Awake!

DECEMBER 22, 1980

PEOPLE ARE RUNNING

–healthful or hazardous?

Also: Real love–dead or alive today?

Awake!®

December 22, 1980
Vol. 61, Num. 24

FEATURE ARTICLES

People are running! The fever began in the 1960's. Millions worldwide are jogging, thousands are running in marathons. What does it do for the body, or to the body? Is it healthful or hazardous? Some enthusiasts even go so far as to call running their religion

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WHY THIS MAGAZINE IS PUBLISHED

"Awake!" is for the enlightenment of the entire family. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it stays politically neutral and does not exalt one race above another. It also shows how to cope with today's problems. Most importantly, "Awake!" builds confidence in the Creator's promise of a peaceful and secure new order within our generation.

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Have You Ever Wondered . . .

What Is Jesus Christ Doing Now?

JESUS CHRIST was an outstanding man. He is viewed by millions worldwide as one of history's greatest teachers—even by many who are not his followers. But he lived and taught a long time ago, nearly 2,000 years ago!

HOW DO YOU VIEW HIM TODAY?

Many, during Christmastime, think of him as a baby cuddled in a manger. For instance, a little girl was taken to view the Nativity scene. Looking into the crib, she was puzzled and asked her mother, "Did Jesus ever grow up?" "Of course, dear! Why do you ask?" came the reply. "Well," responded the girl, "he hasn't grown at all since I saw him last year!"

We may smile at her youthful curiosity, but her question does make a point. He was not always "baby Jesus." You no doubt realize that Jesus grew up to become a great teacher. But did you also know that during his lifetime thousands of persons were convinced that he would become a great king? He is even called "King of kings."

JESUS AS KING—BUT WHEN?

Many in Jesus' day felt he would take up his kingly power over the world right then. But they were wrong. In one of his parables, Jesus showed that there would be a long wait before he became a world king. Alluding to himself, he spoke of 'a certain man of noble birth who traveled to a distant land to secure kingly power for himself and to return.' In Bible times such a trip "to a distant land" would take considerable time.—Luke 19:11-14.

So Jesus, after his death and resurrection, ascended to heaven and sat down at his Father's side waiting till he was given "rulership and dignity and kingdom, that the peoples, national groups and languages should all serve even him."—Dan. 7:13, 14.

To guide those who longed to "serve" this King of kings, Jesus gave a detailed sign to determine the start of his rule. He foretold that there would be international warfare, food shortages, earthquakes, disease epidemics and lawlessness or crime, to mention a few. Not that his rule would bring such conditions, but they would be prevalent when his rule began. Conditions would become so perplexing, Jesus said, that men would "become faint out of fear and expectation

of the things coming upon the inhabited earth." (Luke 21:26) Why not read for yourself the details at Matthew 24, Mark 13 and Luke 21?

By comparing conditions on earth since World War I (1914-1918) with Jesus' prophecy, one can see that he depicted conditions in our time. Therefore, Jesus must now be ruling in heaven.

IF NOW RULING, WHAT IS HE DOING?

He is finding those who really want to be his subjects and is gathering these into a united worldwide brotherhood. Jesus indicated this in a parable that described the start of his rule when 'he sits on his glorious throne.' He gives his attention to "all the nations" and begins to "separate people one from another, just as a shepherd separates the sheep from the goats."—Matt. 25:31-33.

People are given the opportunity to show how they really feel about the kingship of Jesus. After all these sheeplike ones have been gathered, Jesus will destroy the "goats" and invite the "sheep" to "inherit" the earthly realm of his kingdom. Psalm 72 describes how the King will richly bless his subjects. He 'will deliver from oppression and violence the poor one crying for help.' Also, there will be "plenty of grain on the earth." —Ps. 72:1, 12-14, 16.

Gone will be a society of wicked, oppressive, violent persons. Also eliminated will be food shortages, sickness, yes, even death. It is for these blessings that Jesus is now gathering his "sheep."—Rev. 21: 3, 4.

WHO ARE HIS SUBJECTS TODAY?

Not everyone wants to be a subject. Obedience to him as King would mean changes in their lives that many are unwilling to make. These would rather think of Jesus as an innocent baby, not as a mighty King.

For instance, an Englishwoman became very interested in Bible reading following visits made by Jehovah's Witnesses. After a short while she became convinced that the 'sign of the times' heralded that Jesus was ruling. Being an active church member, she spoke to her vicar many times about her findings. He enjoyed these discussions and eventually felt the time had come to alert his congregation to Christ's kingship and the coming Kingdom blessings.

In his Christmas Day sermon he spoke seriously of the need to look beyond Jesus as a baby, to accept him as King and to study the Bible so as to identify the 'sign of the times.' Alas, the congregation was highly displeased! Banding together, they sent a spokesman who told the clergyman: "Although we appreciated your sincerity in all you said, it was not what we came to hear." He was then warned: "If you persist in talking to us this way, we will all go elsewhere." Fearing the loss of a job, the minister complied. But who were the real losers? The congregation, which was content yearly to relive the "Christmas story." Jesus' kingship meant nothing to them. And the minister, too, was willing to quit talking about it. How much does it mean to you?

This experience does draw attention to one group who not only want Jesus as King but are recommending his kingdom to others in over 200 countries, just as Jesus foretold. (Matt. 24:14) They are well known for their unity and loyalty to this heavenly King. Eagerly they anticipate the blessings that Jesus' rule will soon bring to this earth. These Christians will gladly share with you even more knowledge about this hope and what Jesus is now doing as a heavenly King.

PEOPLE ARE RUNNING!

Statistics show that jogging is part of the daily routine of one third of the people in the Soviet Union. Twenty-five million in the United States, a recent estimate claims, are running. The running fever first struck in the 1960's. What are the benefits? And the hazards?

"PHYSICALLY active rats live 25 percent longer than sedentary ones." Experiments have already proved that, we are told. This has not yet been established in the case of humans, but the indications are that longevity is favorably affected by exercise.

One pathologist said that, on the basis of autopsies he has performed, two out of three deaths are premature and are related to loafer's heart, smoker's lung and drinker's liver. The U.S. Administration on Aging said: "Disuse is the mortal enemy of the human body. We know today that how a person lives, not how long he lives, is responsible for many of the physical problems normally associated with advanced age." Similarly one doctor observed: "Most of us don't wear out. We rust out."

Everyone believes in some kind of exercise, but many do not believe in sweating. Easy solutions, neatly packaged, 30 minutes of sweatless exercise a week, and a drinking man's diet—that is today's something-for-nothing syndrome. The American Medical Association's Committee on Exercise and Physical Fitness condemned effortless exercisers: "They do not provide any hidden benefits or values. Their most serious shortcoming is that most of them do little to improve the fitness of the heart and lungs, which are most in need of exercise today." Strenuous, prolonged exercise is the need, the committee said.

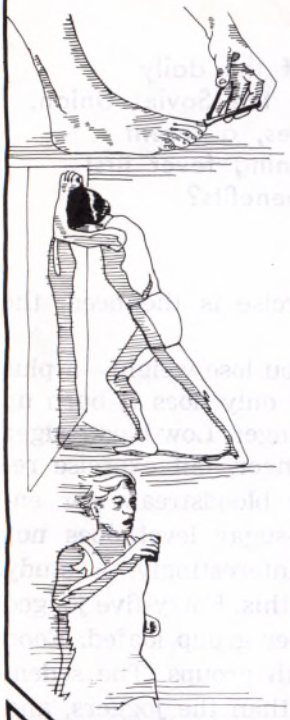
Running makes you lose weight—a plus for your heart. Not only does it burn up fats, it also curbs hunger. Low blood sugar is a stimulus to hunger, but exercise releases fats into the bloodstream for energy, so the blood-sugar level does not drop appreciably. Interestingly, a study with pigs confirmed this. Forty-five jogged on treadmills, another group loafed. Food was kept before both groups. The sedentary pigs ate more than the joggers, and at the end of the test the runners weighed 20 pounds* less than those that loafed.

It is a common belief that those who do heavy exercise, or work, need meat. It is energy that is needed for strenuous exercise, and it does not come from the consumption of meats. Mexico's renowned Tarahumara Indians run 150-mile† races for fun, in mountainous terrain, and do it on practically no meat, milk or eggs. Their food is primarily beans, squash and corn. Not only do they have such amazing endurance, they also live, on the average, extremely longer lives. A well-planned vegetarian diet supplies the body's needs.

Interestingly, a university professor found that over a four-year period medical claims for sedentary men averaged $400 (U.S.), but only $200 for regular exercis-

* 1 pound = 0.453 kilogram.
† 1 mile = 1.6 kilometers.

BEGINNING A RUNNING PROGRAM



If you are over 30, check with your doctor; if over 40, a treadmill test is advisable.

Start slowly, increase gradually, don't strain. Don't stubbornly hold to a schedule that is too hard. Modify it.

Don't save money on shoes. Get good shoes that give enough toe room, have padded soles, and where the heel of the foot is held firmly.

