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# HEALTH





## Getting Away From Tension

by Donald W. McKay

**A**t tense person operates under a great handicap. It is not always overwork that makes people tired, it is often tension caused by lack of exercise. To carry on a rigorous programme requires peace of mind and good health. Your body must be relaxed to cope with all the demands and pressures placed on it.

Rarely if ever do people appreciate good health until they lose it. I know. For many years I worked under tension in a business firm from early morning until late at night, with little time for adequate meals and no time for exercise. Finally a coronary disorder struck me. Now that I am permanently disabled, there is little comfort in knowing that two men replaced me.

I have since observed that healthy, relaxed people who take time for proper meals, for exercise, and eight hours of sleep each night accomplish more and instil greater confidence in their associates than people who do not follow a temperate programme. People who are tense, nervous, and rushed are the least successful. Without exception, all executives of large corporations with whom I have talked exude confidence. They have a good sense of humour, appear relaxed, and put other people at ease.

Even those who pride themselves on their abundance of nourishing food have poor eating habits. When they find it necessary to be away from home, instead of having a balanced meal they gulp down a cup of coffee or have a quick snack. They may skimp on meals so as to use the greater portion of their daily expense account for purchasing gifts for their family, with a resulting drain on good health.

Other people eat to the point of gluttony, thinking that because they paid for a meal they should consume everything on the table. Excessive calories add unwanted pounds.

Many people eat only what appeals to their taste—foods high in calories and low in essential nutrients and vitamins.

Some of us eat excessive amounts of fat, especially the saturated type in animal fat, butter, and cheese. Such a diet can lead to early arteriosclerosis and coronary heart disease.

A balanced diet should be eaten at regular intervals, with ample time for a relaxed and leisurely meal. Overeating always should be avoided. "The digestive organs should not be burdened with a quantity or quality of food which it will tax the system to appropriate."—Ellen G. White, *The Ministry of Healing*, p. 306.

No matter how busy we may be, exercise is important for our good health. Exercise burns up excess fat tissue and strengthens and tones the muscles. Above all, it relieves tension. Doctors agree that the prime candidate for a heart attack is a sedentary, flabby, middle-aged man. The coronary-prone person is usually ambitious, competitive, overweight, and physically inactive. Statistics reveal that most ulcer and diabetes sufferers take little exercise.

Ellen G. White gave good counsel when she said, "Those who are engaged in study should have relaxation. The mind must not be constantly confined to close thought, for the delicate mental machinery becomes worn. The body as well as the mind must have exercise."

If you eat properly, exercise, get sufficient rest, and have a good sense of humour you are bound to have a longer and more fruitful life than if you have poor health habits. If you doubt me, ask your doctor. He will bear me out. I learned through bitter experience.

\*\*\*

It is estimated that some 300 million people are left-handed. With most everyday products designed with the right hand in mind, some "southpaws" have resolved their problem by becoming ambidextrous. U. S. President James A. Garfield reportedly became so adept with both hands that he once took up two pens and wrote in Latin with one and in Greek with the other—simultaneously.

\*

Pipelines are spreading across the world's continents much as railroads did a century ago. Most carry oil and gas, but some transport wood chips and cement, among other products. In Switzerland, plastic pipelines bring milk down from high mountain pastures to villages below. In Kenya, a pipeline carries the melted snows of Kilimanjaro to water a desert. A study at Rensselaer Polytechnic Institute in Troy, New York, indicated that it would be technically feasible to whisk passengers through pipelines in jet-propelled vehicles at speeds of up to two thousand miles an hour.

\*

Artificial blood that keeps animals alive and well for periods up to eight hours was reported at a meeting of the American Federation of Biology. Animals' circulations were supplied with a milky synthetic liquid chemically related to rocket coolants and Teflon. Research will determine how the artificial blood might be put to medical use.

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# Editorial

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## BATHING

Bathing has not always been a popular pastime. And when I make this statement I am not limiting my observation to little boys who probably always have abominated, and always will abominate, the combination of soap and water when applied to neck, ears, and eyes in particular, and the rest of the body in general.

Go back into the history of the Europe of the Middle Ages, and you will discover that a bath was practically never taken.

Until comparatively recent decades, when modern methods of heating made it possible for the people of North America to step into a warm bathroom during any time of the year, bathing was not particularly popular on that continent, either. The long, cold winters did not encourage the population to take a bath during that season. The custom was to be sewn into long woollen underwear when the weather began to get cold, and to stay in it until Spring came. Hardly conducive to taking a bath!

In the past, bathing was not only an unpopular pastime. In some places it was not even legal. In the year 1845 in Boston, Massachusetts, an ordinance was passed making bathing unlawful except when ordered for medical reasons. Philadelphia, Pennsylvania, already had a law, passed in 1843, which prohibited bathing between November 1 and March 15, and Virginia had gone on record by levying a tax of \$40 a year on every bath tub in the state.

But times have changed. Bathing is recognized as an essential practice in health, and is becoming more and more recognized as being just as essential in illness.

In health, a bath may be taken to invigorate or relax, whichever is wished. A warm bath opens the pores and thus helps to eliminate

impurities from the body. It also helps to induce sleep, because it aids in reducing nervous tension, and tends to equalize blood circulation. It has been found that a cleansing bath before retiring gives the effect of from one to two hours sleep. A very hot bath lasting for only a minute, is recommended by physicians to give relief when you are feeling very tired.

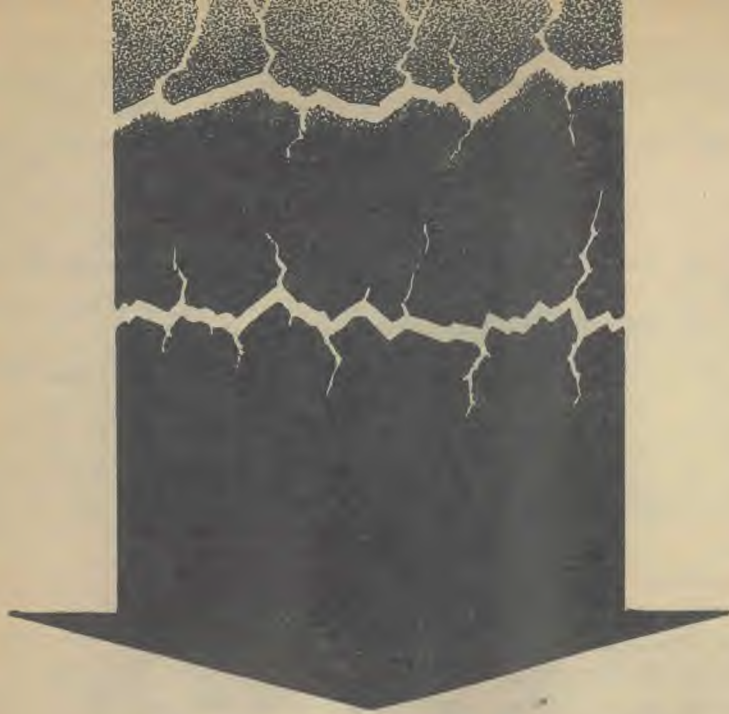
An alternating hot and cold shower, ending with cold, "exercises" the skin, produces a feeling of well-being, and tones up the whole system. This helps to combat disease, and stimulates one for greater physical or mental activity.

A good hot bath is an excellent treatment for colds. One effect is that it causes the blood vessels to dilate, thus encouraging a freer flow of blood throughout the body. The benefit of this is seen, for example, in a lessening of nasal congestion. For the greatest benefit, the bath should be followed by bed rest with covers sufficient to keep you from cooling off too quickly.

Personally, I find that a hot foot bath, as hot as I can stand, taken as soon as I feel a cold coming on, helps greatly in heading it off.

A hot bath sometimes provides welcome relief to those suffering from arthritis or muscular rheumatism. Start with water having 99° F. temperature, and quickly bring it up 104° F., by adding hot water. (This, of course, calls for the use of a bath thermometer). Be sure that the patient is kept warm afterwards.

There is one other use of the bath which we must not fail to mention. That is the excellent opportunity it provides for us to entertain (?) the household and the neighbours as we sing our favourite songs to the joyful accompaniment of splashing water and the rhythm of flying soapsuds. —T.A.D.



by J. D. HENRIKSEN, M.D.

# STROKES

## Prevention and Rehabilitation

**S**TROKE is rapidly becoming the third most common cause of death.

It has been known for a long time that people who are overweight, have high blood pressure, live intensively, drink heavily of alcohol, or smoke cigarettes may be candidates for strokes.

The people especially needing to be alert to the dangers of stroke are the active, busy men and women between the ages of forty-five and fifty-five. All who have had slight warnings of a first mild stroke should be instructed in the most helpful way to prevent further damage through possible later strokes.

### *What Causes Strokes?*

Three basic processes account for the majority of strokes:

1. Clogging of arteries to the

brain is called thrombosis. It may result in small or large strokes. The onset is usually gradual, and seventy-five per cent of patients survive the first episode.

2. When the "clog" is found in the rheumatic heart and follows the blood stream until it stops circulation to the brain, we talk about embolus. This stoppage may occur at any age, and spontaneous recovery occurs more often than in other kinds of strokes.

3. If a blood vessel in the brain breaks, we talk about hæmorrhage. This bleeding may be of varying amounts, and it creates correspondingly slight, moderate, or severe damage.

### *Preventive Measures*

Medical discoveries during the past few years have created new hope for stroke prevention. Because we cannot change inherited

tendencies or congenital abnormalities that may lead to stroke, everyone should take the following positive preventive measures that can help avoid cerebral vascular accident (stroke):

1. Regular yearly physical examination to check the condition of blood pressure, heart, liver, and kidney function usually reveals whether the person needs to be concerned about strokes.

2. Health education for young parents and children in order that healthful living habits may be established early in life helps them stay healthy longer. Here are some basic living habits:

*Balanced Diet.* A diet containing all the essentials for health instituted early in life is important. By avoiding animal fats, shunning weight, and reducing high cholesterol in blood, which leads to hardening of the arteries, stroke can be avoided or postponed.

## *In the early part of the nursing programme for stroke patients, special attention should be given to eyesight, hearing and speech.*

*Physical Fitness Plan.* Nowadays when machines do much of the work and manual labour, modern man needs a physical-fitness programme to give him muscle power and endurance. To accomplish his work he needs to be strong and fast. He needs training of the circulatory system to prevent clogging up arteries.

*Mental Hygiene.* Happiness in work and play along with proper rest will help our mental attitude and give us harmony of soul and mind. This factor has an enormous effect on our bodily well-being—our breathing, heart function, digestion, and brain function.

3. Modern medicine has given us new tools to help the worn-out heart and circulatory apparatus. Advanced science provides medication for patients with high blood pressure or water retention to help prevent embolus and thrombosis in the blood stream. Other medicines help dilate vessels to the vital organs—brain, lungs, heart, kidneys, and liver.

4. Last but not least should be mentioned roentgenological (X-ray) detection of brain-artery and neck-artery disorders. Such discoveries have initiated new forms of blood-vessel surgery to prevent stroke.

In spite of these new insights into preventive factors, the number of strokes is still increasing. The need for improved rehabilitation programmes is important. In order to improve the outcome of these stroke cases, eighty-five per cent of the patients should be under a rehabilitation programme from the very start of the illness. After two or three weeks thirty-five per cent of them can be discharged from the hospital and continue rehabilitation at home or as outpatients.

Of the surviving patients sixty-five per cent can be rehabilitated so that they require only slight attention in personal care. Many of the patients can go back to their previous occupation or be retrained for less demanding jobs.

### *Early Treatment*

Good nursing care is most important in the early state of stroke. It is highly important in the acute state, right after the stroke, in order to prevent shortening of tendons and resulting deformity.

Nursing care includes placing the patient in the right position for improvement. Have a firm mattress, keep a small pillow under the patient's head, which can be raised at mealtime. Supply a footboard to help maintain the feet at the right angle, and a cradle arrangement to keep the weight of the bed-clothes off the feet. To protect the heel from undue pressure, place a pillow lengthwise under the calf of the involved leg or leave a free space between the mattress end and the footboard.

Place pillows or rolled towels so as to prevent prolonged turning out of the legs. Place the paralyzed arm out from the body at a right angle, parallel to the head, bent at the elbow, forearm and hand turned up, palm up. A wrist splint supports the fingers in an extended position to prevent a permanently closed fist.

Interrupt quiet confinement at bed rest with activities that will give movement to arms and legs. Perform passive range of motion (done by the nurse or the therapist) slowly and steadily, especially if there is spasm in the weakened muscles.

In the early state of stroke it

is important as soon as the patient can tolerate it to bring him to a sitting position. Later allow him to dangle his legs from the side of the bed, and then take a standing position on a tilt board.

As soon as the patient's mind is clear, teach him to eat and to do other self-care chores.

Good hygiene, during the first days especially, prevents bedsores. Supervise elimination of bladder and bowels and keep it so well under control that no complications occur. If the patient cannot swallow, he may need to be fed by the tube during the first days or weeks.

Give special attention to problems with eyesight, hearing, and speech in the early part of the nursing programme. Teach the patient as soon as possible to control his need to use the toilet.

When it is time to take the patient out of bed, let him learn to make the transfer to the wheel chair himself by rolling onto his good side, swinging his legs over the side of the bed, and pushing up with his good arm to get into position. From that position he can transfer to a wheel chair or to a standing position.

