a time for your bowels to move, preferably immediately after breakfast, and be regular in meeting this appointment. If these methods fail, try a tablespoonful of mineral oil after each meal. Psyllium seed, especially in the powdered form, is unusually effective.

Susceptibility to Colds

"I take cold very easily and suffer with chronic bronchial trouble. I lack vitality and endurance. Please recommend home treatment."

You should follow some general measures for building up your health, such as getting out into the open air and sunlight, and taking suitable exercise. In the absence of the summer sun, ultraviolet ray treatment could be given at the suggestion of your physician. Build up the skin resistance by taking cool baths, properly graduated by first dipping the hands in cool water, splashing them over part of the body at a time—first the arms, then the chest and abdomen, then the legs. You may find it necessary to cover each part after bathing. Later you can increase the area bathed at a time, until you can bathe the whole body. Perhaps you can work up to a morning spray or shower. Consult your physician, however, to ascertain the condition of your lungs and your heart. I could not tell you about this. Serum treatments for colds are sometimes effective and sometimes not. It should always be remembered that "bronchial trouble" in the aged is often chronic tuberculosis. Medical supervision of these cases is therefore highly necessary.

Always Tired

"I sleep well, but I am just tired all the time, mentally and physically. I do not always get enough breakfast, as I am in a hurry to go to work. I take my lunch with me. I try to be careful in my eating. Please outline a proper diet."

You should take time for a good breakfast, even if you have to get up a half hour earlier. Eat half of a grapefruit or an orange, some well-cooked cereal, butter and toast, an egg, a glass of milk, some cream, and perhaps a little honey on your cereal. The breakfast is the most important meal of the day; it furnishes the energy for your activity. The evening meal may be lighter, as the day's work is over, you are retiring to rest, and there is not a large demand for energy, which is, of course, furnished by the food.

I am of the opinion that you are not getting enough protein. Add to your midday or evening meal a dish of cottage cheese. You should have a quart of milk a day. Fruits and vegetables cooked and raw will give you vitamins and minerals. Perhaps your body is not utilizing its intake of food. You probably need more sunlight and fresh air and exercise.

Salivation

"Since recovering from influenza, I have been troubled with a profuse flow of saliva, and what seems to be a sticky, stringy substance. Mouth washes and gargles do not relieve it. What can I do?"

Salivation sometimes follows influenza, particularly if the disease is severe and affects the nervous system. Your treatment should include general hygienic measures to build up your health. Get out into the sunlight and air, and obtain some exercise every day. Go early to bed, securing eight or nine hours' sleep. Water drinking is essential, about eight glasses a day. Eat plenty of fresh and cooked vegetables, masticating well. Be sure that you drink a quart of milk a day. Follow closely good health habits, including a regulated diet, and I believe you will get results.

High Blood Pressure

"Please send a diet list for high blood pressure."

There are many other factors that enter into the production of high blood pressure besides diet. Heredity, the high-tension life which American people live, the various fears and worries, and cares which we allow to beset us, along with the poison habits which we cultivate, such as tobacco smoking, tea and coffee, and alcohol, are also generous contributing causes to the increase in the pressure. Moderation in eating should be practiced. Enclosed is an alkaline diet list. I advise you to maintain close contact with your doctor.

Green Spots

"My father is apparently in good health, but has greenish-colored spots on his cheek. He is about sixty years of age. Need we worry?"

I am of the impression that greenish-colored spots on your father's face are what we call senile keratoses, which are indicative of degenerative changes in the skin. These occur in some people with advancing years. Ordinarily they do not cause trouble, although they not infrequently form the background for a skin cancer, especially if subjected to irritation. For this reason it would be well to have your doctor examine him.

Constipation in Child

"My three-year-old girl is constipated in spite of all I do. Please suggest procedure."

Give this little girl about a glass of prune juice with her breakfast and some figs, dates, or raisins for her supper meal. Before breakfast have her drink a glass of water with some lemon juice in it. Then immediately after breakfast have her go to the toilet and try to have a movement. Children often neglect the call of nature altogether or fail to spend sufficient time to allow the bowels to move. Until her habits become established, mineral oil, a tablespoonful night or morning, or both, would be beneficial. There are mineral oil and agar-agar preparations that might also be used in the same way with good results. Then the bulky vegetables, such as cabbage, spinach, or kale, should be included in the noon meal.