Keep your toenails clipped. Toes push toward the front of the shoe, and nails that press on the end turn black and sore.

Do stretching exercises before and after running, not calisthenics.

Run in an easy and relaxed style, comfortable for you. Don't land on the balls of your feet, but more flat-footed and roll forward.

Your pace should not leave you breathless, but able to talk as you jog. At first you may need to alternate walking with jogging.

Drink fluids before running, and during if distance is long. Dehydration is dangerous. If sweating is excessive, additional salt may be needed.

In the beginning some jog every day. Three days a week is preferred by many joggers for their regular training. Sufficient rest is essential.

RUNNING CAN BE HAZARDOUS TO YOUR HEALTH

Muscle soreness, muscle cramps, a pain in the side while running. To be expected by beginners. Uncomfortable, but temporary in nature.

Blisters are usually a temporary problem, but should be cared for.

Bone bruises—inflammation of the heel from repeated pounding.

Inflammation of ligaments in the feet. Usually the symptom is a painful heel, and can lead to heel spurs—a bony growth on the heel bone.

Achilles' tendinitis, an inflammation of the sheath within which slides the big tendon that connects heel and calf muscle.

Shin splints, painful inflammation of shin muscles and tendons.

Small stress fractures in bones of feet and lower legs.

Excessive wear between kneecap and end of upper leg bone, the femur. Kneecap's cartilage becomes worn, pain and swelling result.

Warning signs of exercising beyond your limits: chest pains during exercise, heart palpitations when you are idle, and unexplained dizziness. Stop exercising and see your doctor.

ers. One life-insurance firm reduced premiums as much as 20 percent for those who did 20 minutes of exercise, three times weekly, that made their heart and lungs work hard.

Extravagant Claims

Dr. T. J. Bassler, a marathoning pathologist, contends: "It is biologically impossible for atherosclerosis to progress in anyone capable of even walking the 42-kilometer distance [the distance of the marathon]." He further said: "Until there is autopsy evidence of fatal atherosclerosis among marathon runners, it seems prudent to advise this lifestyle for the prevention of this disease."

The *New England Journal of Medicine* did come back with autopsy evidence of the disease causing death to one runner, and other cases where autopsies showed advanced atherosclerosis. Several cases are also known where long-distance runners, including marathoners, have died of heart attacks. There is no dissent from the fact that exercise is valuable, but exercise programs must be tailored to the individual.

Dr. Chris Barnard, the heart-transplant surgeon, does some jogging. He is not enthused, however, about the craze it has become. Especially is he concerned about where so much of the running is done—in cities. "A study presented in Cape Town some years ago," he said, "found that city pigeons had seven times the amount of lead in their bones than that in their country cousins." He added: "Every main road is a sewer of noxious gases from car exhausts."

Marathoners by the Thousands!

Millions of runners are doing a few miles two or three times a week, but many thousands go beyond this and enter marathons—a distance of 26 miles and 385 yards. This year, for example, 14,012 entered the New York marathon. Not all were able to finish, but 12,622 did. It was the first New York marathon for 4,000. Included in the total were hundreds of foreigners from 44 countries. About two million spectators lined the streets to cheer them on.

Alberto Salazar won, in 2 hours 9 minutes 41 seconds. The 74th finisher was Grete Waitz, the first woman finisher, who broke the world's record for women—the new record, 2 hours 25 minutes 41 seconds. The oldest finisher was 77 years old, the youngest 10. Runners from five years old to 84 have participated in marathons. Also, some in wheelchairs, some who are blind, and some with artificial legs.

Ancient Distance Runners

Twenty-five hundred years ago, we are told, the Greek courier Pheidippides ran 22 miles from the battle of Marathon to Athens to bring the news of a Greek victory over the Persians. Tradition says he gasped out the good news and dropped dead. It is his run that is now commemorated in the marathon race.

But Pheidippides was not the first to run such a distance. The prophet Elijah came closer to the marathon distance 400 years before the Greek courier. From Mt. Carmel, near the Mediterranean Sea, to Jezreel is about 25 miles, or 40 kilometers. Elijah did that run in the power of Jehovah: "And the very hand of Jehovah proved to be upon Elijah, so that he girded up his hips and went running ahead of Ahab [riding in a chariot] all the way to Jezreel."—1 Ki. 18:46.

Running is good. It has many benefits. There are also hazards. It is wisdom to exercise caution and practice moderation. And don't make it a religion, as some have. The three articles that follow explain more fully.

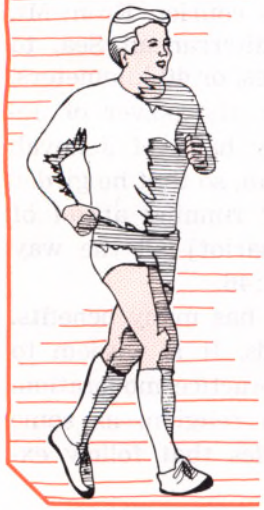
You do not choose to run?

Too strenuous? Too boring? No fun? Too time-consuming? No place to jog? Then choose some other aerobics

AEROBICS? None of the dedicated runners would have to ask what these are, but some others might. The *Encyclopædia Britannica* tells us:

"AEROBICS, system of physical conditioning developed to increase the efficiency of the body's intake of oxygen. Typical aerobic exercises (e.g., walking, running, swimming, and cycling) stimulate heart and lung activity for a time period long enough to produce beneficial changes in the body (training effect). A point-system chart is used to demonstrate the amount of energy expended on an exercise."—1976 edition, volume 1, page 113 of the Micropædia.

Aerobic charts gauge an individual's improvement, and they have been developed for different age groups and for various kinds of exercise. In the above definition the key phrase that makes exercise aerobic is "a time period long enough to produce beneficial changes in the body." The heart must be made to beat fast enough, without letup, over a minimum period of time depending on age, or the beneficial changes will not occur. What these changes are is explained in the two-page article following this one.



How fast must the heart beat to make exercise qualify as aerobic? One suggested formula: Write down 220. Subtract your age. This number represents your estimated maximum heart rate per minute. Multiply this number by .7 and you will have the rate per minute your heart should beat for aerobic training.

Now about your objections to running. Too strenuous? Try WALKING. It may be the least strenuous and safest aerobic exercise for the greater number of people. It can be safely followed all the years of your life, into old age. Even those contemplating running may be wise to start with walking, then combining walking and running, and finally running. Remember, however, for the walking to be aerobic it must be brisk. A leisurely stroll, even normal walking

speed, does not raise the heartbeat enough. In one test, men 40 to 57 years old walked at a fast pace for 40 minutes, four days a week, and showed improvement equal to that of men of the same age who jogged for 30 minutes three days a week. Walking takes more time, but it gets the same results and is safer for many people.

You have no place to jog, and it's too time-consuming? Try ROPE-SKIPPING. It can be done indoors or out. Weather is no factor. It takes less time and gives comparable results. "For producing the greatest fitness in the least amount of time," says Dr. Kaare Rodahl of the Institute of Work Physiology in Oslo, Norway, "nothing surpasses the simple jump rope." At Arizona State University half of 92 unfit students were put on a 30-minutes-a-day jogging program, the other half were on a 10-minutes-a-day rope-skipping program. Later tests showed both groups almost identical in cardiovascular efficiency.

Running is too boring? Try BICYCLING. But exercise caution that cars don't hit you, and that you don't hit pedestrians. Pick out back roads if they are available, but don't stop along the way to smell the roses. Keep a steady pace that will make your heart work at the necessary rate to make your training aerobic.

No fun? Try SWIMMING. You keep cool. The water is exhilarating. A rhythm is established as you plow through the water with steady, powerful strokes. It is an enjoyable exercise that works every muscle in the body, and if it is continuous throughout the training period the heart and the lungs are worked sufficiently to produce the benefits.

There are still other possibilities. Tennis is popular now. Fast singles are good—playing doubles can give players too much rest. Basketball can be aerobic, if action is not interrupted by too many foul shots. Whatever form of exercise you choose, if it is to give the benefits of aerobics it must keep you moving, keep you huffing and puffing. Its demand on the heart and lungs must be heavy, sustained and over a minimum period of time.

And, of course, always within the safe limits of your own body's capacities, as determined by a doctor's examination. Now, please turn the page to see the benefits of aerobic exercise.

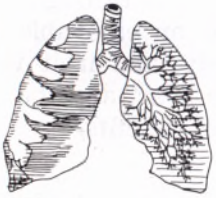
Is running your heart's desire?

It seems so, for the heart thrives on it. Running is also desirable for other parts of your body

WHAT RUNNING DOES FOR YOUR HEART

Makes it work less while doing more. With exercise the heart muscle's fibers lengthen and strengthen, its chambers enlarge and as a result can pump more blood with each contraction. Before training, one stroke of the heart may pump less than half a cup; but after training, each beat may pump almost a whole cup. Because it pumps more with each beat, it beats slower and has more rest between contractions. From this training, over a period of time the heartbeats measured when you are at rest can show a decrease from 10 to 20 beats per minute. The small arteries that carry blood to the heart enlarge with training and are able to supply more oxygen-rich blood for the heart. Training also results in a gradual lowering of blood pressure.