### *Physical Therapy*

In order to learn to walk, at first the patient must have things to hold on to, and so walking exercises should begin on parallel bars. Allow the patient to support himself with one hand and with help from the physical therapist learn to balance and stand by himself before he takes any steps forward. The paralyzed leg can present various problems, such as a turned-out dropped foot or spasm of the whole leg that draws it in to the opposite side. Bracing the paralyzed leg is often helpful in creating support for it and use of it during walking.

When the patient has learned to

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# BODY BUILDING FOODS

by CLIFFORD R. ANDERSON, M.D.

**D**ID you know that if you live to the age of seventy, you will probably eat more than 1,400 times your own weight in food? This is an enormous figure. In actual cash it amounts to far more than all your other household bills combined. Every time you sit down to a meal you make an important decision concerning your own future. What you eat, and how you eat it may determine how long you live, and whether you will be sick or well.

Many people who might enjoy reasonably good health are suffer-

ing from various kinds of illness. Most of them are neither sick nor well. They are just dragging themselves around, half dead most of the time. What a miserable existence! They are not sick enough to go to bed, and not well enough to do their work properly.

In some cases the trouble may be due to some parasite, or some hidden cause of illness. In many others the trouble arises from a faulty diet. So many people spend their money foolishly, then wonder why they and their children are sick or lacking in vitality.

### *No magic pills*

Poor things! Many of them are looking for some magic pill to help them out of their misery, but

**We must have body building materials in sufficient quantity and at the right time if we hope to stay strong and healthy.**

this is not the solution. They would be far better in health if they would only make a careful study of the laws of health, and then apply them in their own lives. What are these principles of good living? Let us start at the beginning.

All forms of life, whether plant or animal, require certain essential food elements in order to live and reproduce their own kind. These food materials must be present in the diet, and also in the right proportion. They must be taken regularly, otherwise one can never hope to enjoy good health.

Like all the higher animals, the human body is composed of untold millions of living cells, all very much alive, and all carrying out their own particular functions. Each cell must be fed and cared for, otherwise it will never be able to do its work properly. To be assured of this, we must have a sensible diet. This is one of our most important decisions in life, a

decision we will only neglect at our peril. The choice is ours. We can blame no one else if we fail to use good sense. It is as simple as that.

### *Beautiful engineering*

So much depends on our making the right choice of food. The human body has been beautifully engineered to operate smoothly without any trouble for many years, provided we treat it well. Not only so, but our bodies also have the power to combat illness, fight disease, and replace worn out tissues with new living cells. What goes on in the body is truly amazing, but if we fail to provide the right kinds of food, the body will soon grow old and die. No magic pills will ever restore that lost vital-

ity, not even the best of modern vitamin pills.

Far too many are drifting through life without any thought about diet and its effects upon the body. They will eat anything they can get their hands on at any old time. "Isn't one food as good as another?" they say. "And what does it matter when I eat, or whether I am hungry or not?" Need we wonder that such people are so often sick? The human system was never intended to take this kind of abuse. Most animals have far more sense.

This much is certain, our bodies are built up entirely from the things we eat. We have no other way to get these important materials into the system. We must therefore educate ourselves to choose the right kind of foods, rather than depending on a fickle appetite to guide us. How silly to spend our hard-earning money for things that may actually weaken the body!

### *Good building materials essential*

When a man plans to build a house, he first gets the right materials, such as glass, wood, plaster, nails, roofing materials, concrete, stone, plumbing and electrical fixtures, and many more. He orders just the right amounts of each so there will be no waste. Then he begins to build. It is interesting to watch experienced men constructing such a house.

The same is true of this most wonderful of all houses—the human body. We are builders, selecting the right materials for the building job, going on within ourselves. This construction job begins at birth and continues for the rest of our lives. For a strong house, or a strong body, we must have the right materials. Nothing inferior must be allowed on this building job. Only the best will do. This is even more true when one is recovering from some illness or injury.

What are these body-building materials? Doctors refer to them as proteins, fats, carbohydrates, vitamins, minerals, and water. These are the materials we must have, in sufficient quantity and at the right time, if we hope to stay strong and healthy. Where do we find them? In our foods and nowhere else. Hence the need for learning how to choose the right foods. Never must we be satisfied with anything but the best for this human house in which we live.

From our foods we derive the materials for building bones, muscles, nerves, and skin, all of which is essential for the smooth working of every organ in the body. The most important of these materials is *protein*, the great cell-building food, so essential for maintaining life in every part of the system. Our food must also provide us with *calories* for energy, otherwise we

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# Your Blood Pressure

and your way of life

by T. R. FLAIZ, M.D.

**T**HERE are still many people, even some physicians, who speak of "proper" blood pressure for one's age. The inference is that with advancing years there is a natural increase in the blood pressure. A common notion is that one's blood pressure should or may be 100 plus one's age; that youth will run a pressure not over 120, whereas a middle-aged person may reasonably have a pressure of 140 or 150 or more.

This fallacious concept has led to a complacency regarding a rising blood pressure that may well be responsible for unnecessary loss of life. It should be stated clearly that any elevation of the blood pressure that persists is significant. It may not be serious, but it is significant, and the extent of the significance will be determined by the severity of the rise, its duration, and related symptoms.

As in any scientific engineering design, the function of the blood circulation follows simple hydrodynamic principles. Take for instance your home water supply system; the engineers designed the tanks, the pipes, the pumps and the control valves to deliver a certain quantity of waters to the kitchen and bath. The pipes, the valves, and the tanks must be of a certain size and capacity for efficient operation. The motor and circulation pump must be adequate to push the necessary quantity of water through the pipes at a certain pressure.

Obviously, if there is any change in any feature of the system or of its adjustment, there must be com-

pensating changes in other features if there is to be a regular and normal delivery of water. If the three-quarter-inch pipes are exchanged for half-inch pipes, the water must be forced through under higher pressure. In the hypothetical water system we are considering, this smaller water pipe, or perhaps defective valves, would require the motor and pumps to work under a heavier load, and if the situation continued, the working parts would burn out earlier. If the engineer observed that the pressure of the system, the load of the pump, or the delivery requirements of the system were substantially increased, he would know at once that suitable adjustments must be made to bring the system back into balance.

In the human body these balances and adjustments are of more importance than in the mechanical water system. Any rise in blood pressure is indicative of some disturbance of function, and should receive attention. The pressure best suited to healthful function in the thirty-year-old is still the most desirable pressure for that same person at sixty or seventy years. To whatever extent there is an elevation above this desirable level, there is, somewhere in the body, possibly in the blood-vessels themselves, a change or changes of an unfavourable nature causing this rise. This change may arise basically from some serious disease, the nature of which is not yet apparent. More likely it is an immediate result of the living and working habits of the patient.

A young salesman once stopped at my office asking for immediate examination and treatment. The office nurse explained that there were two or three people ahead of him and that there would be a half-hour or so wait before he could be seen. He was immediately very uneasy, restless, impatient. Every few moments he would come to the receptionist and ask how much longer. When he was finally brought into the consultation room, he was obviously under considerable tension. His conversation, his mannerisms, and reactions generally were such as to indicate a highstrung, uneasy person.

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### TEN GREAT VERBS OF LIFE

- I am: the power of self-knowledge
- I think: the power to investigate
- I know: the power to master facts
- I feel: the power to appreciate, to value, to love
- I wonder: the spirit of reverence, curiosity, worship
- I see: the power of insight, imagination, vision
- I believe: the power of adventurous faith
- I can: the power of conscience, the moral imperative
- I will: the power of will, loyalty to duty, consecration
- I serve: the power to be useful, devotion to a cause

—G. W. Fisher

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I found his blood pressure about twice the normal level. Conversation revealed that he was an overly ambitious person, burning the candle at both ends and possibly in the middle. He was working early and late, was catching meals on the run. It was only his fear of his throbbing headache that persuaded him to leave his work long enough to have a physical check-up.

He was in a dangerous condition, but the most careful representation of his clinical situation failed to impress him. He was so completely absorbed in his ambitions that he had no time to give serious thought to his health. Within a year he lost his life, the direct result of his illness.

This was, of course, an acute condition, a direct product of his way of life. Your moderate rise in blood pressure will not likely terminate so tragically within a year, nor five, nor probably even in ten years, but there is the probability that it will shorten your life, and may make the years remaining to you less enjoyable and less effective than they have the potential to be.

The *Wall Street Journal* (New York) sometime ago reported the results of surveys of large number of policy holders of some of the largest life insurance companies. From Metropolitan Life Insurance, Mr. Edward Lew reports: "A relatively small elevation in blood pressure appears to be more significant in the curtailment of longevity than had been supposed." From Dr. John Hutchinson, of New York Life Insurance Co., we have the statement: "Even pressures hitherto considered of no great significance do have an effect on mortality."

Mr. Lew adds concerning the ultimate results of slight elevation of blood pressure: "A blood pressure reading twenty-five per cent above average might mean merely that at a given age ten persons instead of eight could be expected to die." The report goes on to state that "the lowest mortality occurs among persons whose blood pressure is below average." A further observation from the same report reads: "A similar finding was made with respect to weight. The underweight individual's longevity is better than that of one whose weight is average or higher."

Most people are too busy to be bothered by physical check-ups. We are frequently told by otherwise sensible people, "I haven't been to a doctor for years; longer than I can remember. I'm just never sick." And then it happens. Often it is to just such people that the untimely coronary or stroke occurs. We take our cars to an expert mechanic for regular periodic check-up and motor tune-up whether they appear to need such care or not. Should we not be as intelligent in the care of our irreplaceable bodies? \*\*\*

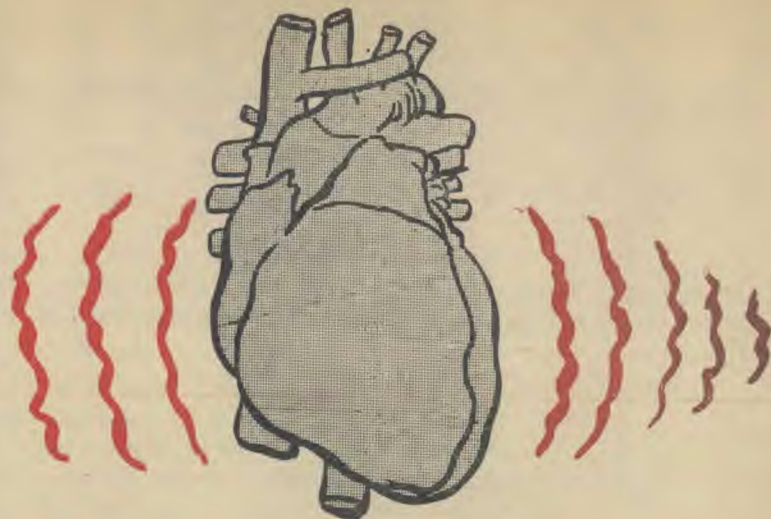
NOT EVERYONE who thinks he has heart trouble really has it; in fact, there are more people with normal hearts who think their hearts are bad than those who have genuine heart disease. Many, however, do have symptoms suggesting that they have heart trouble.

A person who is convinced that his heart is weak or is functioning badly naturally limits his activities to what he thinks is consistent with his ailment. Because of such belief, there are thousands of people unnecessarily living like real invalids.

Of all the organs of the body the heart is most symbolic of the physical and emotional welfare, but it is not the only organ essential to life. The liver, kidneys, and brain are as important as the heart. But whoever clutches his liver as he does his heart when seized with mortal fear? Whoever says, "My kidneys are sick," when stricken with anguish? Instead, he says, "I am sick at heart." Such expressions as heavy-hearted, faint-hearted, hard-hearted, and heart-ache indicate how people's emotional life is bound to the organ of the body that propels the blood through the arteries and veins.

No wonder the heart is the organ commonly incriminated when in response to anxiety a person becomes hypersensitive to minor evidence that his heart is not behaving correctly. No wonder the person who is fearful allows his imagination to encourage symptoms of heart disease, even when his heart is normal. Perhaps the death of a relative from heart disease focuses a person's attention on his own heart. There is something so dramatic about a cardiac death that the natural response is, "Oh dear, I wonder whether I am in danger of the same catastrophe."

Sometimes out of a clear sky a person's attention is attracted to some symptom that causes him to



WHAT IF YOUR HEART

## PALPITATES?

by HAROLD SHRYOCK, M.D.

become alarmed. It may be that he is recovering from influenza, and notices that his heart pounds excessively when he rises from bed. It may be that indulgence in tobacco or coffee have had their natural effect on the heart and have caused it to beat irregularly.

A person becomes so accustomed to the normal rhythm of his heart that he does not notice its pulsation against his chest wall until it breaks cadence. Even a twinge of pain from spasm of a rib muscle may attract a person's attention to his heart. Such symptoms in a person who is apprehensive easily prompt the question, "Is my heart going bad?"

The person who through dread of disease is consciously or unconsciously looking for trouble may misinterpret a remark or a gesture of his doctor when he goes for a physical examination. If the doctor spends much time listening to his chest with the stethoscope, the

wary patient may fear that the doctor is trying to hide from him the facts of some disease.