Constipation Cure

"Is there a cure for constipation?"

The cure for constipation is easy for some people, while difficult for others. I would advise you to go regularly to the stool immediately after breakfast. Be as regular in this as you are in your meals. Eat some prunes, figs, dates, or raisins every day. Also include two bulky vegetables, such as cabbage or spinach, in your diet daily. Stop the cathartics. Many people try to move their bowels daily, and not having success, they will take a cathartic and sweep their bowels out clean. Next day they will expect to have another such movement, but this cannot be, simply because enough material has not accumulated. Try naturally two days, and if your bowels do not move then, while sitting upon the toilet seat, take a normal saline enema (one teaspoonful of salt to a pint of water makes it normally saline) of about a quart. Get some outdoor air and exercise. Do not forget to drink about eight glasses of water a day, beginning in the morning with two glasses with half a lemon squeezed in them. Perseverance will help greatly.

Health News Notes

Sanitary Control of Aerial Navigation

From London comes word of the report of the International Sanitary Convention for Aerial Navigation which has been signed by most of the important countries of the world. It is proposed that sanitary air-dromes be established, which will have an organized medical service, equipment and facilities for proper examination, for isolation and care of the sick, and for carrying out of disinfection. The passengers and crew are to be subjected to sanitary inspection, and any persons with symptoms of infectious diseases are to be prohibited from embarking. Plague, cholera, yellow fever, typhus, and smallpox are subject to special measures.

Safety Emphasis

A report from the Secretary of Commerce, Daniel C. Roper, has called the attention of the forty-eight States to the importance of cooperating with the government in safety measures. While the call was particularly bearing on Safety Month, which was September, the facts mentioned in the report are of all-the-year importance.

About 100,000 people lose their lives yearly by accidents in this country. One third of the accidental deaths are caused by motor vehicles, while one fourth of the deaths by auto are of children under fifteen years of age. In addition to the deaths by auto accidents, about 1,000,000 persons annually are injured in street and highway accidents.

The causes to which may be attributed the

tremendous increase in auto accidents are: the increase in the number of automobiles, the increased horsepower and speed rate of autos, the use of worn-out and unsafe cars, carelessness of pedestrians, disregard of traffic regulations, carelessness of the courts in dealing with traffic violations, and, not the least, reckless or drunken drivers.

Secretary Roper suggests three ways of reducing accidents:

1. Drivers and pedestrians must be careful.
2. Public opinion must be developed to condemn the drunken driver.
3. The public must be educated in traffic problems.

Denmark Conquers Syphilis

For a century and a half Denmark has been fighting syphilis. Now comes the word that the disease is conquered, and Hamlet's remark, "Something is rotten in the state of Denmark," is not so applicable. Compulsory treatment, penalties for infecting others, a very careful filing system of cases and follow-up tests for several years after treatment, have solved the problem of syphilis, one of the greatest public health problems almost everywhere. All patients, high or low, rich or poor, male or female, of good or bad character, are alike subject to the same regulations.

The Common Cold

Because it is so common the common cold seems well named. It is still holding the attention of health students and investigators, and although it is so common, it is still one

of the problems of medicine. Little is known as to its cause and treatment.

It is known that the common cold is highly communicable, occurring in all age groups. It occurs most frequently in the age group under five years, and in the adult group between twenty-five and thirty-five years. While prevalent throughout the year, it is most so in early fall, midwinter, and early spring. Though the common cold is important because of its temporary disabling effect, it is at the same time an important factor in the development of other diseases, such as pneumonia, ear infection, etc. It is considered the most important predisposing cause of pneumonia. Certain control measures are urged; namely:

- Avoid the cougher and the sneezer.
- Keep out of crowds when colds are prevalent.
- Keep from chilling.
- Drink plenty of water.
- Breathe through the nose.
- Keep the feet dry.
- Dress warmly.
- Follow regular habits of body cleanliness.
- Secure sufficient sleep.
- Guard against infecting others.