WHAT RUNNING DOES FOR YOUR LUNGS



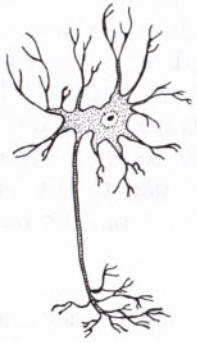
Strenuous exercise causes the muscle fibers to demand lots of oxygen. They get it from the blood, which picks it up from the lungs. The lungs, with their hundreds of millions of moist, foamlike bubbles of tissue known as alveoli, are efficient suppliers of oxygen to the blood that streams by them. They are very adaptable, changing quickly in response to exercise. The lungs' blood vessels dilate, increasing the area where oxygen passes into the bloodstream. The breathing muscles of the abdomen, diaphragm and thorax become stronger and more efficient. The amount of air the lungs of a trained runner can take in increases greatly—the volume per minute perhaps tripling.

WHAT RUNNING DOES FOR YOUR BLOOD

Aerobic exercise produces in greater quantities the enzyme fibrinolysin. It dissolves blood clots, and it is theorized that it may also dissolve long-standing clots in the coronary arteries that could cause heart attacks. In one test the clot-dissolving

ability of blood nearly quadrupled in some persons engaged in a 10-week exercising program. Trained runners have higher levels of high-density lipoproteins (HDL) in their blood. HDL transports excess cholesterol from artery walls, reducing buildups of fats that might clog vessels and trigger heart attacks. In trained muscles adjacent arteries sprout new branches and capillaries become more dense, making more oxygen available to muscle fibers. Exercise also increases the number of red blood cells, the oxygen carriers.

WHAT RUNNING DOES FOR YOUR NERVES



Nerves, even the tiny hairlike tendrils, become more efficient at transmitting electrochemical impulses, and thereby more effectively activate muscle fibers to increase endurance and ultimately strength. With training and use, reflexes replace voluntary actions and movement becomes more efficient. Unneeded muscles relax more and energy is conserved. Dr. Lucien Brouha, authority on the physiology of athletics, states: "The final result is that for a given performance a decrease in energy expenditure occurs which can reach one-quarter of the total energy needed before training." Men are not mice, yet it is noteworthy that young mice that exercised developed larger motor neurons, a type of nerve cells, than those that didn't.

WHAT RUNNING DOES FOR YOUR MIND

Runners speak of the joys of running and "natural highs." More specifically, a psychiatric hospital in Knoxville, Tennessee, found that running made patients less anxious. Dr. Alan Clark of St. Joseph's Infirmary in Atlanta, Georgia, says: "It is well known that exercise is the best tranquilizer. I refuse to medicate patients with simple neurotic anxiety until they give aerobic exercises an adequate trial." An article in *Medical World News* was headlined: "Jogging May Keep Depressives Off Therapist's Couch." It reported two studies, from the University of Wisconsin and the University of Virginia, that confirmed this view. One study has shown that exercise stimulates production in the brain of the neurotransmitter norepinephrine, which relieves depression.

WHAT RUNNING DOES FOR YOUR MUSCLES

That muscles desire exercise should be apparent to everyone. Without it they waste away. The specifics of their functioning, however, are so amazing that they will be discussed in the following article. Also, a training of far greater importance will be considered.

What muscles can do, and can't do

Their simplest movements are marvels we take for granted. With training, they perform feats of strength and endurance that are amazing. But there is another kind of training that is far more important, that can do what muscles can never do!

A BOX is full of feathers. You want to pick it up. Your mind instructs the sets of muscles involved, and you pick up the feathers. Now the box is filled with lead bars. Your mind instructs the same set of muscles that lifted the feathers now to lift the lead, and they do so. Simple? Not at all.

A skeletal muscle fiber does not contract with less or more force for light or heavy weights. When a nerve ending tells the fiber to contract, it does so completely. If it contracts at all, it contracts all out. How is it, then, that at one command muscles exert only enough force to lift feathers, and at another command those same muscles muster the greater force needed to lift lead?

A muscle is made up of many bundles of tiny muscle fibers, each bundle being called a motor unit. To each unit there is a motor nerve, which at its tip branches out so that each muscle fiber has its own individual nerve ending to stimulate it. The electrochemical impulse is transmitted by chemicals from the nerve ending to the fiber, where it again becomes electrochemical. The fiber contracts. All the fibers in that bundle or motor unit contract.

Now, not all the bundles of fibers of a muscle contract when that muscle is used. If the mind knows it is only lifting feathers, the central nervous system signals only the comparatively few bundles needed to lift feathers. But if it is lead that is to be lifted, many more bundles will be stimulated to contract.

Sometimes the mind is fooled. If it thinks the box is full of feathers when it contains lead, not enough fibers are told to contract and the mind is surprised. It seems like the box has been nailed to the floor. But if the mind thinks the box is full of lead but has only feathers, many bundles of fibers are engaged to lift lead, and the box seems to fly up from the floor.

Decisions! Decisions!

The point is, the central nervous system is constantly making decisions as to how many bundles of fibers it must signal to contract for the many works to be done by the some 650 muscles in the body. Sensory organs in the fibers, called stretch receptors, monitor the fibers and send back reports to the central nervous system, and by this feedback they help in the decision-making. You may hate to make decisions, but unconsciously you are making millions of them constantly!

The more fibers that contract, the bigger and harder the muscle will be. For example, your biceps muscle in your upper arm contracts to lift your hand to scratch your head. Not many bundles of fibers are needed, and your biceps is quite soft. But in the same movement hoist a 30-pound weight to your shoulder, and your biceps will bulge and harden as many more fibers go to work.

Some muscles have a much finer control over tension than others. The fingers, for example, can close with an iron grip, or delicately handle thin-shelled eggs. Such

muscles contain many fiber bundles, but each bundle with only a few fibers—some no more than 10. Other large muscles, as some in the legs, are incapable of such finely graded movements. They have fewer fiber bundles, but many more fibers in each—often more than 100.

Skeletal muscles have basically two kinds of fibers: dark ones for slower, steady use; white ones for quick bursts of action. (Called slow-twitch and fast-twitch fibers.) Some muscles are almost entirely made up of slow fibers, but others have slow and fast intermingled. Persons who are unusually quick in their movements have more white or fast fibers than those persons whose movements are slower. Agile gymnasts, for example, need fast fibers for the dazzling and explosive gyrations with which they amaze us. Also, outstanding sprinters have more of these fast fibers than do the long-distance runners. Training makes a difference, but it cannot change the proportion of fast and slow fibers—that's hereditary, a gift.

Where the Energy Comes From

ATP (adenosine triphosphate) is the energy-rich source for muscle action. It is produced in the muscle fibers by small bodies called mitochondria and is formed in several ways. Fats in muscle tissue (adipose tissue) are broken down to become free fatty acids in the muscle and also in the blood. Eventually, in the muscle fibers they are oxidized to release energy to make ATP. Glucose from the blood is also oxidized in the muscle fibers to form ATP. Some glucose from the blood is stored in the muscles as carbohydrates, called glycogen. Then, as ATP is needed, this glycogen is broken down into glucose, which, without the use of oxygen, produces ATP.

These methods for making ATP are used simultaneously, but in varying degrees,

WHAT AEROBIC EXERCISE DOES FOR MUSCLES

Muscle fibers become stronger and contract faster.

Mitochondria are increased in number —they make ATP.

The number of enzymes needed by mitochondria to make ATP increases —three times as much in distance runners as in sedentary persons.

The muscle's myoglobin often doubles. It carries oxygen to the mitochondria. More myoglobin means more oxygen.

Arteries sprout new branches, capillaries increase, often doubling. This means more blood supply of oxygen to muscles.

Because of this increased circulation and more myoglobin, oxygen supply is more efficient and less blood flow is needed.

Amount of fats oxidized increases, supplying more ATP.

Oxidation of glucose increases—another source of ATP.

Trained muscles contain higher concentrations of stored carbohydrates (glycogen)—the main energy source for high-intensity exercise over long periods of time.

Trained muscles do not accumulate lactic acid as fast, and can hold more than untrained muscles; hence lessen fatigue.

WHAT LACK OF EXERCISE DOES TO MUSCLES

Muscles become smaller, waste away, atrophy. Obvious when casts are removed from broken arms or legs—muscles shriveled.

In one study, athletes spent 20 days in bed. Oxygen intake capacity dropped over one fourth. Heart's pumping capacity dropped same amount. Red blood cells dropped 15 percent.

according to the circumstances. The kind of exercise, its intensity, its duration, the physical fitness of the individual—all are factors governing how much ATP each method will supply at given times. Relative to distance running, however, when the exercise has been intense for a long time, the mainstay for ATP production is glycogen.