If such a person fails to pass an insurance examination, his imagination elaborates the facts. Then he may remember that the family doctor once remarked "This child has a slight heart murmur." In his ignorance of how innocent a heart murmur may be he is haunted by fear of leaky heart and chronic invalidism.

### *Personal Stress*

Another setting in which disturbed emotions may touch off a symptom-producing mechanism that points to the heart is profound personal stress. Heart symptoms among soldiers increase sharply during combat. The very knowledge of war hazards has caused many military recruits with normal hearts to experience symptoms of heart disease even before they enter combat duty.

Soldiers with more stable nervous systems have been able to endure the rigours of combat for weeks or months before succumbing to soldier's heart. The two considerations, How stable is the person's emotional response? and How extreme is the stress to which he is subjected? determine how long a person under stress can remain free from symptoms.

The symptoms of true heart disease and of pseudo heart disease are so similar that the question naturally arises, How can a person know when he has true heart disease? Admittedly, when a person is in doubt over the meaning of palpitation or chest pain, he suffers the

**Not everyone who thinks he has heart trouble really has it. Many, however, do have symptoms suggesting that they have heart trouble.**

same amount of concern as he would in the face of proved organic disease.

Here are the common symptoms that attract a person's attention to his heart-symptoms that may or may not be caused by genuine heart disease:

1. Palpitation. When a person complains of palpitation he means he has become aware of the action of his heart and notices it is beating forcefully, fast, or irregularly.

The heart is under precise nervous control, by which its rate and force change in response to momentary body needs. During vigorous exercise, the heart can perform several times as much work in pumping the blood as during rest. A person is not surprised when he has been exercising forcefully that his heart pumps so fast and vigorously that he feels or hears its action within his chest. It is when he has not been exercising that he becomes alarmed because he notes his heart action.

The normal heart responds not only to exercise but also to an

emergency. The body's demand to be ready for an emergency is the mechanism by which fear activates the heart. The body knows only one response to fear, and that is to prepare for activity. The person who is fearful or anxious places a strain on his heart just as if he were actually passing through the experience of which he is afraid.

The irregular beats that attract a person's attention to his heart may be caused either by disease or by variation in nervous control of heart action. Feeling the pulse or listening to the heart does not reveal the cause of irregular beats. An electrocardiographic tracing interpreted by a competent physician in the light of the patient's medical history will answer the question for or against organic disease of the heart.

#### *Pain*

2. Pain. Not all pain that originates around the heart comes from the heart. The reason a person is so fearful of pain in his chest is that he knows such pain is often associated with the dreaded heart attack.

There are many causes of pain in the region of the heart. The pain of pleurisy, of spasm in the muscles between the ribs, of neuralgia, and of muscle spasm at the opening into the stomach may cause discomfort in the chest that to the uninformed is similar to pain of heart disease. Excessive use of tobacco may cause terrorizing pain in the chest. Pain is sometimes transmitted to the chest from organs in other parts of the body, as in gall-bladder disease and stomach ulcer.

The person whose symptoms make him fearful of heart disease should trust his case to a competent physician and accept the doctor's findings as to the presence or absence of heart disease.

#### *Difficult Breathing*

3. Difficult Breathing. There are

many causes of shortness of breath, some due to heart disease and some not. When as in serious heart disease the heart is not able to pump a sufficient quantity of blood to satisfy the body's needs for oxygen, the organs of breathing are reflexly stimulated, and breathing becomes laboured.

Many other circumstances that deprive the body of the amount of oxygen it needs similarly stimulate the organs of respiration. Certain lung diseases make breathing difficult. In anæmia, in which the oxygen-carrying capacity of the blood is reduced, there may be a similar symptom of difficult breathing. In obesity breathing is often handicapped.

#### *Heart Murmur*

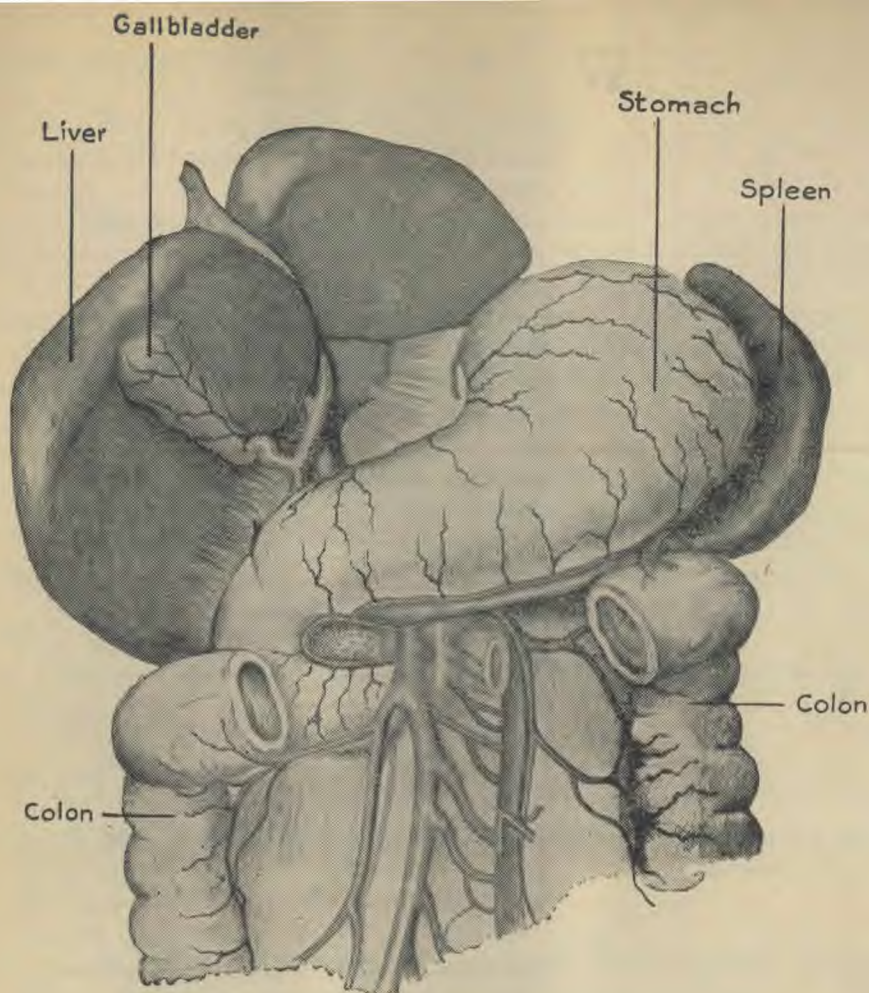
4. Heart Murmur. A heart murmur is an unusual blowing sound the physician hears through his stethoscope when the flow of blood through the heart or the large blood vessels causes eddy currents in the blood stream.

In early part of this century it was generally assumed by physicians that heart murmur was caused by diseased valves in the heart. Thirty or forty years ago many a child was kept in bed as an invalid because the physician had detected a heart murmur. With modern methods of studying the heart and its actions, it has become apparent that about half the people with heart murmurs have no disease of the heart.

Innocent heart murmurs occur commonly in children. A heart murmur may come and go with the onset and cure of a fever. Some times it is related to exercise.

Heart murmurs are not properly classed as symptoms. The patient does not know he has a heart murmur unless he learns of it from the physician who examined him. Modern physicians recognize that heart murmurs must be checked

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## Colitis Controlled

by K. W. SEHNERT, M.D.

**C**OLITIS, called chronic irritable colon by doctors, has been called spastic colon, mucous colitis, laxative colitis, and chronic functional colitis. Doctors have also coined the term unhappy colon, a good name for this disorder.

A patient with colitis has a variety of symptoms. He may complain of constipation, bloating, and belching. He has spells of pain and bowel irregularity.

The pain arises from spasm of the colon-wall muscles. It most often appears on the left side of the abdomen, where the transverse colon turns and becomes the descending colon. It may also be on the right side, and can imitate appendicitis. Pain may be violent and severe or only dull and aching. The pattern of pain is unrelated to eating and only partially related to bowel movement. The only consistent thing about the distress is that it follows an emotional upset. The turmoil of a domestic upset or anger at the boss causes spasm of the colon, with painful results.

Bowel irregularity rather than constipation best describes another common complaint of this colon pattern. Only when the patient has a miserable time between constipation and diarrhoea does he report to the doctor. He gets a vicious merry-go-round of spasm to

constipation to laxative to diarrhoea to constipation. He is the person the advertising man speaks of when he talks about the laxative habit. It is a habit, and the patient needs help in controlling it.

He becomes convinced that only a bowel movement will relieve the distress he feels in his abdomen. The distress is due to spasm in an overactive colon (a colon fighting to adjust to odds), not to a sluggish colon filled with faecal material, as he may imagine. He adds insult to injury when he takes a laxative or an enema and further stimulates an already overactive colon. Diarrhoea, not simply a bowel movement, is the result.

As diarrhoea cleans out the colon, the vicious cycle goes into action. The bowel then needs several days to fill up before a normal bowel movement can occur. Instead of waiting for this natural process, the patient gets impatient and takes another laxative. Then the cycle continues. Having little insight into his problem, he proudly says, "I never let my bowels go for more than a day without moving."

A careful history by the doctor shows that although the patient says he is constipated, in reality he is often in a state of chronic diarrhoea. He thinks of headache, fatigue, and nervousness as results of con-

stipation. Actually, the symptoms are a result of constant intestinal upset and chronic nervous anxiety.

Medical specialists estimate that about one third of the abdominal complaints they see can be attributed to colitis, which is somewhat more frequent in women than in men. The symptoms often begin when the patient is in the early thirties, and become increasing problems from the forties on. The medical history often reveals much nervous tension in the family and similar bowel problems in other members of the family.

The doctor begins treatment of colitis as soon as he makes an adequate diagnosis. He does a thorough study using X-rays, special tests, and a complete physical examination to make sure that the patient does not have cancer, ulcerative colitis, diverticulitis, or any other organic bowel disease. Once the doctor removes the fear of serious disease, the patient is ready for treatment.

The first part of treatment is a talk to help the patient understand his illness. He should learn to be his own best doctor.

The doctor stops laxatives and enemas, and the patient is pleasantly surprised to see normal bowel function return in six or seven days. He should set a regular hour for bowel movement and follow nature's pattern.

The doctor gives him dietary advice aimed at a well-rounded diet without undue restriction. Avoiding all roughage food often is not desirable. The bowels need some bulk for normal action. Nuts, tough meat, uncooked heavily fibrous vegetables, onions, and some melons are best avoided. Salads, cereals, and most ordinary foods are not harmful.

The doctor advises plenty of outdoor exercise for people with colitis, because physical activity cuts down on nervous tension and assists nature in normal elimination. A noontime rest period is important, and an adequate rest at night is essential, especially for nervous people. Medicine may be prescribed for some patients to help relax the spastic colon. Often the doctor suggests a bulk-producing laxative to help restore normal bowel tone.

The doctor advises the patient troubled with colitis to follow a healthful daily programme. He urges him to learn to live with his spastic colon and not submit himself to repeated investigations or surgical operations in the vain hope that some organic disease will be discovered. Understanding of the patient's problem by the rest of the family is necessary, because often the root of the trouble is an over-anxious spouse.

With a simple medical routine and understanding of his ailment, the patient can expect complete relief of symptoms he may have had for years. Colitis need not remain chronic if it is handled correctly. \*\*\*

**W**ITH ACCIDENTS on the increase people often need prompt and effective first aid.

Only two out of every ten people know how to give effective first aid. If your beloved child was almost drowned, broke an arm or leg, was severely burned, or was bleeding, would you know what to do? Would you have to stand helplessly by, knowing that as the minutes passed, his chances for serious illness or injury were increasing, that you could have saved his life had you been prepared to give first aid?

If you learn the twelve basic first aid procedures, you will be able to meet most health emergencies. Study them carefully. Do not delay. Do it now. Somewhere, sometime, you may save a life because of your preparedness.

1. *Do examine the injured person promptly.* Look for broken bones, hæmorrhage, wounds or bruises, and breathing obstruction.

2. *Get help immediately.* Call a physician or, if you cannot leave the injured, have someone call for you. Always keep close at hand the name and telephone number of your family physician, ambulance service, hospital, police, and fire station. If you are away from home and need medical care, call the nearest hospital, medical officer, or public health nurse.

3. *Apply artificial respiration.* If breathing has stopped, begin artificial respiration at once. Minutes count. When the patient revives, keep him lying down and keep him warm. Watch the respiration carefully in case it fails.

4. *Look for shock.* Shock is noticeable if there is weak pulse, cold and moist skin, and face drained of

# Be Prepared To Give First Aid

by OLIVE IRELAND THEEN

colour. Make the patient lie down and wrap him in a blanket. In case of electric shock, artificial respiration should be applied after the injured person is released from contact with the electric current.

5. *Check bleeding.* By applying a tight bandage or putting on a pressure dressing with a pad of sterile gauze, bleeding can be controlled. Press firmly at the point that cuts off the flow of blood to the injured part of the body. A tourniquet may be applied if other methods fail; if kept on too long it may damage.

6. *Do not move the injured person.* Handle an injured person with extreme care. Roughness or moving may add to his internal injuries, make fractures worse, increase the danger from shock. Better wait for the ambulance.