Evaporated and Dried Milks

In an article entitled, "His American Majesty," in a recent issue of the *Delineator*, Dr. L. Jean Bogert, who has been instructor in medicine in the University of Chicago, instructor in experimental medicine at Yale University, and research chemist at the Henry Ford Hospital, said:

"When a baby is weak and undernourished so that it needs plenty of food, but at the same time its digestive tract refuses to handle large volumes of food, boiled cow's



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milk cannot be used, for the baby cannot get enough calories on the quantity of this dilute food which it can take. In addition, some babies with weak digestions cannot take cow's milk unless the protein has been made more digestible by quite vigorous heating. For such babies, evaporated and dried milks are very valuable. Since they have been rendered almost as readily digestible as human milk, owing to the heat treatment to which they have been subjected, only enough water need be added to replace that removed in processing, and to bring them up to the strength of undiluted cow's milk. Thus concentrated calories and protein can be given the weak baby in small volume and in easily digested form. Being sterile, evaporated and dried milks are useful in traveling or whenever milk free from bacteria is essential."

Unique Advertising Policy

We are so used to seeing every sort of thing advertised in newspapers and magazines nowadays, that we are almost led to believe that periodicals have no care or conscience about what they put before their readers. It comes as a most refreshing exception to see an announcement such as the following by the *Chicago Daily News*, in an editorial entitled, "Why We Said 'Kill It:'"

"Freedom of the press includes the right of a newspaper to reject advertising offered to it for publication. It is as important to defend the purses and health of the people from private exploiters as to defend their liberties against political usurpers.

"The principle of the *Daily News* rule that bars liquor advertising extends to all medical advertising. In the last year, more than \$500,000 has been paid to other publications in Chicago by advertisers of liquor and of medicines that are either fraudulent in their claims, or are deemed to be potentially dangerous to health.

"This newspaper will not accept advertising of any product that contains arsenic, mercury, acetanilide, phenacetin, or other harmful or habit-forming drugs. This rule eliminates hundreds of dangerous preparations foisted upon a public which is not informed of their dangers. The *Daily News* rejects advertising of all products containing lead, silver, or other metallic salts. That rule automatically eliminates all hair dyes. This newspaper believes that the external tissues of its readers are as much entitled to protection from dangerous substances as their stomach linings, brains, hearts, and livers. So all preparations which it is claimed will grow hair, and all chemical depilatories, are barred.

"No 'reducing' medicines are allowed to be advertised in the *Daily News*, as nearly all of them, when subjected to analysis, turn out to be either fraudulent in their claims, or dangerous to those who use them.

"Of course, the *Daily News* rejects the advertising of all preparations claiming to cure serious organic diseases that are either incurable or require remedies and services that can be administered only by physicians, hospitals, and clinics.

"In rejecting the advertising of such products, this newspaper deprives itself of immediate revenues. But in doing so it builds up the value of its space for all legitimate advertisers, who are bound to profit accordingly when they advertise their wares in columns which readers have learned can be depended upon not only to tell the truth, but to protect the reader's interest."

L. A. H.

HERE IT IS



That Holiday Gift Your Friends Are Sure to Appreciate

What could be more appropriate than a year's subscription to LIFE AND HEALTH? Here is a magazine that appeals to every one, for it touches vital interests common to all. The business and professional man, the housewife and mother, the young person in college, the man on the street, each finds guidance and help in this truly scientific, but easily understood journal.

A year's subscription is only a dollar, but if you wish to send five or more (your own subscription may be one, either new or a renewal), the price is only sixty cents. In other words, you can remember ten of your friends at this holiday time for only \$6. If you request it, we will send to the recipient of a gift subscription a card naming you as the donor. There is still time to send such a holiday gift, if you act at once. Here is the gift to send—LIFE AND HEALTH.