Marathoners often do what is called carbohydrate-loading. A few days before a race they gorge on carbohydrates, and in so doing they can increase the amount of glycogen stored in their muscles by as much as 300 percent. A by-product of this use of glycogen, however, is lactic acid, and it is its accumulation in the muscles that causes fatigue, and eventually muscle soreness.

Worship Muscles, or Their Maker?

Muscles can do many things: Throw a ball and make it curve and drop and slide. Balance the body upright on one hand. Send the body gracefully flying, flipping, spinning through the air. Muscles of one arm can hoist weights of hundreds of pounds overhead. Muscles in legs can propel the body over a bar seven feet high, or over the ground nearly 30 feet, or race 100 yards in nearly nine seconds, or a mile in less than four minutes, or 26 miles in a little over two hours. Or they can keep running for 50 miles, or 100. Tarahumara Indians in Mexico run 200 miles. The dubious claim is made that the Mahetangs, Tibetan monks especially trained for "swiftness of foot," run 300 miles in 30 hours while repeating their sacred mantras in time to their strides and breathing.

Muscles are awesome. But muscles are not gods. Some runners seem to think so —a minority, doubtless. One likens running to the search for the Holy Grail. Another runner claims that "the quest of spirit through the body has just begun." Dr. George Sheehan, called by many the high priest of running, said: "My danger is that I will fail to reach my limits and find God. But here my running helps." A woman jogger likened her running experience to a conversion. The wife of a runner said: "Tom used to be a Methodist. Now he's a runner." In his book on running, Joel Henning said: "It is indeed a form of worship, an attempt to find God." Bob Anderson, editor of *On the Run,* declared: "Someone once said, 'For humanity to survive, it will have to invent a new religion.' The religion has been invented. It is the religion of the runner."

But wait a minute! Muscles can't save. Only their Maker can. Muscles reflect Jehovah's creative wisdom. See his genius in their agility, speed, strength, endurance. See it in the electrochemical complexities, millions of reactions in millions of fibers, every second of the day, monitored and synchronized without thought from us. Without thought from us as they go about their business of keeping us alive: lungs breathing, heart beating, blood circulating, organs digesting, glands secreting, electrical circuits racing—and much, much more we're never aware of.

Muscular training is beneficial, but not to be compared to training in godly devotion. "Bodily training is beneficial for a little," the apostle Paul wrote, "but godly devotion is beneficial for all things, as it holds promise of the life now and that which is to come." (1 Tim. 4:8) Enjoy whatever kind of exercise you do. Relish its benefits. It can make you feel better. Godly devotion, however, can do what muscles can never do—make you live longer, even forever. As the psalmist sang:

"The LORD sets no store by the strength of a horse and takes no pleasure in a runner's legs; his pleasure is in those who fear him."—Ps. 147:10, 11, The New English Bible.

On aphids, ants and "lions"

ASK a farmer what he thinks of aphids and he may make your ears tingle. These tiny insects suck the sap from tender leaves and stems in his crop and can do a great deal of damage.

On the other hand, beekeepers in Germany prize aphids highly. In the Black Forest there lives an aphid that gives off a substance called honeydew, which bees love. Beekeepers from far away travel there with their bee colonies. After the bees get honeydew from the aphids they can make expensive, famous fir honey for their owners.

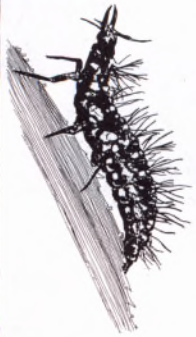
Other insects are divided in their feelings toward aphids, just as people are. Certain species of ants are so fond of aphids (for the honeydew!) that they protect their little friends from their enemies and even hide them underground.

The fact is that aphids are already well equipped for survival, even without the help of friendly ants. They have a bewildering sex life, for one thing, which practically assures rapid multiplication. Several generations of aphids may not even have to mate in order to produce offspring! The aphids are born with eggs for other aphids right inside them. These eggs hatch and are born as live aphids with more eggs inside!

In other species, the aphids do not grow wings if there is plenty of food where they are, but let the food supply run short and the wings begin to grow! Soon they fly off to find more food. As one source put it, "Here it is literally true that hunger gives wings."

If it weren't for their natural enemies, the earth might be overrun with aphids. But what happens when aphids are protected against their enemies by their friends, the ants?

The "aphid lion" (the larva of the green lacewing) is a creature that has a voracious appetite for aphids. It is big, gray, and bristled, while the aphids it likes to eat are small, white, and covered with a fluffy waxlike secretion. As soon as the aphid lion shows up for dinner, alert ants attack it, driving it off.



What does the aphid lion do? Some aphid lions sneak up on aphids and snatch bits of the fluffy wax from their backs, using them to disguise themselves until they look like overgrown aphids. Then these 'lions in aphids' clothing' sneak into the "flock" while the ant "shepherds" are unaware. If an ant gets suspicious, the disguised lion hides its big jaws by putting its head down, and stays very still. Generally, it is inspected and then left alone. As soon as the guardian ant walks away, too bad for the nearest aphid!

To most people, aphids are just tiny dots on a leaf, at most a nuisance. Closer examination, however, reveals the amazing and sometimes humorous handiwork of the Creator.

Real Love – Dead or Alive Today?

"I DON'T know what I'm going to do," sobbed Esther who has been confined to a wheelchair for 10 years with multiple sclerosis. Her home had just been robbed by heartless thieves who took everything they could find—$282 (U.S.), four pounds of chicken, milk and her 10-year-old son's back-to-school clothes. This helpless cripple was now left with only 25 cents to feed and clothe herself and her son.

This woman's experience is just one of millions worldwide that illustrate how those less fortunate are preyed upon. Perhaps your heart may ache to read of such tragedies. And indeed today's world is saturated with selfishness and greed. Violence and terrorism frequently scream from news headlines. Many feel that real love has died.

Yet visitors to a current series of worldwide conventions of Jehovah's Witnesses could not help but feel that real love was very much alive. For instance, in Japan, a large number of crippled and handicapped ones were a part of the more than 100,000 assembled. The loving care these received was moving.

Imagine the scene: a whole section of the seating area is reserved for handicapped ones; scores of helpless cripples are wheeled in; at mealtimes volunteers bring these ones lunch and tenderly help them to eat. (See picture this page.) One man so crippled and bent over that he can hardly eat with his one good hand is ably assisted by a friend who sets up, just for him, a little table. This care from so many is indeed a touching sight.

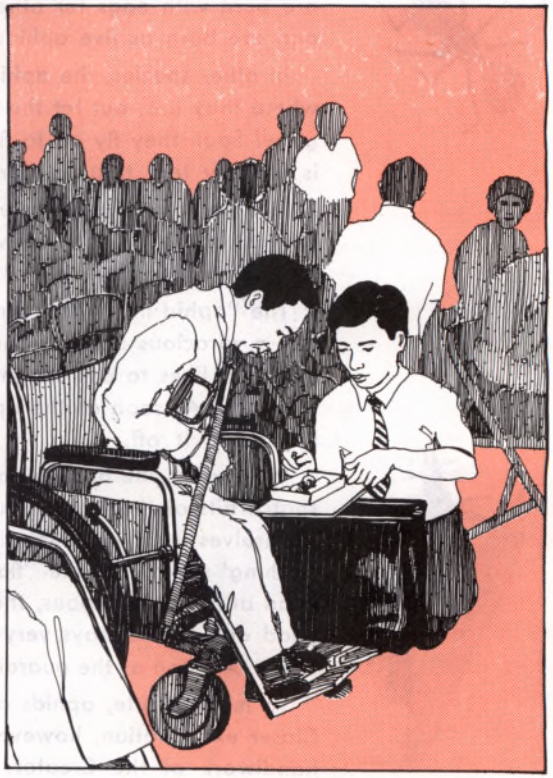
Yet such kindness was not limited to these "Divine Love" conventions in Japan. Three multiple sclerosis victims in Florence, Oregon, felt that attending the convention was not possible because they could not be away overnight from the special care of their home center. However, fellow Witnesses picked them up and returned them *each day*—a trip of 170 miles (274 km). They also fed and totally cared for the needs of these invalids *all four days* of the convention.

However, the love evident at these conventions, which already have been attended by 2,290,855 in 39 countries, was not merely a concern for the handicapped.

Love Prompted in the Home

Love has deteriorated in many families to the point that, according to a team of sociologists, "The amount of intense physical violence" in homes in the United States

Real love in action: a handicapped conventioner in Japan is assisted with his meal



is "second only to that seen in wars and riots!" But, at the conventions, families were urged to develop self-sacrificing love. "A happy marriage," said one speaker, "is the union of two good forgivers."

One attentive delegate in Japan especially appreciated this counsel. Formerly she was seeking a divorce due to being overwhelmed with distrust of her husband. Actually, she did not trust *anyone.* She became mentally unstable and began a life of overdrinking and sexual immorality that led to her contemplating suicide. However, a study of the Bible with Jehovah's Witnesses helped her to change all of this and restore right relations with her husband. She was among the 25,389 baptized worldwide thus far at these conventions.