7. *Bandage wounds.* Disinfect the wound by using antiseptics such as alcohol or merthiolate. Cover it with sterile gauze and bandage it to protect against infection, reduce bleeding, and lessen pain. For bite wounds of insects and snakes, encourage bleeding to wash out any material deposited by the bite, then apply merthiolate and use a cold compress to stop the pain. Because of rabies, bites from dogs should be investigated. Consult the physician at once.

8. *Aid for poisoning.* Follow the directions on the poison container or give the victim egg white beaten in water to dilute the poison. If the poison was not a corrosive or kerosene, make the person vomit. In gas poisoning, get the person into fresh air as quickly as possible. Wrap him warmly and keep him warm. Then call the ambulance.

9. *Splint broken bones.* First, examine the patient

to determine the extent of the injury—whether there is bruising or hæmorrhage, and whether the skin has been damaged. A broken bone usually reveals itself by inability to function. A firm object—tightly rolled newspaper or magazine, a broom-handle, or a stout stick or wood—makes a good splint, but it must be long enough to reach beyond the joints above and below the break.

10. *Care for burns.* If a burn is severe, the patient should be put at rest and the burn suitably covered to prevent continued irritation. When a person's clothing is burning, smother the flames with a handy blanket, towel, or other heavy material. For slight burns or scalds, it is preferable to cover the burned portion immediately with cold water to check the effect of the heat and stop the pain. Apply the gauze dressing, then cover with a bland ointment.

11. *Heat stroke.* If the pulse is rapid; skin is dry, burning, and flushed; pupils of the eyes are contracted; and breathing is fast and noisy, get the person into a cool place and absolutely at rest, flat on his back. Sponging or bathing in cool water helps control the temperature. If breathing stops, supply artificial respiration as for a drowning person.

12. *Fainting.* Place the patient flat on his back and lower his head. The colour of the face indicates the extent of the blood supply to the brain. If the face is pale, lower the head until the colour of the face improves. If the face is extremely red, keep the head raised. Allow the patient plenty of fresh air, apply cold water to the face, and keep him quiet and lying down until fully recovered. \*\*\*

**When accidents occur,  
your preparedness to help  
may save a life.**



With the first cry of the new born to the last gasp of life oxygen plays an essential role.

# the breath of life

by R. W. SPALDING, M.D.

THE first cry of the newborn infant is possible only after the lungs are filled with air. Until that moment the baby's life has been entirely dependent upon the life of its mother. As the air, containing the life-sustaining oxygen, enters the infant's lungs, the lungs expand to begin their lifelong activity.

Oxygen is the most essential element needed to preserve and maintain human life. Life may continue for a somewhat extended period without food, water or light. Oxygen, however, cannot be dispensed with even for a short time. It is the most essential element for the physical existence of the human family. When breathing ceases life soon ceases.

The breath may be held purposely by any individual for a short time, perhaps thirty to sixty seconds. A few can hold it longer than a minute. But beyond that point a person cannot voluntarily refrain from exchanging oxygen for the by-products of metabolism, chiefly carbon dioxide, within the lungs. In fact, it is the building up of carbon dioxide within the body and consequently within the blood stream, that stimulates the respiratory centre near the base of the brain. As the blood level of carbon dioxide builds up within the body this nerve centre sends out increasingly stronger impulses to the respiratory muscles. The nervous system of the body is similar in many ways to a large and intricate telephone system of a metropolis. Thus a call for more oxygen is sent quickly to the muscles that operate the intricate bellows of the body—the lungs.

The circulatory system for the blood has been likened to a huge river with its tributaries and its navigation system for cargo ships. The veins are like rivers, starting in small streams, collecting more and more blood until the large rivers, or veins, empty into the heart. Here the body pump, the heart, forces the dark

red blood into the pulmonary arteries leading to the lungs, and the blood flows into smaller and smaller vessels called arterioles.

## *Exchange of Cargo*

In the smallest of the arterioles surrounding the small air sacs, an exchange of cargo is made by the red blood corpuscles, which might be considered as microscopic boats, trading carbon dioxide for oxygen. This oxygen changes the colour of the blood to a brighter red. Then the tiny boats, the red corpuscles, are again collected from all parts of the lungs into the pulmonary vein and thence into the heart. Here the blood—now fresh—is forced out into the large arteries to be carried to all parts of the body.

These millions of boats pass through the heart every minute laden with a load of oxygen and food that has been picked up by the blood in the portal circulation that serves the digestive system. Their load of fuel and oxygen is carried to every part, every cell, of the body. Thus the body is nourished.

Food and energy may be stored in the body for days or weeks. Oxygen can be stored for only seconds or minutes. Consequently, it is necessary to maintain an adequate supply at all times.





### *Margin of Reserve*

Only through the lungs can oxygen be obtained through appreciable amount. The lungs, like all other organs of the body, have a large margin of reserve. In order to increase the oxygen supply, an individual can at will take one or many deep breaths. By this means the dormant air sacs within the lungs may be filled. It is important to keep this reserve in good working order in case it may be called upon to supply increased needs of the body as physical activities may be increased. Attention should be given to the fact that tight clothing around the chest restricts deep breathing.

Forced breathing may be used to increase by a few seconds the period of time that breathing may be discontinued, as when a person dives or swims under water. One way to test in some degree one's own state of health as to respiratory and circulatory systems of the body is by simply timing the period that one can hold his breath. If one can hold his breath for sixty seconds, he might conclude that these systems are in better than average condition. Fifty seconds would be

good. Forty-five seconds, average; forty seconds, fair; thirty-five, poor.

Another test easily made is the climbing of a flight of stairs. Count the pulse rate for one minute before the exertion, then immediately after, and again two minutes afterward. If the pulse has returned to a normal average rate of seventy-two for a man, or eighty for a woman, the response of the heart has been normal. If in two minutes it has not returned to the rate prevailing before the climb, then the cause should be determined. Often by these simple tests incipient disease may be detected and serious disease prevented by consultation with your physician.

Daily active physical exercise in the open air is important because it encourages deep breathing. This is especially true for those who earn their livelihood by mental activity. Recreation in the open air helps to equalize the circulation and relieves the tired brain by relieving the congestion caused by long physical inactivity and competitive tensions. Mental activity should be balanced on the one hand by physical exercise and on the other hand by spiritual activity. Such a well-balanced daily programme will help develop a well-balanced character. \*\*\*



# Make up Yo

**O**NE of the most sought-after human qualities is the ability to make decisions. This ability is the basis of leadership and mental health. When the officials of a large corporation pick men to train for positions of leadership they test the candidates' ability to make decisions. People who never make up their mind on issues are neither useful nor popular.

Most of the people who have come to me for counsel belong in two categories. Either they are filled with anguish because every small decision they have to make is a major crisis with them—every fork in the road is a monster threatening them and torturing them with indecision, so that they cannot even sleep at night or they exist in an area of artificial peace that requires no decision, only conforming to the crowd, falling in with whatever everyone else is doing.

Neither of these attitudes leads to inner satisfaction or self-respect. More than anything else, people need to feel deep down that they are individuals, capable of meeting the challenges that come their way by deciding on the issues.

How do we learn to make independent decisions, so that we will not resemble the wife who said to her husband, "There's no use agreeing with me now. I've already changed my mind"? Here are some guidelines for learning how to make up your mind:

**1. Use your energy to weigh important matters.** Do not waste mental energy in making decisions

that require no desperate struggle. If your rising time is seven o'clock in the morning, escape the mental misery of deciding every time the alarm clock rings, "Well, now, should I get up, or should I stay in bed an extra ten minutes?" You must get up, so get up—with a smile on your face. You will feel better if you settle once and for all that your rising time in the morning is seven o'clock, not a question to debate.

The same principle holds true for planning a meal. Some housewives make every meal a crisis because they do not know what to cook. A half hour before meal time they begin wringing their hands in an attempt to think of something that might be exciting enough to satisfy their family's appetite. One way to avoid this repetitious woe is to plan your menus a week ahead of time. Settle your way of doing your routine chores and meeting the demands on your time, and then give them no more energy. Some of us burn up so much energy on choices made for trifles that we have none left for the major decisions of life.

**2. Do not coddle yourself.** If you want to develop maturity you must learn to act as an adult, and not as a baby who needs to be handled delicately.

Observations at the Du Pont Company in Wilmington, Delaware (U.S.A.), under the direction of Dr. Frederick W. Dershimer, who is responsible for the mental health of the company's thousands of workers, reveal that workers who take time off for every snuffle, every little ache and pain, generally

**You can make even the most critical decisions soundly when you understand the best way to make them.**

by ARTHUR L. BIETZ, Ph. D.

# ur mind

speaking, are not so healthy mentally as those who refuse to pamper themselves and who report for work regardless of slight sickness.

We would do ourselves a great favour by taking discomforts without flinching or even thinking about them much. The most miserable people are those who use up the day's precious time in exaggerating their malaise until it is a caricature of its true proportion.

When you have an important decision to make, make it without sparing yourself difficulties if some problems are necessary in order to reach your goal. I have known talented young people who hedged and hesitated when it came to enhancing their education. Finally they quit school, simply because they dreaded the demands college or graduate work would impose on them. Every decision such people make is on the basis of minimum resistance and maximum comfort. They miss out on some of the most rewarding aspects of life.

Some time ago I talked with a young man who told me that more than anything else in the world he would like to be a writer. Apparently he had talent, for several of his short articles had been published.

But he said to me, "I am considering going into business with my father, because writing is such hard work. It takes discipline to sit at a desk and think up new ideas for the many hours of a work-day."

This boy, a writer at heart, will never be happy in the business world. His better choice would be to

find happiness where his heart is, even though it means hard work.

Never choose second best because it is easier. Base your decision on what you know will be most gratifying to you and on the good you can do for other people.

**3. Concentrate on your choice.** Decisions demand attention, and they need to be pinpointed, localized. Many people run away from decisions, following the theory that if you ignore unpleasantness, it will go away. That is why some people have difficulty deciding anything. They say, "I'll think about that tomorrow." True, some problems are solved by time, but others must be faced with resolution.

In making valid decisions, you must distinguish between impulse and reason. Doing so takes concentration, for how can you tell an impulse from a reasonable course unless you ponder your alternatives thoroughly? Any problem requiring a decision that will affect your life deserves to be thought through, viewed from every possible angle, so that you can predict the outcome.

Concentration means looking at every possibility objectively. Whether the decision has to do with taking a new job or taking a mate, your future happiness deserves your unemotional attention.

The best way to examine the advantages and disadvantages of your possible choices is to stand back as if you were not at all involved in the problem as if you were making the choice for someone else. By this means it is easier to balance the advantages against the disadvantages. Ask yourself, "What advice would I give a friend if this were his choice?" You can concentrate better if you approach your problem thus objectively.

Whatever standpoint you take, do not cheat yourself. Give your entire mind to thinking about the case in question.

**4. Take the risk.** No matter how careful you are, because you are human you will make some wrong decisions. Socrates married a quarrelsome woman. But legend has it that he was grateful for her in that she gave him a chance to practise the virtue of patience. He looked through his mistake and not at it. You can do likewise. Good can be extracted from error. Mistakes are natural.

In an absolutely safe world, greatness would have no place, because it involves risk. If our ancestors had played it safe, history would not be studded with the names of such men as Columbus, Lincoln or Gandhi. These were men who made risky decisions—decisions for peril, loneliness, and the unknown. If the slogan "Safety First" had always ruled man's mind, there would be no world worth living in today.

Years ago when a large chemical company was getting started, the founder was talking to the

foreman of the electrical shop when a stranger walked up to them and, after introducing himself, said he was an electrician and had heard that there might be an opening in their shop. He went on at length about his qualifications and ability, emphasizing that he never made a mistake.

Before the foreman of the shop could say a word the owner spoke up saying, "I'm sorry, mister, but I've got three thousand men working at the plant, and they make at least three thousand mistakes a day. It wouldn't do at all for us to hire a man who never makes a mistake."

Great men are tolerant and expect human beings to err once in a while. They know that it is inevitable.

Do not let your wrong decisions worry you. If you made a mistake in good faith, do not scourge yourself for it. If all risk were removed, decisions probably would not be worth making.

The fear of making the wrong choice causes dangerous pressure to build up in people. The resulting restlessness, apprehension, inability to sleep, and fatigue will not help in making decisions. All they do is produce high blood pressure and heart attacks.

Here are some tips on how to avoid tension, given to a group of fliers in training: Think of the muscles in your arm, leg, and face. Let them go limp. Practise slow movements. Speak without hurrying, and keep your voice low. Practising these exercises when you feel yourself under stress as the result of a difficult decision. They will lower your anxiety and tension.

**5. Seek expert help.** Some answers are best left with an expert in the field, for he already has canvassed the facts and knows the danger points in his area

of operation. Many crucial decisions can be handled with ease if you confide the alternatives to one who knows more about what is involved than you do. For legal problems, go to a lawyer; for medical problems, go to a physician; for financial advice, go to a banker. Do not allow your pride to keep you from counselling with someone who can help you.

A student of mine became morose in her final year of medicine, alarmingly so. She was about to give up her career. When it was suggested that she might need some psychiatric help, she at first became angry. "There's nothing wrong with me," she said. In the end, she made a wise choice and saw a psychiatrist. Together they found the reason for her trouble. She was simply overtired. Trying to get through school by working at night had gradually worn down her vitality. A vacation restored her courage.