In the February Issue

"Do You Take Drugs Blindly?" by G. K. Abbott, M. D.
 "Food Facts and Food Fables," by Alice Garrett-Marsh, dietitian.
 The first article in a new series, "Are These Your Symptoms?" by Charles H. Wolohon, M. D.
 "The Care of a Child With Croup," by Amanda Sloane, R. N.
 "What Science Has Discovered About Alcohol," by Emma L. Transeau.
 "The Man Behind the Microscope," by Harry E. Ford.
 "A Week's Menu," by Helga C. Forehand, dietitian.
 "Don't Be a Slouch!" by G. Mosser Taylor, M. D.
 "The Mothers' Counselor," conducted by Belle Wood-Comstock, M. D.
 "When Daddy Was a Boy," a story for children, by Veda S. Marsh, R. N.

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"Early to Bed"

ONE of the great essentials to good health is rest. Especially is this necessary for children. At any time it is difficult to get the children to bed early, as we all know, and with the summertime and the light evenings this difficulty is increased.

But parents must be firm on this point. Children of early school age should have from ten to twelve hours' rest in bed. Ten hours should be the minimum for boys and girls of ten to fourteen years. If the rising hour is about 7 A. M., then the younger ones should be in bed by 7 P. M., and the older ones by about eight. These times should become a fixture in the minds of the parents, who should not allow play, cinemas, choir practices, visits of friends, etc., to interfere with their regularity. Teach the child in its infancy to observe this golden rule.

See that the sleeping room is quiet and well ventilated. Draw down the dark blinds over an open window, and (if not Venetian blinds) fix, by the cord, to a chair or other article of furniture, so as to avoid tapping movement which might be caused by the circulation of air. If possible arrange that the children's sleeping room be at the back of the house away from the noise of the street.

Early rising, too, should be particularly encouraged, for two special reasons.

1. Because the early morning sun is a very valuable asset to the children's health, and it is good for them to play before breakfast.

2. Because early rising, with some recreation before breakfast, sharpens the appetite, and a substantial breakfast makes a good beginning to the day. Plenty of time should be allowed for the early morning opening of the bowels, and for the taking of the first meal. Hurrying over these important duties is the beginning of troubles.

Many cases of weak hearts among school children are much aggravated and seeds of delicate health sown for a lifetime, by the practice of late hours. On the other hand, children with a tendency to weak hearts or in whom this common condition exists, can be expected to improve to a large extent, if not entirely recover, by receiving a liberal amount of rest, such as is occasioned by early bedtime hours.

Practice of the "early to bed and early to rise" habit will soon prove the truth of the old adage.—Dr. A. E. Druitt.

Don't Be a Slave

IT should be understood that Nature has fast, though easy, rules which must be strictly obeyed if she is to be expected to give 100 per cent response. Mere man-made inclinations and habits, if against her basic principles, cannot be successfully superimposed on her will.

Too many people refuse to recognize this unalterable principle. And no better example of this fact can be found than in the widespread, habitual use of drugs to stimulate alimentary action, which should be a natural process. This type of person is a slave in the strictest sense. And his name is legion.

Perhaps the largest class of serfs in the United States are the food slaves who, chained to the unrestrained desires of the palate, habitually overeat—with some type of backfire on Nature's part as an inevitable consequence.

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take a conscientious inventory of his habits, and eliminate all those that are definitely beyond the natural laws. Undoubtedly some sacrifices will have to be made; even professional advice may be required.

However, Nature is prodigal in her returns for kind treatment. And one's business in life is, or should be, to get the most out of Nature that she is willing to give. Vital, vibrant life will not be satisfied with less.—*Dr. Theodore B. Appel, Secretary of Health, Pennsylvania.*

Fifty Years Fighting Tuberculosis

ON Thanksgiving Day the National Tuberculosis Association launched its twenty-eighth annual Christmas Seal campaign and commemorated the fiftieth anniversary of the beginning of the sanatorium movement in this country. Both events are significant, for behind them lies a story of a determined fight to overcome the disease that is still this country's greatest public health problem and was once so fatal that it was called the "Captain of the Men of Death." (John Bunyan, in "Life and Death of Mr. Badman.") In fact, tuberculosis has cut short the life of more than one famous genius. Among its victims are numbered Nicolo Paganini, Elizabeth Barrett Browning, Frédéric Chopin, Robert Louis Stevenson, and Molière.