"Even though I'm only 16 years old, I've done everything immoral there is to do!" began Tammy, who was baptized at one of the conventions in the United States. "It seemed that whenever my father was around, I just rebelled." Though she ran away from home and had a "wild time" with her "friends," she occasionally would associate with youngsters who were Witnesses. "I always remember feeling good the next day after being with the Witnesses. This, with the love and help the Witnesses offered, drew me into Jehovah's family," concluded Tammy. Now she found that her homelife blossomed with real love.

Even the absence of a father does not prevent these families from developing love

Hearing that the convention program would have a talk to help single parents, one of these could hardly wait. Then, suddenly, her car was demolished in a serious accident just a few weeks before the convention. As Janet and her three children recovered from their cuts and bruises she dejectedly realized that now she had no way to pull her travel trailer to the convention.

Soon, one of the Witnesses offered her a van to use; another repaired her vandalized trailer; even on the trip when a trailer wheel snapped off, a Witness helped her to get going again. As Janet sat in the audience, almost in tears because of the love she had received, she heartily agreed with the speaker, who said: "Rejoice in the knowledge that you single par-

ents are part of God's spiritual family and have the love and support of many brothers and sisters!"

A Brotherhood of Love

Was the love shown Janet just an isolated incident? An outstanding example of hospitality involving 2,400 Witnesses answers, No! From Hungary and Poland arrangements were made with the cooperation of the government for several thousand Witnesses to attend the convention in Vienna, Austria. But where would all of these stay? How would they afford to eat since they each traveled with only a limited amount of foreign currency?

The Witnesses in Vienna met many of the visitors at the border. For the next four days or longer, they fed, housed and transported these ones and made other provisions for them. With only 31 congregations in the city of Vienna, the response to care for so many visitors was truly remarkable. Some of the Austrian Witnesses drove literally hundreds of miles, making countless trips to care for their fellow Witnesses. Many had from 10 to 15 of these visitors staying in their homes. One Witness who lived near the convention site ended up with 40 in his house!

An unforgettable moment climaxed the close of the convention. Because of language differences, the visitors assembled in separate locations, but on the final day all the groups joined together in the large stadium to sing the final song. Here were persons who, up till a few days prior, had been total strangers—related only by faith. But now as they sang, "We thank you, Jehovah, for our brotherhood," most got choked up with emotion. Tears unashamedly streamed down beaming faces. As one Pole, trying to hold back the tears, said to a delegate from the United States: "I can hardly contain myself for the joy of being here." As he began to explain his gratitude for the love of the Austrian Witnesses, he burst into tears and had to excuse himself. Following the song, no one wanted to leave. Many who lingered waved and applauded. This was a stirring expression of an international brotherhood.

Many have noted such unity. For instance, a non-Witness in Italy remarked to several Witnesses: "If all were like Jehovah's Witnesses, there would really be peace!" People can see real love among the Witnesses. This is significant in view of Jesus' words: "By this all will know that you are my disciples, *if you have love among yourselves.*"—John 13:34, 35.

Terrorism Replaced by Love

"Has the world gone crazy?" blared a recent headline in the San Antonio, Texas (U.S.), *Express-News*. The article that followed showed that terrorism "is mushrooming at an alarming rate" and is "haunting the world." You yourself may recall recent acts of terrorism. However, unless those who perpetuate such acts change, there seems to be little chance of conditions improving. But can a terrorist be changed?

One prison inmate in Madrid, Spain, is serving sentences totaling *nearly 500 years* for acts of terrorism and armed robbery! After serving over a decade, he began to study the Bible with Jehovah's Witnesses. His conduct improved remarkably. The astonished prison authorities even granted him a special four-day leave to attend the "Divine Love" convention. Overwhelmed with his first convention, he said: "This is too marvelous to be true. I cannot describe how I feel!" Real love changed his personality.

"Raised in the midst of violence, trained in military camps to become a hired assassin," began the story in the Italian newspaper *Giornale di Bergamo* about another man baptized at one of these conventions. The article stated that this young man "has come out of this criminal tunnel

[to become] one of Jehovah's Witnesses." His violent disposition was replaced by a 'calm serenity' that even impressed the news reporter.

Would it not be wonderful if such changes could take place on a global scale? Our earth certainly would be a much more secure place in which to live. Yet not everyone is willing to change. For this reason Bible prophecy shows that soon the righteous rule of God's kingdom will "crush" those who oppress, and deliver "from violence" those who now live according to the Bible. Then, lovers of peace will flourish "to the ends of the earth."—Ps. 72: 1-14.

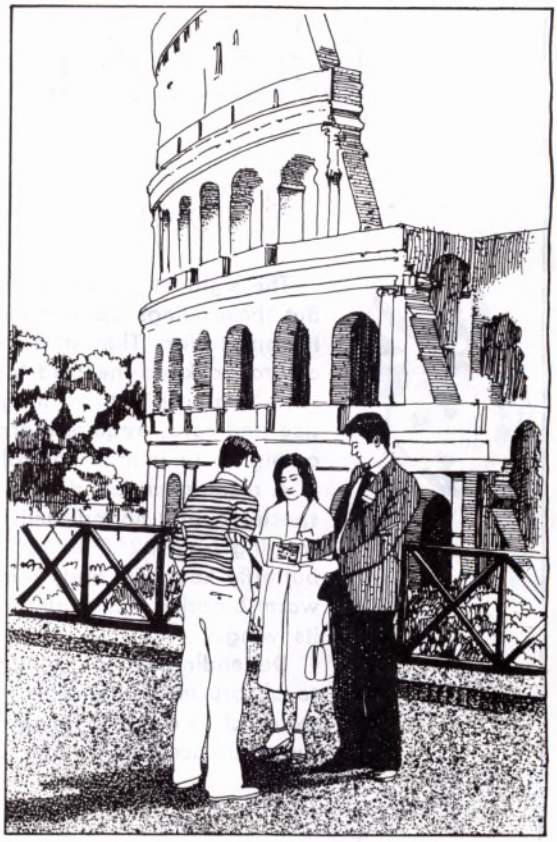
Genuine Love of Neighbor

To help persons to learn about this inspiring hope, Jehovah's Witnesses spend many hours talking to others about it. Even during the convention, time was set aside to visit the homes of the people and share with others this message of love and hope. In Japan, among the thousands that shared in this preaching activity were two Christian women who called at a small company. They were warmly greeted by the company president who requested some of their literature. Noting his wedding ring (not very common in Japan) one of the Witnesses inquired about his wife.

"She died four years ago," uttered the grieving executive. He was then amazed, and tears welled up in his eyes, as the Witnesses showed him the Bible hope of "a resurrection of both the righteous and the unrighteous." (Acts 24:15) The following Sunday he came to the convention eagerly seeking more Bible knowledge. How much he appreciated the loving call of those two women!

What Builds True Love?

Almost everyone agrees that the world needs more love. But what is the key to developing such? "He that does not love," states the Bible, "has not come to know God, because God is love." (1 John 4:8) Getting to know God personally requires an accurate understanding of his Word, the Bible. Through such knowledge, one sees what a loving God the Creator is and is thereby drawn to him. The appreciative learner is moved to imitate that same love in his own life. This is what prompted the love that was obviously very much alive at these recent conventions.



Near the Colosseum in Rome, a place of much bloodshed in ancient times, Witnesses show love by sharing a message of hope

Why not get in touch with Jehovah's Witnesses and benefit personally from this free assistance to understand the Bible and thereby get to know God even better? Your own life can add to the testimony that *real love is alive in today's world.*

Beautiful and brainy

Beauty with purpose

The sight of gorgeous butterfly wings often thrills young and old alike. But those wings apparently are not only a beautiful means of butterfly transportation. They also act as a sophisticated system of temperature control to keep the cold-blooded insect warm enough to function. In fact, says "Natural History" magazine, "virtually all butterfly species, regardless of size and color, require thoracic [middle body] temperatures of 81° F [27° C] or higher to initiate controlled flight."

A researcher found that the average thoracic temperature of 50 butterfly species during normal activity was 95° F (35° C), with various species ranging from 82° F to 105° F (28° to 41° C). Hence, the cold-blooded butterfly keeps its body temperature in an operating range similar to warm-blooded mammals and birds (90°-104° F, 32°-40° C) by means of its wings.

Depending on species and circumstances, the wings may spread out flat to absorb maximum solar radiation, extend vertically or at an angle, or even act as a shield for the thorax to maintain the necessary temperature—quite an accomplishment for a lowly insect!

Incredible bee brain

The incredible wisdom found in a tiny bee's brain continues to dumbfound scientists. "Natural History" magazine describes an experiment that gives "perhaps the eeriest example that argues against bees being nothing more than elegant pieces of clockwork." A dish of sugar solution is placed near the hive and moved every few minutes in increasingly large jumps, until it may be transported 100 feet (30 m) or more each time. According to the article, researchers have all noted that "a time comes during training when the bees will begin to 'catch on,' to anticipate where the food will be next, fly that distance, and wait."