The expert's analysis is a helpful tool. He can help you tabulate the pros and cons of your cause so that you can look at them objectively and make your decision on a rational basis.

A note of caution: Not simply anybody can qualify as an expert. Erasmus once said: "Beware lest clamour be taken for counsel." Your closest friends or family members may pose as expert counsellors. Their advice, though well meant, often is the worst possible, because usually it is biased and highly personal.

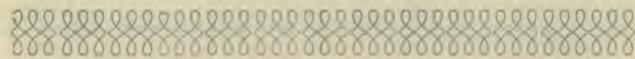
More often your best counsellor is someone not involved in your problem. Even then you will reserve the right to make the final decision yourself. No man will be more true to you than your own self. In making the final decision on an issue, it will help you immeasurably if you are informed as to the issues involved.

**6. Keep your goal in mind.** When you have decided what you want to accomplish in life, you ought to move in line with this mark. If you wish to become a musician, your decision ought to make room for time to accomplish musicianship. If you wish to become a good homemaker, your decision must be for the best good of your husband and children.

If you want to be mature, make choices that will not violate your values. Decide for uprightness in your dealings, for kindness in deed and word, for mercy toward other people.

Following the six steps listed here will help guarantee freedom from anxiety when you make a decision that is fully your own.

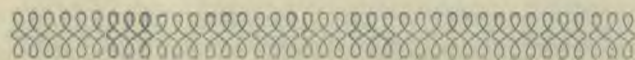
When you are in a deadlock, leave your problem for a while. Take a long walk, get yourself physically tired, and go to bed. Your subconscious mind will work on the problem while you rest. When the body is relaxed the mind can work best. Then you can get a fresh angle, a new outlook. You can make even the most critical decisions soundly when you understand the best way to make them. \*\*\*



## TEN WAYS TO BE MISERABLE

1. Talk about yourself.
2. Think about yourself.
3. Be sensitive to slights.
4. Expect to be appreciated.
5. Trust nobody but yourself.
6. Shirk your duties if you can.
7. Use "I" as often as possible.
8. Do as little as possible for others.
9. Sulk if people are not grateful to you for favours shown them.
10. Demand agreement with your own views on everything.

—Selected



# Why Constipation ?

by  
ARTHUR N. DONALDSON,  
M.D.



AS LONG AS nature is allowed to handle a job alone, we can rest assured that it will be well done; but, when we start meddling with the established routine of automatic body functioning, we usually wind up by calling a specialist. Take that swing through the digestive tract, for instance. Nature can do a good piece of work from throat to rectum, provided eating habits are ordinarily reasonable, and there is not too much wanton neglect at the rectum. You see, it is only at the two ends of this system that the human intellect or lack of it can enter into the picture. The in-between is all automatic. It runs itself.

Constipation is a major human woe; and, like 99.9 per cent of all our griefs, it is self-inflicted. We have little to blame on our forbears for this unpleasantness, unless it be that they have passed on to us a touchy nervous system, which can tie up anybody's intestinal tract. Usually, however, it is our own dictatorial action that throws the monkey wrench into the gears and upsets nature's best efforts.

Think back over the years and recall the times that you have refused to obey the signal telling you

to hasten to the toilet. Maybe you were at a game, a party, or in the classroom—mighty inconvenient spots for such an alarm—nevertheless an important call was ignored. Well, the nerves delegated to the job of ringing the bell when the faecal refuse reached a certain spot in its descent, will, like your conscience, eventually become hardened by repeated rebuffs, and refuse to notify headquarters of the state of affairs. This is Number One cause of constipation—failure to answer nature's call.

It is only when the rectum fills from the section of colon called the sigmoid, just above, that the urge to defecate develops. So, when the rectum fills and is refused the opportunity to evacuate its contents, there is nothing to do but for the faecal mass to remain there and dry out. That is, moisture is gradually absorbed from the mass. It gets drier and harder and packs more firmly. Then we begin with enemas and cathartics, introducing a second phase of the constipation problem and another bad habit.

Enemas may succeed in clearing out the rectum,

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# Religious Faith and Mental Health

by JOHN DUNFORD

EVERY age has its problems. One hundred years ago the foremost medical problem was the prevalence of infectious disease. Today it is mental illness. One in every nine women and one in every fourteen men in affluent countries can expect to spend part of her or his life in a mental hospital. The mentally disordered account for nearly half [47%] of the total number of patients in hospitals in England and Wales. The picture is increasingly becoming similar in developing countries as they march forward in industrial and scientific progress.

What are the causes for this large amount of mental ill-health? Industrialization probably accounts for a good deal in men. With mass production there are fewer craftsmen. Men in industry today tend to be "cogs in a wheel" and have not a feeling that they matter.

## *Nervous Breakdowns*

In my experience mental and nervous breakdowns (especially in women) are due to three main causes.

1. *Domestic difficulties*, e.g. coping with a large family without adequate help and co-operation from the husband. The woman who is "tied" to the house day after day, especially the one who is left alone with the family in the evenings, is very prone to an eventual nervous breakdown. Similarly is the intelligent, highly

strung woman who is married to a husband who has no topic of conversation that would suit her interests.

2. *Financial difficulties*. Striving to keep up with (or even outdoing) the Joneses is undoubtedly a cause of many a mental breakdown, for when a person is constantly worried by debts, or a woman has incurred debts about which her husband is ignorant, the nagging fear and anxiety result in a nervous collapse.

3. *Loneliness*. There are many lonely people, some because they are old and living alone. This, however, is not the full story, for "one may walk alone within a crowd."

In recent years many families have removed from familiar surroundings to new housing estates and new towns where there is often no sense of community. In spite of a new house with all the facilities the wife may feel lost and isolated.

I once removed to a mental hospital a woman of thirty-nine who had spent all her life in a small village. The house in which she had lived, quite happily, was condemned as unfit for human habitation. The family was then rehoused in a nice modern dwelling in the suburbs of a near-by town. The woman was never happy there, because she felt so lonely. She did not easily make friends, and this sense of loneliness and isolation caused a serious mental breakdown. When she left the hospital she got another house in the village from which she was removed, and has had no

further mental illness. She is back among her friends and neighbours.

Dr. Desmond Macmanus, physician at the London Neurological Clinic, may have had such a case in mind when he wrote recently:

"A pal to whom a person would talk his heart out and on whose sympathy he could rely was of more value than psychiatrist."

This, he added, was where religion was so important. All priests were true psychiatrists.

### *The place of religion*

Edgar N. Jackson, in an excellent book entitled *Preaching to People's Needs* writes:

"One psychiatrist has reported that though he himself does not pretend to be a religious man, he cannot help but be impressed by the fact that in twenty-five years of active practice in New York he has never had a patient who really knew how to pray."

It was his experience that it was "the people who did not know how to pray who got life all tangled and messed up."

When I was a Mental Health Officer I carried out a survey of the religious persuasion of patients admitted to mental hospitals from my area during a ten year period. This showed that eighty per cent gave their religion as "Church of England". However, a very small percentage only of these were, so far as one could gather, "Church of England" communicants. Of the rest, "Church of England" meant nothing more than that they had been christened or married in a church, and in a few cases, perhaps, confirmed. Most made no pretence of any real religious faith. The remaining twenty per cent consisted of Roman Catholics, various church denominations, some who simply stated "Protestant," and some who openly stated that they were agnostics or "no religion." The Society of Friends [Quakers] had the lowest percentage of mental illness.

Among the Roman Catholics was a large number of displaced persons and immigrants from European countries. The upheaval and difficulty of making a new life in a strange land undoubtedly contributed largely to the emotional and nervous collapse.

While from my very limited experience I would not go so far as to say that all people who develop nervous and mental breakdowns do not really know how to pray, I am sure that in the great majority of cases there is no deep religious faith. A sincerely religious person who realizes that he is not fighting life alone and who has inner resources, is not likely to be one who will occupy a bed in a mental hospital.

Not more psychiatrists but more prayer may well be the answer to the increasing amount of mental illness. \*\*\*

## TEST YOUR V. D. KNOWLEDGE

1 If you had been exposed to (or in contact with) someone who might have had syphilis, which of the following would be the way to be most sure you hadn't become infected?

- (A) A blood test one month later.
- (B) A blood test three months later.
- (C) Watching for a sore, a rash, or other signs.
- (D) A physical examination.

2 One of these diseases is almost never passed from one person to another except during the act of mating, because it must enter the mucous membrane inside a body exit. The other may be passed along in other ways, because it may enter the body almost anywhere. Which of the following is correct?

- (A) The first is gonorrhoea; the second is syphilis.
- (B) The first is syphilis; the second is gonorrhoea.

3 For how long after he is infected with syphilis can a man pass the disease on to someone else?

- (A) First 90 days only.
- (B) From six weeks to six months only.
- (C) Two years.

4 If a man and a woman both got infected with syphilis at the same time and neither was treated, which could pass the disease on to anybody for the longer period of time?

- (A) The man.
- (B) The woman.
- (C) No difference.

### Answers to quiz:

1. (B) A blood test one month later may still be negative. A physical exam may not disclose symptoms and may not include a blood test.
2. (A)
3. (C)
4. (B) This question tested your awareness of the fact that an untreated woman can pass on syphilis indefinitely to her future babies.

*If not for the resiliency  
of the skin, a smile  
can tear your skin.*



# HEALTHY SKIN

by ROSE TENET

**T**HE SKIN may be described as a canvas on which nature paints her pictures. No one can have a glowing skin who is not in perfect health. Pimples, blackheads, open pores, and sallowness give away the secret of some bodily disorder.

An eminent physician has called the skin a living armour. It acts as a protective covering for the body. Unbroken, it forms an inaccessible barrier to almost all the germs that cause disease. We all know how even the slightest break in the skin can become infected if not given attention.

If your skin is rough and red or there are cracks and sores around your mouth, it is possible that there is a deficiency of certain vitamins of the B group in your system. Fortunately, these vitamins can be administered in tablets, which your doctor will prescribe, or a yeast course is often helpful.

Bear in mind that the B vitamins are in cheese, eggs, beans, dried peas, figs, and whole-meal bread. The skin is more than a protective covering. It

is the most sensitive part of the body. Richly supplied with blood-vessels and nerves, it performs numerous functions such as heat regulation, flushing, exertion, and sweating. It is responsible for the sense of touch, pain, fear.

Have you ever considered what happens when you smile? If it were not for the resiliency of the skin and the very fine muscle fibres found in the skin of the face, it would be impossible to show such pleasure without fear of the skin's tearing or crackling.

As we grow older, the skin loses its elasticity and pliability. It may lose its tone, causing facial blemishes and lines. The best way to avoid wrinkles is to deal with their causes. Smile by all means, but do not grimace.

Most women covet a lovely complexion. Fortunately, this is within the reach of almost all of us. Careful diet, inner cleanliness, rest, relaxation, exercise, fresh air, and a general understanding of how to treat the skin itself will go far toward making the



complexion attractive. The skin is made up of numerous tissue cells, and it derives its nourishment from the blood. Sebaceous glands secrete sebum, or natural oil, to keep the skin soft and supple. When these glands and the muscles are functioning properly, the skin is well balanced and looks normal. But when the system is upset, you have a dry or greasy skin.

If the sebaceous glands are weak and cannot feed oil to the cuticle (outer skin), the result is a dry skin. This can nearly always be recognized by its thin, fine texture and polished look. It flakes easily, and is inclined to become red and sore. When exposed to the sun, rough weather, or cold winds, a dry skin can be very painful.

When considering outward remedies for a dry skin, the first thing to remember is to avoid the use of soap. Soap is drying (it is excellent for the normal skin) because it takes out the natural oil, which a dry skin cannot replace. Instead, use a good cleansing cream and supply it in this way:

Take about a teaspoonful of cleansing cream and smooth it over the face and neck with your finger tips. Leave it on for a few minutes, then remove the surplus with tissue or a piece of absorbent cotton wrung out of water. Splash the face lightly with cold water. After a few days of this treatment, the results should begin to show.

Diet must not be neglected in dry skin. Eat normally of fats, and be sure to include green vegetables and salads. Drink several glasses of cold water daily, and try a course of halibut-liver oil and malt.

For a greasy skin (when the system gives off too much oil) soap can be used satisfactorily. Never use very hot water on the face, for the heat relaxes the skin and may encourage red veins. Use lukewarm water, make a good lather of soap, and massage it well into the skin. Wash off all traces of soap by prolonged rinsing.

Avoid all fried and greasy foods, too much starchy food—white bread, cake, macaroni. Eat plenty of salads and green vegetables. Have as much fresh fruit as possible. Drink several glasses of cold water daily; you may also have fresh fruit drinks.

Teen-agers sometimes suffer from an excessively moist skin. This is indicated by pimples, blackheads, open pores, and sallowness. Observe the general health rules of sensible food, sleep, fresh air, and exercise. Keep the skin scrupulously clean with soap and water, and scrub very gently with a soft brush.

The skin of your body needs as much attention as the skin of your face. Have you ever tried a salt scrub? Take a handful of dry salt and rub it into your skin all over after the daily bath, and rinse thoroughly. It is very refreshing, and makes the skin beautifully soft and smooth. \*\*\*

## I Am Alcohol

Listen while I tell my story, for I AM ALCOHOL.