Until 1882, when the German scientist, Robert Koch, discovered the germ that caused the disease, nothing was known about it except its symptoms. In 1884 Dr. Edward Livingston Trudeau, who had cured himself of the disease, built a little one-room cottage at Saranac Lake, New York, for the treatment of others. His system of treatment emphasized rest, fresh air, and good food. Today that treatment is the only known cure for the disease, and the little cottage is noted as the forerunner of the 600 modern sanatoriums in the United States.

Among the honors that were conferred upon Dr. Trudeau during his lifetime was his election as first president of the National Tuberculosis Association in 1904. Following principles established by Dr. Trudeau, the association has conducted a program comprising free nursing service, clinics, preventorium, tuberculin testing of children, X-rays, education, medical and social research, and rehabilitation. This work has been an important factor in the reduction of the death rate from tuberculosis in this country, but the disease is still the greatest cause of death between the ages of fifteen and forty-five.

The trying years through which we have recently passed make the work of the 2,000 tuberculosis associations throughout the country especially necessary. The purchase of Christmas Seals will help them to carry on their efforts to make tuberculosis a public health problem of the past.

[The term "sanatorium," used in this article, describes a type of medical institution that specializes in the care of tuberculous patients. The term "sanitarium," as used elsewhere in LIFE AND HEALTH, describes a wholly different type of medical institution. Sanatoriums do not admit tuberculous cases.—EDITORS.]

**BUY
CHRISTMAS
SEALS**



**HELP
FIGHT
TUBERCULOSIS**

Tooth Injuries

A TOOTH is the only part of the human body that does not possess the ability to repair itself from an injury. Once a tooth is injured by an accident or as the result of dental decay, it does not heal or get well as we speak of an injury or disease occurring in other parts of the body. The dentist can, however, remove the diseased part and repair most injuries to the teeth by artificial means, and thus save the tooth for years of service.

Unlike other human tissue, a tooth once formed is hard and flintlike and unyielding to reparative processes. Other body tissues repair themselves when injured, because they have a direct blood and lymph supply through their substance to carry away waste products and bring building or nutritive materials. This is absent in the enamel and dentine of the tooth.

The enamel or outer covering of a tooth is chiefly composed of lime. It is the hardest structure in the body, and is made of a mass of rods cemented together by a thin network of organic substance. Just beneath the enamel covering is a softer material which makes up the body of the tooth. We call this dentine. It is less dense than the enamel covering and much softer in its texture. This explains why a cavity of some-time duration is always larger on the inside than on the surface or point of entry. The dentine being softer, the decaying process travels faster in it than in the enamel.

The root of the tooth is made up of a substance called cementum. It is somewhat like dentine, but softer or more like bone.

In the center of the tooth is a tissue which is known to the public as the nerve. In reality it is composed of a nerve, an artery coming in, and a vein going out, as well as a lymph system. These are bound together by fibrous connective tissue called the pulp of the tooth.

The nerve in the pulp sends out little rootlets or endings into the small spaces in the dentine. This is why a tooth hurts when the dentist works in a cavity, even though the nerve proper is not actually exposed. The nerve endings are disturbed. It also explains why a tooth often aches before the main nerve is reached.

Often a very small cavity can be polished out if it has not actually penetrated the enamel. In this case no filling would be required. If the cavity is not detected early, and the destructive process is allowed to continue, it finally penetrates the enamel, next the dentine, and ultimately the bacteria reach the blood stream in the center of the tooth. Death of the pulp (nerve tissue) ensues. By this time the infection has reached the end of the tooth, resulting in an abscess.

From this point of infection at the root end, bacteria and their poisons may and often do spread by the blood and lymph stream to remote parts of the body. Infections set up in various parts of the body as a result of being carried from one point and established in another, are called secondary infections. This secondary point (focus) of infection may be a greater source of evil than the abscessed tooth, although caused by the tooth. This explains why some patients fail to get the relief expected by the extraction of infected teeth. Only a part of the infection may have been removed. The secondary source has been entirely overlooked. Tooth infections are often far-reaching in their effect.—*Wallace F. Mustian, D. D. S., M. S. D., in the Health Bulletin, North Carolina.*



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