Marvels the writer: "I can imagine nothing about [gathering nectar from] flowers that could provide a reason for evolving such a behavioral program. Either the bees are very smart or they have been programmed with such exquisite finesse as to leave us in doubt about the source of their abilities. . . . if we concede that even the programming of a one-milligram honeybee brain is too intricate to be distinguished easily from some sort of insect 'free will,' where does this leave us with regard to analyzing the sources of our own incredibly complex species-specific human behavior?" It leaves appreciative ones acknowledging the "Programmer" who is the Source of all these incredible creations.

New Year's Day —How New?

IT'S early New Year's Eve as Joe gets behind the wheel of his car and leaves home to pick up his girl friend. Later, as he turns down her road, Joe smiles, thinking about the midnight hour, when the New Year will be welcomed in with noisemakers, and every pretty girl at the dance will be eligible to be kissed.

But he does make a mental note to watch his drinking, because he doesn't want an accident when coming home. It won't be easy though; almost everyone drinks too much at New Year's parties.

Getting home late presents no problem. After all, Joe has nothing planned for New Year's Day except sleeping late and watching football in the afternoon.

Joe doesn't think of himself as religious. So he might be surprised to learn that everything on his agenda—noisemaking, kissing pretty girls, drinking—descended from the rituals of ancient religions that Joe would want no part of.

Joe's counterparts in Japan, Mexico, China, Germany and elsewhere celebrate New Year's differently from Joe and from one another. Yet they, too, are upholding the same ancient myths, usually without knowing it. What are those myths? Why is New Year's the oldest, most universal and least understood of man's holidays?

First New Year's Celebrations

For insight on Joe's New Year's party let's turn to ancient Mesopotamia, where the first New Year's festivals were held.

The Mesopotamians believed that the universe was created after a colossal struggle between their god Marduk and Tiamat, goddess of chaos. Marduk violently brought forth order from chaos. Every year his accomplishment was memorialized when the life-giving rains arrived.

Since the king represented order, he went into seclusion for several days, during which the populace literally re-created chaos by drinking, allowing slaves to insult their masters, and by committing sexual immorality. The ancient Romans picked up the same idea in their festival of the Saturnalia in December.

Does it sound a little like Joe's party? It should. As stated in a 1972 book about celebrations: "There is a great deal of excessive drinking throughout the world on New Year's Eve. This drunkenness is a secular leftover of a rite that was once religious in character; a personal re-enacting of the chaotic world that existed before the ordered cosmos was created by God," that is, as viewed by the religion of ancient Babylon.

In Babylon, where the New Year's Festival was most highly developed, it also involved an elaborate ritual of exorcism, to get the 'demons of chaos' out of the city as the New Year began. At Joe's party this is done by noisemakers, sirens and boat whistles. The Chinese, who got many of their religious ideas from Babylon, chase the demons away with firecrackers.

Ritual Combat

Of course, the ancient Babylonians did not have a football game on New Year's Day. But for their celebration, all the gods of the towns surrounding Babylon were brought into the city and joined in an impressive parade, to help Marduk win his battle with Tiamat. The great battle itself was relived through a public reading of the *Enuma elish,* the creation epic that told the story.

Today in Pasadena, California, a great parade precedes the annual New Year's Rose Bowl football game. Is the game a modern version of that ancient ritual battle? The *Encyclopædia Britannica* puts it this way: "Football games in the U.S. have all the external trappings of religious festivals . . . one side representing evil and the other good, depending upon the viewpoint of the members of the audience. Leading the congregation are the priestesses (cheerleaders) . . . Operating on the principle of sympathetic magic, the priestesses attempt to transfer the enthusiasm of the crowd to the appropriate combatants."—Macropædia, 1976, Vol. 7, p. 202.

Whether it descended from an ancient ritual or not, it has taken on a religious significance for some fans.

Divination

In many Germanic countries, it is the custom to melt lead or tin and plunge it into water at the stroke of midnight, just as the New Year arrives. Then, by looking at the shape created or the shadow cast by that shape, everyone tries to guess what the New Year holds in store.

In Mexico, crowds of people visit the ancient Mayan city of Mitla on January 1. Among its ruins there is a stone 'Column of Life.' While a person tries to embrace the column completely, someone else determines how many fingerbreadths of space remain between the outstretched hands. This is supposed to correspond to the number of years the person embracing the column will live.

The Japanese are very concerned about their first dream of the New Year, which is felt to reveal their luck for the coming year. Special good-luck papers and charms may be purchased to ensure a pleasant dream.

All of this reminds us of the ancient Babylonian efforts to divine the future. The New Year's Festival was especially important in Babylonian divination, for then there occurred the "fixing of the fates" for the coming year.

Numerous peoples carry on the tradition today. Joe doesn't know it, but kissing a girl under the mistletoe was originally a way of divining whom a person would marry. Joe would really 'fix his fate' if he had to marry every girl he kissed under those circumstances!

"Just Having Fun?"

"All of that is very interesting," Joe might object, "but for me, New Year's is just an occasion to have some fun." Many people feel this way. Religious history aside, is New Year's a harmless holiday?

In the United States, about 400 people die in traffic accidents during each New Year's holiday, and half of those deaths are related to alcohol. While vehicle travel increases 4 percent during holiday periods, traffic deaths increase 24 percent. What is

In Future Issues

- ***The Best Life—Soon to Come***
- ***Living Together Without Marriage***
- ***Preparing the Family to Cope with Death***

"Football games . . . have all the external trappings of religious festivals." —Encyclopædia Britannica

killing those people? Alcohol-related "fun."

Nor is the United States the only country with this problem. France, West Germany, Canada and Portugal are but a few of the countries with higher automobile death rates than the United States.

The modern "re-creation of chaos" on New Year's Eve leads to other problems as well. As a New York City assistant police chief put it, "New Year's Day is a time when people drink, and when people drink they lose control." During the first few hours of 1980 in New York city 6 people were murdered, 30 felonies were committed on subway trains, and in a Times Square crowd 50 people were injured and 51 people were arrested. Meanwhile, in Reno, Nevada, thousands of revelers ran amok for three hours, throwing rocks at policemen and smashing store windows. Was this 'just having fun'?

What Will You Do?

Whether you consider yourself a Christian or not you will likely see the practical value of the Bible's advice at Proverbs 22:3: "Shrewd is the one that has seen the calamity and proceeds to conceal himself." If you can foresee danger in your New Year's plans—from overdrinking, dangerous associations, drunk drivers on the roads—why not make a change? You may save your life and the lives of those with you.

What if you consider yourself to be a Christian—would this affect your view of New Year's celebrations? Well, can you imagine the apostle Peter's going to a New Year's party? Notice what he wrote in his first letter, chapter four, verse 3: "You spent quite long enough in the past living the sort of life that pagans live, behaving indecently, giving way to your passions, drinking all the time, having wild parties and drunken orgies and degrading yourselves by following false gods."—*The Jerusalem Bible.*

In view of the origins of New Year's celebrations, isn't it likely that Peter would consider today's New Year's parties to be "the sort of life that pagans live"?

"But it's not as if I go to wild parties every night!" some might object. "This is a special occasion—just once a year."

In this connection, you might ask yourself what overindulgence "just this once"

can do to your reputation, with both God and men.

"Dead flies are what cause the oil of the ointment maker to stink, to bubble forth. So a little foolishness does to one who is precious for wisdom and glory." (Eccl. 10:1) Just as expensive oil can be ruined by a single dirty fly, a good name can be ruined by a single night's foolishness. Why take the chance?—Eccl. 7:1.

This New Year's Eve, thousands of people will 'have a good time' at a party, try to drive home, and harm or kill themselves or others. Thousands more will humiliate themselves or their mates by behaving foolishly in an alcohol-laden atmosphere. Others will not be able to resist immoral temptations because of their surroundings.

These are some of the risks that Joe is taking this New Year's Eve. What about you?

Teaching Your Child Through Play

TWENTY-ONE-MONTH-OLD Barbara was sitting on the floor with her building blocks. When she finished she told me how she had made Noah's ark. That night, before going to bed, she again gleefully explained her building of Noah's ark.

The next day we sat down together with her blocks and several of her toy animals and people. We built the ark again and put the animals inside, along with Noah and his three sons, Shem, Ham and Japheth.

We were learning together through play. Children learn through play. They learn through movement, conversation and personal experience.

When teaching our children about God's love, we must keep in mind how children learn. They can be taught the holy writings from infancy, as shown in the case of Timothy, one of the early Christians. (2 Tim. 3:15) Our youngsters have a great capacity for learning, but, like adults, they learn and remember far more easily the things they find interesting.

The child's best teachers are his parents. They know their own child's disposition, his temperament, level of development and ability. Parents know best how to teach within the framework of his individual capacity for growth. Jehovah has given parents the responsibility of teaching their children his ways.—Prov. 22:6.