I have been a problem for human beings for a long, long time. For it is written that Noah got into trouble with me as soon as he had returned from the most exciting ocean journey of history; and one of the oldest warnings that men passed on to others was, "Look not thou upon the wine when it is red."

Men have tried all sorts of schemes to outwit me: locking me in basements away from the children or the weak of will; drinking me only at weddings and funerals; closing the bars on election days and earlier at nights; putting me at a fixed distance from schools or military camps; diluting me with water; hemming me in by laws.

But all such things merely mean that lo, these many centuries, I have been hard to handle.

And today, in the freedom of this mechanical age, I am tougher and more dangerous than ever.

One method has not been tried yet: one generation of young people not learning to like me. With that I would be through.

This is my story:

I ride behind the steering wheel in the nerves and muscles of the drinking driver.

I give him a false sense of security and power.

I lengthen the time it takes him to give an answer in action to the danger he sees ahead.

Through him I scatter wounds, crippling, and death along the highways of the world.

I undermine the prospects of youth, weaken the security of age, and destroy the happiness of little children.

I paralyze the moral restraints which men and women have built up as their inner protection against the evils of life.

I strike first at the highest powers of mind and body.

Thus, I progressively degrade men to the level of the beast.

I will yield my age-old sway over mankind only at the stern insistence of those strong enough to live without me and unselfish enough to deny me to those too weak to stand alone. I AM ALCOHOL.

—Selected



"Look not thou upon the wine. . . . At the last it biteth like a serpent, and stingeth like an adder."—The Bible.

# How I Conquered Alcohol

by GEORGE LITTLER

**Q**UITTING THE DRINK habit is one of the easiest things in the world. I should know; I've done it scores of times! But quitting for good—and making it stick—is much more difficult. That means studying your life through the microscope of truth. It means facing yourself and your shortcomings honestly and squarely. It requires courage and determination. It calls for faith and prayer. It is not impossible, however, or as hard as it may seem to the drink-enraptured victim. I know; for I've done that, too.

Eight years ago I finally made up my mind to tear myself free from the steel-like tentacles of alcohol. I have not touched a drop since, and I know I never will. I do not say this in a boastful manner. Why should I? Countless thousands of other victims have accomplished the same thing. I merely tell my story to help any others who have a drinking problem and want to escape from the valley of shadows into the sunshine of buoyant living.

I began drinking when I was in high school. Everyone in our crowd drank. It was the smart thing to do. Movies, books, and all those glamorous liquor

advertisements make drinking seem appealing to youngsters, like a magic doorway into the world of sophistication.

## *A Living Death*

Before long I was hooked, and for the next fifteen years I suffered the living death of alcoholic addiction. There is no need to go into the sordid details of my life during this period; if you drink or intimately know someone who does, you are familiar with the accompanying wretchedness: the foul drunkenness, irresponsibility, poor health, character decay, and shattered hopes and dreams.

When I finally decided that I must give up drinking completely, I knew that I was facing the most difficult job in my life. I had tried many times to wrench free from my shackles and had failed at every attempt. This time I knew that I had to succeed or sink down into total defeat.

One afternoon I went into the quiet of my bedroom to wrestle with the invisible enemy in my mind, the enemy that continually urged me to destroy my-

self with drink. The first thing I did was pray. I knew that I desperately needed God's help in my arduous undertaking. I prayed as I had never prayed before. I poured out my heart and soul, begging God's forgiveness for my many sins. I did not ask Him to cure me of my addiction; I just prayed for strength, courage, and enlightenment, so that I could cure myself. Intuitively I realized that I had to learn a lesson by extricating myself from the predicament I had gotten into.

As I prayed for guidance, my faith grew stronger and stronger. Gradually I began to feel God's wonderful Spirit filling the room. His goodness and love surged through my whole being, making me feel light and joyous. Suddenly words of fire formed in my mind: "Face yourself! Stop running away from life and truth!"

My heart leaped with joy. I knew that God had provided the answer I was seeking, the one that would lead me from slavery to freedom. I humbly thanked Him for His mercy. Then I went to work.

### *Quit for What?*

First, I asked myself why I had failed in my past attempts to stop drinking. The answer was immediately obvious: I hadn't really wanted to stop! I had tried to quit because others had wanted me to or because I felt I should. My half-hearted attempts were a balm to my conscience, my family, my friends but deep within myself I had not wanted to lose the alcoholic crutch I had come to depend so much upon.

I had tried tapering off, switching from whiskey to beer, drinking only weekends, stopping after three drinks, all the tricks with which alcoholics try to fool themselves. Naturally, none of these feeble efforts had solved my problem—because I did not really want it solved. Even when I tried to quit completely, it had not worked; and soon I had found myself back in the old routine of heavy drinking again, with the resultant periods of drunkenness, shame and remorse.

But now, with my eyes opened through God's mercy and wisdom, I realized that there is only one way to renounce drinking: a person must sincerely want to give it up, and he must break with the habit cleanly and completely. There can be no compromising with the devil.

Next I asked myself why I drank. I knew I had to discover the source of the weakness that forced me to fill myself daily with the deadly poison. I knew I had to root out the festering sore that was causing me to seek the slow suicide of alcoholism with its mental, physical, and moral degradation.

The phrases I had parroted for years popped into my mind: I drank for fun, relaxation, social

reasons. Suddenly I knew that these were lies, palliatives to hide the ugly truth from myself that I was a slave of the monster Alcohol. I recalled the words of fire, "Face yourself! Stop running away from life and truth!"

Then I knew why I drank. All my life I had been quiet and shy. I was selfconscious and completely lacking in confidence. But when I drank, I lost my inhibitions. I became carefree and boisterous, I had surrounded myself with an alcoholic haze to cover up my own inadequacies, fears, and worries. I was a halfman hiding behind the false courage of an alcoholic mask.

### *Escape from Reality*

Drink to me had been an escape from reality. Whenever a problem arose, instead of facing it or trying to improve my character, I had reached for the bottle. All my life I had been running away from myself and my weaknesses. This was a harsh revelation, but I knew it was the truth and that it pointed the way to liberation.

I realized then what I had to do. I had to change myself. I had to correct the defects in my personality and character. I had to weed out my weaknesses and replace them with strength so that I would no longer need my crutch. I had to become a whole man eagerly facing life instead of a half-man living continually through the gloom of alcoholic misery.

I spent the rest of the day mapping out my curative programme, a three-pronged attack covering the mental, physical, and spiritual aspects of my nature.

### *Curative Programme*

The next week I enrolled in night school. I chose courses in literature, history, business administration, and public speaking. It was a tough schedule for a person with a full-time job, but I was grimly determined to see it through.

The public speaking course was especially difficult. I had always been afraid of people, and in high school I had invariably pleaded unpreparedness when called upon to recite. But now I knew that I had no choice. It was essential that I gain poise and confidence or descend once more into the snake pit of drunkenness.

The first time I got up to give a talk, my knees shook so hard that I could barely stand. My mouth was dry, and my voice sounded squeaky and unnatural. I halted and stammered, but somehow I got through the ordeal. I was grateful that no one burst out laughing at my sorry exhibition.

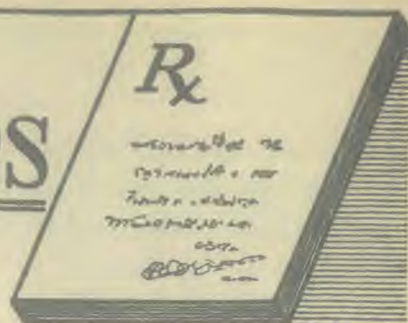
Others followed me, and I saw with surprise that many of them were as terrified and inept as I

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# The Doctor Advises

A SERVICE FOR OUR SUBSCRIBERS

READERS REQUIRING PERSONAL ANSWERS MUST SEND STAMPED SELF-ADDRESSED ENVELOPES WITH THEIR QUESTIONS.



## Inflammation

*Please explain inflammation of the breast and inflammation of the female organs. How long do they usually last?*

Your question is rather general, and will have to be answered in general terms, because we do not have any information about the patient under consideration.

The word *inflammation* refers to certain tissue reactions such as heat, swelling, pain, and redness. Not all these characteristics are necessarily present at the same time.

There are different kinds and degrees of inflammation. It may be acute or chronic. We sometimes think of infection as being a cause of inflammation. We would presume that inflammation of the breast as you refer to it connotes merely simple correction of the breast. This condition may occur to some extent before the monthly period.

There is a kind of inflammation of the breast, called cystic mastitis, that causes the breast to become lumpy and tender.

If the infection is acute, specific treatment by a doctor may be necessary. If it is caused by increased fluid or congestion at the time of a period, no specific treatment probably would be necessary except for perhaps reducing the amount of salt in the diet. Occasionally so-called fluid pills taken before the period give relief to such congestion.

Inflammation of the female organs, particularly tubes (which are called Fallopian tubes by your doctor) may become acute and cause the patient severe pain. The pain may be severe enough, if it is on the right side, to simulate appendicitis. This condition sometimes is called pelvic inflammatory disease. Usually it requires antibiotics and close medical supervision.

Perhaps what you call congestion of the female organs is similar to that which occurs in the breasts before the monthly period. The pelvic organs become congested with increased amounts of blood, and may cause a heavy feeling or even actual pain such as is experienced by some women before the monthly period.

There is no way of telling how long an infection may last. It may seemingly clear up quickly with treatment or time, and then may flare up later. The degree of inflammation, the cause of it, and the

amount of it are determining factors.

In minor inflammation, possibly all that is necessary would be hot sitz baths and cleansing warm douches.

If there is acute pain, a medical doctor certainly needs to be consulted. There are other painful conditions, especially in this area, that may require surgery, and they must be differentiated from medical problems. It is possible for a large cyst to develop in the ovary and rupture. Sometimes a cyst, by twisting on its pedicle, chokes off its own blood supply and causes severe pain. It is not so common as the other kinds of inflammation, but it does occur.

You can see that there are many degrees and kinds of inflammation of the female organs and the breasts.

## Blood Transfusion Dangerous?

*Is there any danger in people giving blood for transfusions?*

Except in case of dire emergency—and I have not seen that emergency—I would not consider taking blood from anyone younger than sixteen years of age. A transfusion should be from a healthy man with a good blood count, no anæmia.

Usually a pint of donated blood is quickly restored in the person who is in good health, and by three months he conceivably could donate another pint. Sometimes half a pint of blood can be taken from a young person. This amount would not bother anyone in moderately good health.

## Tired Feeling

*For the past four or five months I have been feeling tired and cannot find any interest in anything I do. My head feels thick and I am nervous most of the time. I am forty-one. Could this be the beginning of the menopause? My symptoms are still quite mild, but my family needs me at my best. Is there any help for cases like mine?*

Yes, there is help available, and this is the time for you to talk this over with your own family doctor. The symptoms you describe are typical of many women in the change of life. Trouble arises because certain hormones are no longer being produced in

sufficient quantities within your body. Eventually, your system will make its own normal adjustments, but this takes time. Today we have excellent medicines to relieve problems such as yours. Maybe you will not need very much medicine. But before using anything like this you should have a thorough physical examination, including a test for cancer, and whatever blood and urine, and stool tests may be needed. If all these prove negative, you need not hesitate to use whatever medicine your doctor may prescribe. Life will then take on new meaning, and you will be able to meet your family responsibilities with new zest and understanding.

### Dizziness

*How can I begin the day without feeling dizzy?*

Dizziness on arising is likely to be of circulatory origin. A weak heart or hardening and narrowing of the blood vessels may be contributing causes. Centres in the brain or the mechanism of the internal ear that has to do with sense of balance may be affected. Low blood sugar is an accompanying state in some instances.

We suggest adequate rest and sleep. A warm nutritious drink before rising might be helpful. Arouse from sleep slowly and lie awake gently stretching for a short time before dressing. A light nutritious breakfast may be an aid in combating this feeling.

### Not Eating

*Should a mother ignore a child in the one and a half to three-year age range who will not eat?*

I have seen a number of children whose mothers say they will not eat anything. However, on inspection, the nutrition of the child appears to be adequate—no ribs sticking out, bones adequately covered by fat, and no pot-belly. Occasionally, on my examination of the blood, these children show anaemia. Usually an iron preparation alone or with vitamin B complex picks up the appetite and corrects the anaemia.

Some children are small eaters. We fail to realize that children and adults are different in temperament and habits. There are times to ignore periods of not eating during this age group if the child is healthy.

Many times poor eating habits are established by allowing a child to dawdle at the table, by putting too much food before the child at one time, by paying too much attention to him. On the other hand, not eating may be a play for extra attention. It is normal for the year-old child to eat less, for several reasons, among them being the fact that growth rate is slowing down and the child is busily occupied exploring the world at hand.

The atmosphere at mealtime should be pleasant, unhurried, and emotionally quiet. Usually the normal, healthy child becomes interested in eating again after a short spell of not eating.

### Falling Hair

*For four years, since my last pregnancy, my hair has been falling. It is becoming quite thin. My thyroid and hormone levels are normal. What can I do?*

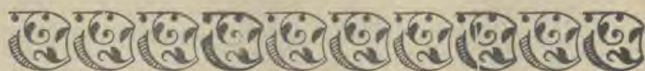
As we grow older, our hair undergoes certain changes, and it may become thinner. These changes usually are much more evident in men than in women.