There are many ways to teach the Bible. By teaching the Bible at fun times through joyous games and warm togetherness, we are using positive discipline. Discipline involves not only punishment and reproof, but the entire process of making one a disciple. Learning the Bible through puzzles, pictures, games and playacting can be very beneficial.

Reading together when you are both in a rested, eager frame of mind is exciting for the youngster if the book has plenty of interesting pictures. *My Book of Bible Stories** is excellent for this. The pictures can be explained simply as the child flips randomly through the book. Later you'll find him stopping at his favorite illustrations to explain the story to you. As he gets older and more capable of sitting attentively, you may want to read the story word for word. If you stop before he is uninterested you will find him ready and willing to sit again to read with you another time.

Puzzles are also a source of education.

* Published by Watchtower Bible and Tract Society of New York, Inc.

Quick, inexpensive puzzles can be made from pictures depicting Biblical events or characters cut out from older magazines that would otherwise be piled away in the closet. The pictures can be glued to cardboard, then cut into jigsaw-puzzle pieces.

Puppet shows using old socks or some of your children's toys can be a lot of fun. Do not be discouraged if your small children seem uninterested at first. Try again some other time. They may sit only a moment at first before they are up trying to confiscate your puppet. Soon, though, they will learn that if they sit and watch long enough, a great tale will unfold before them.

Here are some suggestions for those who enjoy playing actively with their children. You may want to try bringing some toys into the bathtub or outdoor pool to play Moses crossing the Red Sea or Paul's shipwreck.

The little good Samaritan may bandage poor Mommy up; or Mommy may bandage up the poor little traveler, then put him on Daddy's back to travel to the inn.

One of the times the blankets are dragged into the living room for tent making, you might play Paul making tents or an Israelite during the festival of booths.

Outdoors the games can get rowdier. For instance, spying out the Promised Land, escaping out Rahab's window in the land of Jericho, David pretending insanity in the land of the Philistines, or Paul's being lowered in a basket over the wall at Damascus.

In the sandbox Jericho's walls can be made, then after parading some toys around the walls, much tooting of toy horns and a loud shout, the walls can be knocked down.

A note of caution, though, is found at Ephesians 6:4. We do not want to be irritating our children. It would be especially sad if we made learning the Bible an irritating experience. We must, therefore,

examine ourselves truthfully. Ask yourself: "Would playing these games make me feel out of place and lead to frustration and irritability toward my children? Would I feel more inclined to pressure them than to enjoy the game?" If so, you may want to find some alternatives. Rather than play the game yourself, you may cheerfully suggest that your children play it. For instance, when the blankets go up for tents, you might say: "Paul worked at tent making just like you." Also, the games may be less frustrating if, before you begin with your youngsters, you have thoroughly thought out what you want to portray and how you will do it.

If you find enjoyment in crafts and your children are old enough to participate, then you have another avenue for teaching the Bible. Dolls can be made from papier-mâché, wood, or cloth; then dressed appropriately. Samson can be given seven braids, Saul made tall, Absalom with lots of hair, Aaron in priestly garb. A cloth fish with Jonah in its mouth can be made. A bird feeder the shape of Noah's ark can be made. All these things can be the springboards for explanations of important Bible truths.

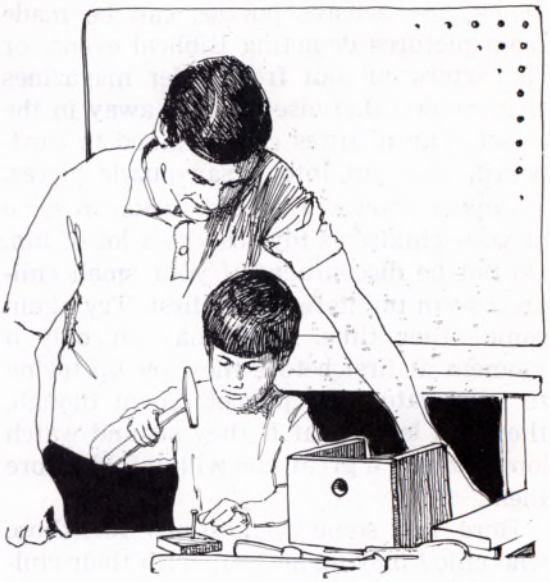
Everyday things can be applied to the Bible. Animals we see at local farms or

zoos can be used. After seeing a donkey, we could make a few comments on Jesus' riding into Jerusalem on a donkey, or Balaam's donkey speaking. When your child sees snakes or sheep or frogs, remember that these, too, are mentioned in Bible accounts. After turning the lights out at bedtime you might say: "What if it was this dark all day long? Jehovah made Egypt dark this way during one of the 10 plagues." If your children know the account already, it will give them food for thought before they sleep. If not, read it together sometime.

If a slingshot comes home in a back pocket, you might tell how 700 Benjamites could hit their mark within a hairbreadth with a slingshot. (Judg. 20:16) However, the fact that this was an instrument of war and that Christians have desisted from war could also be mentioned.

At the grocery store an olive or a pomegranate or a cucumber can be used, especially if you enjoy telling colorful Bible stories.

In all these ways and in many more you'll be thinking of, you can follow the



Scriptures' admonition at Deuteronomy 6: 6, 7: "These words that I am commanding you today must prove to be on your heart; and you must inculcate them in your son and speak of them when you sit in your house and when you walk on the road and when you lie down and when you get up."

Firefighters Express Appreciation

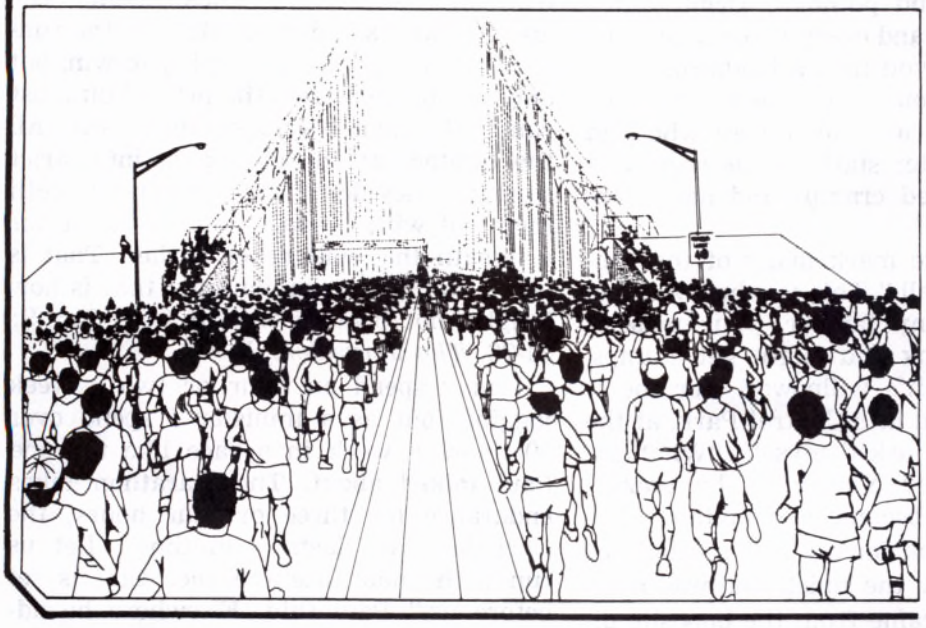
A report on a five-alarm fire in Brooklyn, New York, appeared in "Awake!" of June 22 this year. The Hotel Margaret, across the street from the headquarters of Jehovah's Witnesses, was gutted by fire and subsequently was razed to the ground. "With New York Firefighters," a quarterly magazine published by and for members of the New York Fire Department, concluded its report on this fire:

"All members operating at this fire did so under the most trying and difficult of conditions. Of necessity, many members were committed to extremely hazardous acts and performed in a most outstanding and exemplary manner.

"And, we would be remiss, indeed, if we neglected to mention those members of the Jehovah's Witnesses who, from their headquarters across the street from the Hotel Margaret, provided food and shelter for our firefighters during the entire operation. On behalf of the entire firefighting force, warm and sincere appreciation is extended to these kind and dedicated people."

My first marathon

At the 23-mile mark I asked myself, "What are you doing here? You must be crazy!"



I STARTED running to keep a friend company. I didn't like it. It was cold and my muscles were sore. Then I began to like it! I felt refreshed, slept sounder, lost weight, breathing came easier and my back stopped aching.

I ran off and on for about a year, then started thinking about the New York marathon. Could I finish it? I knew it would be tough. I guess that's what made it a challenge. Each mile I ran became easier. Finally, one day two and a half months before the event I ran 22 miles (35 km), and I knew it was possible for me to do it. I signed up.

The day of the race, up at 5:30, ate a pancake breakfast for carbohydrates, did stretching exercises, and left with my wife for the race.