To a certain degree our general health is reflected in the quality and lustre of our hair. Premature thinning and falling of hair may be an indication of poor health or of a devitalized condition.

There are many causes for thinning or falling hair. The result is sometimes permanent and sometimes temporary. General causes may be fever, heredity, or malnutrition caused by an improper and unbalanced diet with a resulting vitamin deficiency.

Some scientists believe loss of hair may represent the onset of early hardening of arteries, resulting in diminished blood supply to the hair follicles. Local conditions (scalp disease, infection, heavy dandruff and others) may be possible causes. Hair dye or excessive heat to the hair and scalp may contribute to temporary loss of hair.

The hormones you mention are to be considered, but there are other hormone imbalances besides those of the thyroid and ovaries. Should your problem persist, it would be wise to have a thorough medical examination.



### WANTED—A FRIEND

WANTED: a friend. Not one who will praise or flatter me. Not one to grant me liberal access to his purse strings should financial reverses beset me. Not necessarily one who will visit me formally in probable seasons of illness or bedeck my final resting place with roses, should I pass the great divide.

But one who will trudge the common road of life with me; who will criticize me constructively, bear patiently with my all too obvious faults, and lay the uplifting hand of confidence upon my shoulder when my best efforts seem to have failed.

After all, I want to live nobly, and my friend must be one whose personal influence will inspire and encourage me to press eagerly toward this—the highest of all attainments!



## STROKES

From page 6

balance himself and to walk in the parallel bars, it is time to use a cane. One of the greatest joys of doctor, therapist, or nurse is to see a patient gradually overcome his lack of balance and weakness and be able to walk with a cane or without support.

Physical therapy includes activation of the involved arm and leg by means of exercise for increased muscle function, including normal range-of-motion exercises for all joints.

### *Occupational Therapy*

Occupational therapy helps the partially paralyzed patient learn to live with his disability. One of the first skills to learn is transferring from bed to wheel chair, from bed to a standing position, and back again to bed.

Fitting the paralyzed arm with a sling is often needed to prevent dislocation of the shoulder joint. Splinting of the paralyzed hand often is done early in the treatment to prevent deformity and to support the hand in a usable position.

One of the major problems of the partially paralyzed patient is dressing. He needs training, sometimes with adapted mechanical aids not only to get his garments on but to get buttoned. He needs help getting on socks and shoes.

One of the next steps is training for independence in the use of the toilet, washing, bathing, shaving, and combing.

Encouragement in using the weakened arm more and more is of great importance. Strength can be increased by training in writing and the use of special mechanical aids for homemaking. Craft activities in occupational therapy encourage the patient to use his affected arm and hand. He becomes so intent on his project that he

forgets himself and his weakened members.

### *Braces*

Sometimes training in standing and walking requires a brace for the paralyzed foot or ankle. Temporary help can be supplied by a stiff boot, and support of the ankle joint with an elastic bandage. This kind of bandage is easy to apply, holds well and firmly, and if not put on too tightly is comfortable.

It is well to hold off bracing for one or two months to determine whether there is any return of backward flexion of the foot. The aid most commonly used is the short leg brace. It is composed of two bars fixed to the shoes and a cuff around the lower leg. In severe cases where there is weakness of the thigh muscles, a long leg brace may be needed, with a lock at the knee.

### *Speech Therapy*

About forty per cent of hemiplegics (people with paralysis of one side of the body) have speech difficulty. It is especially common in right hemiplegics. Speech therapy improves the talking ability of about eighty per cent of such patients. Some improve without therapy. Speech disorders are distressing. The patient fears misunderstanding, and his concern delays progress in other areas.

One form of speech disorder is dysarthria, in which the patient cannot form words clearly or articulate sound because the muscles of his lips, tongue, and larynx do not function properly. Dysarthria is caused by a lesion that can be helped by specific speech therapy.

Aphasia is the most common language disorder in hemiplegics. Some aphasic patients have difficulty in understanding the spoken language, some in expressing themselves, some have a mixed form of

aphasia. This disorder is due to brain lesion in the left side of the brain. Because it can create complicated problems it should be recognized, evaluated, and treated from the beginning.

Teachers giving stimulation in unaffected areas in orientation of the patient to the reality of his environment and in group therapy may reinforce the measures of the speech-therapy programmes.

### *Mental Therapy*

A stroke may often change the patient's personality. There are times of depression, anxiety, fear, frustration, anger, hostility, and sometimes reaction to the beginning of a rehabilitation programme.

These outbursts may be owing to lack of inhibition of usual feelings and emotions. Often they can be helped by the therapist, social worker, or psychologist.

The difficulties may be treated by all members of the rehabilitation team and by the family, who have been told how to help in overcoming problems.

Many stroke patients attain self sufficiency in their daily living. Many can reach vocational goals. A number of highly involved patients make their own adjustment. For no obvious reason some do not like to be tested and trained for jobs easier than they are used to doing. Qualifying for future work depends not only on the severity of the stroke but also on other disabilities that may complicate the picture, such as heart weakness, arthritis, spasticity, poor eyesight, hearing defects, and others.

Good counselling and continued training usually help disabled patients to bridge the gap between uselessness and usefulness. When patients are discharged from the

hospital they should have continued training and supervision in their exercises and physical therapy programme. Some of the patients after discharge gradually improve and enlarge their activities.

Because of wider use of technics of rehabilitation we find a larger group of stroke patients living a happy life in their home. Some are also able to drive cars and go to their jobs, feeling more or less fully restored. \*\*\*

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### BODY-BUILDING FOODS

*From page 8*

would soon feel weak and worn out. Most of our calories come from *carbohydrates* (or starches) and fats.

Other very important chemicals, such as *vitamins* and *minerals* are also needed in sufficient quantities to regulate all the activities of this highly complex machine, the human body. Vitamins and minerals come almost entirely from an important part of our diet.

To be sure of sufficient minerals and vitamins, we must have a wide choice in our foods. If we do this consistently all our lives, we can be assured of a strong, healthy, beautiful body. A good diet is not a question of money so much as knowing how to choose and prepare our foods properly. We cannot live very long on an unbalanced diet no matter how much we may spend for food. If we try to get along on a poor diet we will soon find ourselves in need of medical care.

#### *Lubricating the system*

Even the question of water is highly important. Far too many people take too little water for their own personal needs. Sometimes the water they take is contaminated, or otherwise unfit for use. A lack of water may slow the circulation and thicken the blood stream, thus increasing the work on the heart. It may even result in the formation of kidney and blad-

der stones, and other serious complications. To be healthy, one must take plenty of pure water every day. If in doubt as to whether the water you see is safe, boil it, or use it in hot drinks. But whatever you do, take sufficient water to meet your needs.

However, even the finest diet may fail if our own attitude is faulty and full of gloom. Many years ago King Solomon gave us this counsel: "A merry heart doeth good, like a medicine." In other words, a happy optimistic person is bound to keep better health. His whole body responds to the sheer joy of living. A bright philosophy gives him something worthwhile to live for.

#### *Overcoming depression*

But Solomon didn't stop there. He added these significant words: "A broken spirit drieth the bones." How true! We all know that an unhappy person—a pessimist—always looks on the gloomy side of things. He is depressed and discouraged with everything he sees. Such a fellow can never really enjoy good health. His unhappy attitude interferes with his digestion. It slows down his circulation, makes him nervous and jumpy, spoils his sleep, makes him sceptical and suspicious of others, and takes all the joy out of living. All the vitamins and food supplements in the world will never make him happy.

Maybe he needs a good cook, someone who knows how to prepare food, and serve it attractively. This is most important if one is to enjoy life to the full. A happy attitude is often either gained or lost at the dinner table. The smart man will recognize this and be grateful for the good things that come his way. He will quit his complaints, realizing that "the best things in life are free." This is a lot more fun than griping about taxes and the high cost of living.

So, ladies, in planning your meals, try to provide the best meals at the most reasonable prices. Prepare your meals in such a way that your family will not only enjoy eating, but will do so with gratitude for what you have done. Provide a happy atmosphere in your home, without rivalry or favouritism. Be contented and make the most of what you have. Look on the bright side, and encourage your children to do the same. Mealtimes will then be pleasurable occasions for all the family, and your children will remember you with deep gratitude for all the happiness you have given them. \*\*\*

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### PALPITATION

*From page 12*

by other means of diagnosis before suspecting heart disease.

#### *What to Do?*

What should you do if you have symptoms that make you fear heart disease? Should you take things easy just in case you do have it? Should you try to stifle your fear by trying to work till you drop?

First, seek out a physician and learn from him the cause of your symptoms. If a careful examination and study of your case indicates that you have a diseased heart, follow the doctor's advice as to how to get along with your heart disease.

If the symptoms are caused by some other disease, that disease should be treated. If they are caused by anxiety, nervous tension, and fear, learn to carry on normally in spite of your symptoms. It is reasonable to try to ease the stress and anxiety that cause your symptoms.

With assurance that your heart is healthy you may determine to live normally, and your symptoms should disappear as silently as they came. \*\*\*



## A Pal for Prem

by DAISY JENNEY CLAY

PREM heard his mother gasp in the kitchen, but he could not go out to see what the trouble was, for he had a broken leg and had to stay in bed. Fortunately, his mother came into the room soon with his breakfast on a tray and told him what had disturbed her.

"Mice, Prem! We have mice in the house. I saw their tooth marks just now on the cookies."

"I think mice are cute," Prem said.

"Ugh, I don't think so. They make me want to scream," his mother said.

She handed him his tray and hurried back to the kitchen to wash the dishes.

Prem ate his breakfast slowly. He was thinking about the long day ahead of him, with all his friends in school and his mother busy with housework. A whole day ahead and nothing to do. He was tired of reading. Then he remembered how his mother and dad always prayed about their problems, even the small ones, and he prayed a little prayer himself. "Dear God," he said, "You know I get lonesome and bored. I'd be awfully glad if You could send me some kind of pal."

He went on munching his toast and didn't even notice when a small piece of toast fell to the floor. But when he heard a gentle rustling sound he leaned over and saw that he had a visitor—a tiny gray mouse. It was eating the toast crumb for breakfast. Prem watched it without moving until the last morsel was gone. He heard his mother's steps coming near, and held his breath, but the mouse heard too and disappeared.

Mother took the tray. It was not really an accident that there was a bit of toast still in Prem's hand! Prem was sure that the mouse would come back for another snack. He hoped it would not be when mother was in the room, for he didn't want to hear her scream!

He kept watching, and as he had hoped there was a movement under the corner of the bedspread, and then a little head appeared, with tiny eyes peering out. Prem dropped several bits of the toast onto the floor and watched with a grin while the mouse nibbled on them. Then it scurried under the bed again.

"Come back for dinner, Mickie," Prem said softly.

Mickie must have understood, for he was back for dinner and supper both. Over the book he was reading, Prem kept watching for him. At bedtime he suddenly realized that the day had not seemed long or tiresome.

For several days Mickie kept his appointment with Prem. It was fun, but it made Prem worry too. Surely someday mother would see the mouse and be scared out of her wits! One afternoon she came back from the store with a small bag.

"Traps," she said. "There will be no more mice in my cupboards after this!"

This was one more thing for Prem to worry about, but he thought that if he gave Mickie enough toast and cake scraps to eat, he would not roam the cupboard shelves at night. Maybe, though Mickie was particularly fond of cheese and would visit the trap anyway, just to get some. So at the next meal-time Prem asked his mother for some cheese for supper. Soon cheese was added to Mickie's menu!

One day soon after this, Prem's mother had to be away for awhile, and his Aunt Kamla came to stay with him.

"I wonder if she is scared of mice," was Prem's first thought when he heard her busy in the kitchen. But, strange to say, there was no need to test his aunt on this point for Mickie did not show up all day. Prem watched and listened but there was no sign or sound.

At last he asked the question that had been bothering him all day. "Aunt Kamla, Did the mouse trap catch anything last night?"

"No, and I undid the trap today. I don't want any cute little mice caught while I'm here!

"You like mice?" Prem cried. "Then you wouldn't be scared of Mickie."

"Who's Mickie?" Prem told her all about his pet, but when the whole day had passed and there was still no sign of the mouse it began to seem certain that Mickie had chosen another home.

"Prem, I have a plan," Aunt Kamla said next morning. "You know your mom and I are sisters. When we were little girls we had mice for pets, but they were white mice from the pet shop. Your mother loved those little fellows, and I'm sure she wouldn't be afraid of white mice now. I'm going down town this



afternoon, and I'll try to get you one or two at the pet shop. This morning I'll fix a box for them to live in. They will be fun for you to watch while you're laid up with this leg."

"Thanks, Aunt Kamla," Prem said gratefully. "That will be great. And I've just thought about its being funny too. I asked God for a pal to keep me company, but I never thought He'd send a mouse."

Aunt Kamla laughed. "Very often God answers our prayers in a different way from what we expected. But He always answers in good ways."

Prem nodded. \*\*\*

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## WHY CONSTIPATION?

*From page 21*

but they also discourage the rectal mechanism in the handling of its evacuation job. Like some able-bodied loafers—the mechanism prefers charity rather than to work for its keep. Cathartics irritate the intestinal tract. In fact, most of them accomplish their task through processes that injure the lining membrane, particularly in the large bowel. And thus we provide one potent cause of inflammation of the colon—colitis. The mucous membrane of the colon, raked by phenolphthalein, cascara, and other irritating drugs, finally gets tender, sore, and pours out quantities of mucus in an effort to protect itself. "Colonics" and "high enemas" have a similar effect. All this leads to spasms here and there in the muscles of the colon, which not only hurt and cause stomach-ache and backache, but distinctly further the cause of constipation. And so—more cathartics—more irritation—more spasms—more constipation—more cathartics—and you have a vicious cycle.

Now the use of cathartics and enemas commonly becomes habitual because of the nerves alone. The colon is somewhat of a barometer of nervous things in general, and responds to tense times by either a diarrhoea or a tie-up, usually the latter. Anxiety, worry, or fear will produce a spasm in the colon. Thus the passage of waste is slowed, too much time is given for the absorption of moisture, and the material becomes difficult to move. We call it spastic constipation.

### *Bulk in Diet*

Another, probably minor, cause of constipation is deficient residue. The idea of bulk in the diet is so universally preached today that it is only now and then that we find a table without spinach, lettuce, carrots, or some other food that provides a large amount of "roughage." The combination of white bread, potatoes, rice and meat is quite obsolete (or

ought to be), and even the oldsters choke down their string beans, greens, and bran. Of course, the logic of it is simply the mechanical necessity of having enough unabsorbable stuff in the intestinal tract to give it something to work on—otherwise *it won't work*.

Sometimes, however, we find a nervous colon that cannot and will not tolerate rough bulk like celery, cabbage, cauliflower, or bran. This sort of stuff is definitely scratchy and in an irritable colon stirs up a reaction about like the proverbial bur under the saddle. These "spastic" folk have to tread lightly in the use of rough bulk, otherwise their constipation will get decidedly worse. They need bulk all right, but smooth bulk. They must avoid cucumbers, radishes, celery, cabbage, and most certainly bran and perhaps coarse bread.

Anything in the rectal area that irritates will defeat nature's best effort to take care of things. Hæmorrhoids and fissures cause a tightening of the controlling sphincter, and, simultaneously, through an interesting physiological mechanism, a diminution in the muscle power needed to effect evacuation. This type of constipation naturally can never be cured by enemas, "colonics," cathartics, bulk foods, or mineral oil.

The abuse suffered by the human digestive tract is beyond words. The nearer to the vegetative stage the intellect may be, the less the evidence of interference with the automatic parts of our make-up, the less the worry of constipation. You never hear of animals calling for an enema can. To begin with, they apparently use some judgment (or is it instinct?) in the selection of what goes in at the mouth. Humans must be clubbed into any semblance of reason in matters of diet. Animals are not tied to social forms. Furthermore they have no worries over increasing tax, unpaid bills, the styles of clothes, or the size of the family—nothing, in fact, to keep the emotions in a chronic uproar and to tie the intestine into knots that hurt and that prevent normal function. And so the proposition of normal bowel action resolves itself into the matter of learning how to eat, how to control emotions, and how to co-operate with a body that will carry on decently and in order if we use a little intelligence. \*\*\*

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## HOW I CONQUERED ALCOHOL

*From page 27*

had been. I realized then that I was not the only person in the world with problems. I began to feel more at ease.

In the weeks that followed, I gradually improved. I became more sure of myself and even began to enjoy speaking before the class. The confidence I

acquired carried over into my personal life. I found myself keeping up my end of the conversation at social gatherings.

My boss commented on the change in my personality and gave me a promotion and raise. Suddenly I realized that I really liked people, and, surprisingly enough, they seemed to like me. Where before I had been morose, lonely, and self-centred, I now found myself in the centre of an active, wholesome life, with plenty of wonderful friends.

During this period of character reformation, I had been giving my physical being an overhauling. Drink and lack of fresh air and exercise had put my body in a pitiful condition. I was pasty-faced, flabby, and constantly tired. Now I saw that I got a healthful, balanced diet and sufficient sleep. Every morning I

did calisthenics before breakfast, and after work I took a fast walk. Gradually, as my strength returned and I became lean and firm, I increased the distance of my walks until I was hiking eight kilometres every day. I learned to step briskly and breathe deeply. I began to feel alert, healthy, alive.

Today, I still adhere to this programme. I am happier than I ever dreamed possible, greeting each day with joyful anticipation. I am certain that anyone, no matter how badly enmeshed in the serpentine coils of drink, can achieve this same self-mastery and happiness. All that is required is for you to ask God for guidance and then start eradicating your weaknesses. He will point out the way. The rest is up to you!

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### THE DANGERS OF LACK OF SLEEP

IF YOU HAVE under five hours sleep a night for two nights running it is likely to have a bad effect on how well you do your job. And less than two hours sleep in a single night is liable to impair your performance the next morning. These are two tentative conclusions which have emerged from work being carried out at the Applied Psychology Research Unit at Cambridge, England, by Dr. Robert Wilkinson. He emphasizes, however, that the results of his experiments cannot be directly applied to ordinary working conditions, because they were carried out in the laboratory. None the less, the results are striking enough to provide a strong argument for more research on the effects of lack of sleep under ordinary working conditions.

Dr. Wilkinson carried out his experiments on nineteen young volunteers from the armed forces for a period lasting six weeks. Two different tasks were set. In one the volunteers listened to short musical notes, played to them against background noises, and they were asked to pick out the notes which were deliberately made longer than the others, while in the second task the men had to add up columns of figures. Though the second task represented any routine mental activity, the first one was more in common with inspection work in industry where people are engaged in looking out for the occasional small and unexpected fault. It is also similar to driving a car along a good road, where it is essential to be alert for the emergency caused by something unexpected happening. Although the men got up at the same time every morning, during the experiment, to start their tasks, they were made to go to bed at different times the night before, one at 11 in the evening, providing seven and a half hours sleep, one at 1.30 in the morning, giving five hours sleep, one at 3.30—three hours sleep—one at 4.30 who got two hours sleep, one at 5.30—one hour's sleep—while one got no sleep at all. Having carried

out their day of tests the men followed exactly the same procedure the next night, so that for the second working day each man had had two nights running on his particular sleep ration. In each of the six weeks the programme was the same, except that the sleep rations were changed round, so that each man had experienced each ration of sleep by the end of the experiment.

Results showed that performance was significantly worse after one night's deprivation by a matter of several per cent, as soon as the sleep rations fell to two hours or less in a single night and this applied to both tasks. But, more important in terms of normal life, efficiency was also lowered in both tasks after two successive nights of only five hours sleep. Psychologists do not yet know how much sleep we need, or how it varies between individuals, but nearly all of us, if not all, evidently need at least five hours and seven seems a more sensible figure. The first two hours or so of our night's sleep are much more important than the rest. We sleep most deeply and are least likely to dream during those first two hours. Dr. Wilkinson found that people who got five, three or even two hours sleep only were able to perform their tasks just as well as they could with a full seven hours. They were just losing more and more of their drive to work efficiently. This drive could be restored by offering quite small rewards and incentives for better work. But when the amount of sleep was reduced to less than two hours, to one hour, or to no sleep at all, then the ability to perform tasks itself became less.

Apart from the obvious implication for pilots, policemen, doctors, nurses and other vital members of the community who frequently miss their sleep, there is an evident moral here. If you must miss your sleep try never to do it two nights running, and always get at least two hours sleep in any one night.

—Spectrum



# MEDICINE TODAY



## Reject Action May Curb Cancer

A problem in heart surgery could help in the fight to combat cancer.

Sir Peter Medawar, a Nobel Prize winning scientist, explains it this way: The human body rejects a borrowed heart or other organs, and this is a major problem in heart transplants. Scientists are trying to find a way around this reaction.

In fighting cancer, the reverse reaction would be helpful. The body could be strengthened so its natural defences would reject cancer cells.

## Electricity for Bone Repairs

Electricity may some day be used to repair injured and diseased bone and to help straighten crooked teeth. Dr. Andrew L. Bassett, an orthopaedist at Columbia University, is exploring indications that negative electrodes can stimulate bone production, while positive electrodes are associated with diminished bone formation. Pressure produces a type of electricity in bones, he finds, and this may explain how pressures can reshape bone.

—*Today's Health*

## Understanding Migraine

Experiments by the Wellcome Trust of England, indicate that migraine headaches may be caused by tyramine, an amine occurring naturally in many foods.

This discovery is important because tyramine is known to cause changes in the size of blood vessels, and blood vessels are known to contract and then later dilate in the painful area of the head during an attack of migraine. It is feasible that a fault in amine metabolism may be a cause of migraine in general, a fault which may be inherited because migraine is frequently found in members of the same family.

—*Spectrum*

## Lasers and Dental Decay

Dental scientists at the University of California, Los Angeles, are experimenting with laser beam treatment of teeth to prevent dental decay. Microscopic studies of extracted human teeth and those of experimental animals indicate the laser beams seal tiny passageways through which agents of tooth decay penetrate enamel.

Preliminary tests suggest that laser energy, in the intensities used, does not damage dental tissues. Next the investigators will experiment with teeth scheduled for extraction. Mass clinical trials on human subjects probably are two or three years away.

—*Today's Health*

## Hong Kong 'Flu Blamed on Horses

Researches in viruses such as those that cause the Hong Kong influenza, have long felt that such viruses originated in animals. This idea has gained support from a recent experiment at Baylor University College of Medicine and the American National Institutes of Health which reported evidence that the Hong Kong 'flu virus bears a strong resemblance to a virus long known to cause 'flu in horses.

Tests with this horse virus upon humans showed that the same antibodies that were produced to fight it, were also present to fight Hong Kong 'flu.

—*Good Health*

## Laser Knife for Surgery

Developed recently was a new "light knife" which allows surgeons to use the focused beam of a laser as easily as they would a scalpel. The new device, designed to help the medical profession evaluate laser surgery, guides the laser beam through a hollow pointed arm to a small probe like a scalpel. The probe is about the size of a fountain pen and can be moved easily in any direction. It can be attached to a surgical microscope for more delicate operations.

—*Good Health*

# Water's Way

by MARY C. NOBLE, R.N., R.P.T.

**W**ATER is found wherever man is, whether in the rain forests of South America or in the arid wastes of the Sahara desert. If heat is needed, water can be heated quickly and by means of simple equipment applied to the body. If cold is needed, the coolness of a rushing stream or a piece of ice can be used. The fact that water can go rushing through a hose, up a pipe, or out a nozzle under pressure makes it possible to apply water in different ways. With water vaporized as steam and used in a moisturized bath it can change blood pressure, help eliminate body waste, and relax tenseness.

## *A Versatile Healing Agent*

Because water can absorb more heat than can other substances, it is able to give off great quantities of heat. The fact that water can exist as a solid or a liquid or a gas gives it versatility as a healing agent. As ice, it can cool. Applied for a short time to the skin, ice is a stimulant, but applied for a long time to the skin, it depresses the activity of the cells and of the blood flow in that part.

Inasmuch as the body and water are of about the same density the body is bouyed up and floats in water, a fact that is useful in treating weak or paralyzed muscles.

The pressure water exerts on the body when it is submerged in-

creases blood flow and urinary output.

How glad we should be that much soil and dirt are water soluble, easily washed off the skin and out of clothing.

The changes that occur in the body as a result of the application of hydrotherapy are caused by the water's being either hotter or colder than the body. These changes are called thermal (related to temperature). The greater the contrast or variation, either above or below body temperature, the greater is the physiological change occurring in the body if other factors are equal.

Significant changes in the body may be produced by the mechanical effects of water, such as water in motion, as in the whirlpool bath, in showers and spray, or douches for friction and percussion effect.

## *Thermal Change*

Water has a chemical influence in that the body cells are primarily water. As we take water into the body, waste products of the cells' living processes are eliminated. Water may form the basis for irrigation of various body cavities, such as the bowel.

Of the bodily changes that may be produced by the use of water, the thermal is by far the most important. Although the heat from hydrotherapeutic applications does not penetrate deeply, it is quickly carried by the blood in the treat-

ment area. The rate of blood in the part is doubled, and as a result oxygen in the blood is increased, to the extent that blood from the veins cannot be distinguished in colour from blood from the arteries. Metabolism in the treated part increases, and the white blood cells increase in number. Moist heat is well known as a good pain reliever.

## *Application of Cold*

When we apply cold to a local body part the blood vessels contract and become smaller, and the result is that no fresh warm blood flows into the part. This action causes deep penetration of the cold. The circulation is slowed, the activity of the white blood cells is slowed, and the breaking down and building up of tissue (which we know as metabolism) is slowed. Cold applied to a sore spot is a good pain reliever. In acute joint pains, in sprains, and in acute bursitis the application of cold often affords more relief than does heat, because of its effect on metabolism and blood flow.

In addition to the effect of heat or cold on a body part, effect is produced deep in the body. This effect is accomplished through the nerves, which are influenced by the change in temperature. An example is an ice bag applied over the heart. The cold slows the rate of the heart and increases the force of its beat. If a fomentation (moist heat) is applied to the abdomen, the activity of the intestines and of the blood flowing through these tissues is increased. The gastric juices are also affected in that less of them is secreted by the stomach.

An extremely useful treatment measure is the application of heat and then cold. This combination produces marked stimulation of the area of circulation, so that the good effects of both heat and cold are experienced. \*\*\*