For the first three miles I looked around at the other runners. Young, old, some in fancy outfits, others in cutoff jeans. People two and three deep along the streets. Some would call out encouragement, others held up signs, "We're proud of you, Dad!" or "You can make it, Bob!" A father and 10-year-old son ran together. "Why are you doing this?" I asked the father. "To do something with my son." They finished together four hours later.

At the 11-mile mark I was running easily—just an easy Sunday run. Ahead I could see heads bobbing up and down, behind me the same, a sea of bobbing heads. My ears were filled with the sound of thousands of pounding shoes. I felt like part of a special army invading New York city.

Most of the way I thought of what I had read about running long distances. Relax, breathe well, don't go beyond your limit, listen to your body. Watch out for uneven roads and potholes. Drink water before the race, and every three miles during it. How do you help a heatstroke victim? How do you know when you're becoming one? I came to a man who had skipped two water stations—he was overheated, developed cramps and never finished.

At the 20-mile mark many of the runners "hit the wall." This is when you feel you can't go any farther, your muscles stiffen, you think you might get cramps. From then on it's willpower. For me it came as I turned into Central Park, at the 23-mile mark. I asked myself, "What are you doing here? You must be crazy!" Each little hill became a mountain.

I began to look for my wife's little face —then I'd know the finish line was near. An ambulance came from the opposite direction, and I think, "It could have been me in it." Then someone yelled out to me, "You can make it!" and threw me half an orange. All the way people had lined the streets two and three thick, but now they formed a corridor five and six deep cheering you on as if you were the winner.

I was an hour behind the winner, but I did finish, and was suffused with a feeling of accomplishment. At the finish I was given something to drink, my time was recorded, and I was presented with a medal to show I had finished. My wife was there with a big hug and kiss and clean clothes for me.

That night at home I lay in bed in the dark looking up at the ceiling and smiling. I ran and I finished the largest marathon in the world and I felt tremendous!

There is another race, however, that I feel far more tremendous about. The apostle Paul talked about it: "All the runners at the stadium are trying to win, but only one of them gets the prize. You must run in the same way, meaning to win. All the fighters at the games go into strict training; they do this just to win a wreath that will wither away, but we do it for a wreath that will never wither. That is how I run, intent on winning; that is how I fight, not beating the air."—1 Cor. 9: 24-26, *The Jerusalem Bible.*

I may spend an hour or two a week jogging, but as a minister I spend over 50 hours a week in a race like the one Paul talked about. The marathon takes endurance for three or four hours; the Christian race lasts a lifetime. "Let us run with endurance the race that is set before us," Paul said. Elsewhere he admonished: "Keeping a tight grip on the word of life, that I may have cause for exultation in Christ's day, that I did not run in vain or work hard in vain."—Heb. 12:1; Phil. 2:16.

Bodily training is of some benefit to me, but I always keep it in its subordinate place, realizing that training in godly devotion is far more beneficial, leading to everlasting life. (1 Tim. 4:8) I wish all runners realized this.—*Contributed.*

Watching the World

Married Women Happier

◈ "If you're thinking about leaving your husband, my advice is don't," says Dr. Edward Shorter, a professor of history and women's studies at the University of Toronto. He notes that, in general, "divorced women now have the highest rates of depression of any group in the population," and are "70 percent more depressed than formerly married men." He added: "Happiest of all the women surveyed were those who had stayed married." And while seeking a career in the work force outside the home has recently seemed appealing to many women, Shorter says: "It's now the working women who're discovering what a drag it is slaving full-time at some zero job that nobody is interested in hearing you tell about."

War at Home

◈ "While the nation has been at peace with other nations, the stark reality is that there is still another war being waged right here at home," said Phil Caruso, head of New York city's 18,000-member Patrolmen's Benevolent Association. He observed: "It's a bizarre kind of warfare to be sure, but nonetheless it's a real war being fought with real guns and real bullets that are causing an alarming number of casualties each year. . . . The elusive enemy we face today is an animalistic criminal element—aggressively violent, instinctively psychopathic—that is bent on destruction of order and civility within our society." Such is not unique to American society, as many other nations also report huge increases in crime.

Youth Rampage

◈ Three children, aged 7, 8 and 9, went on a rampage and caused more than $100,000 (Canadian) damage to an elementary school in Prince George, Canada. A Royal Canadian Mounted Police spokesman said that the youngsters were found "in the process of smashing up everything in sight . . . They had been in the school four or five hours and really made a mess of the place. They went on a smashing spree that was quite unbelievable." Holes were kicked in walls. Typewriters, copying machines, television sets and a microwave oven were destroyed. Light switch plates were pried from the walls and wiring pulled out. The children used hammers to smash windows, toilets and drinking fountains, and also poured paint on carpets and walls.

In Toronto, 180 of 203 high school students admitted to vandalism over the past year. The most common reason given was that the person was bored, or that it was "fun." Being "disobedient to parents," "without self-control, fierce, without love of goodness" are marks of the "last days" foretold in Bible prophecy.—2 Tim. 3:1-5.

Most Popular Exercise

◈ "Walking is now the single most popular adult exercise" in the United States, with about 34 million adherents, says author Bill Gale in *Parade* magazine. Brisk walking increases mental alertness because more oxygen is delivered to the brain cells. "Muscles stretch and turn and knead with every step you take, revving up circulation and helping your heart pump blood. In medical circles, our leg muscles are sometimes referred to as a 'second heart,' " says Gale. He adds: "Unlike jogging, walking is risk-free."

Dr. Gerald Austen, chief of surgery at Massachusetts General Hospital in Boston, notes: "This is a country that's gone a little crazy about jogging. . . . I'd prefer many of my patients to take a five-mile walk and do it on a regular basis." The late Dr. Paul Dudley White, a heart specialist, once said: "A vigorous five-mile walk will do more good for an unhappy but otherwise healthy adult than all the medicine and psychology in the world."

However, it is suggested that beginners, especially older persons, not push themselves. "The idea is to build up gradually—walking short distances, a little at a time, and gradually increasing both distance and speed," Gale says.

Sharp Crime Rise

◈ The Federal Bureau of Investigation reported that final statistics for the year 1979 in the United States showed the sharpest crime rise since 1975, a 9.1-percent increase over the previous year. Violent crime was 11 percent higher, forcible rape 13.2 percent, robbery 12 percent, aggravated assault 10.1 percent, and murder 9.7 percent. An average of one out

of every 145 registered motor vehicles was stolen, with 75 percent of the thefts being automobiles. For the seven categories of major crimes shown on the FBI's index, men accounted for 81 percent of the arrests.

Worldwide, a United Nations survey shows that in a recent five-year period theft rose by 45 percent, drug abuse by 114 percent, robbery by 197 percent. Says the *National Catholic Reporter:* "The statistics are much more frightening than in 1956 when the UN held its first conference on crime and its prevention."

Kindergarten Classes and TV

◈ Educators are reporting an increase in the number of early learning problems among children in kindergarten. They say that an increasing lack of readiness for school and for learning to read appears to be the trend throughout North America. Why? Says Harvey Welch, a Canadian school principal: "I think part of that has to do with the fact that many of them have been very passive in the younger years because of television." And Val Lehman, a primary consultant for a Canadian public school system, says that TV "helps in some ways in broadening children's knowledge and concepts, but it's very passive. There's no interaction there and no making and doing of things, which is very vital." Children addicted to TV may have a short attention span, be restless and expect the teacher to "perform."

More Moons for Jupiter

◈ The planet Jupiter was thought to have 13 moons—until Voyager I sent back photographs showing two more moons. Then a new examination of the photographs disclosed still another small moon, according to the National Aeronautics and Space Administration. The planet's 16th moon is estimated to be 25 miles (40 km) in diameter and 35,000 miles (56,000 km) beyond the cloud tops of Jupiter.

Cows Brush Up

◈ Cows on a 160-acre dairy farm in England give themselves a welcome brushup on their way in from the fields at milking time. The electrically powered brush revolves like a car-washing brush, and is fixed to a shed wall at a convenient angle for the cows to groom their heads, necks and flanks. Farmer Ken Fuller says: "The expression on the cows' faces when they are using the brush is like a smile. They love it. I am sure grooming keeps them fit and helps to ensure good milk yields. But there is no pushing. Each cow knows her place and keeps to her turn." London's *Daily Mail* says that since the brush has been installed "milk yields have been up."

Television Slaves

◈ The average television set in the United States was used for 7 hours and 25 minutes per day in the first quarter of 1980—a new record. This was an increase of 57 minutes a day over 1979. In 1969 the figure was 5 hours and 50 minutes a day.

Highway Carnage

◈ A report from the Council of Europe shows that Greece had the highest auto-accident rate last year, with 195 deaths for 100,000 autos. Ireland was second on the list, with 95 deaths per 100,000 cars; Belgium had 91 deaths, France 90, the Netherlands 64, Italy 58 and England 46. The U.S. rate was 37 deaths per 100,000 personally owned vehicles. As for the high rate in Greece, Costas Kyriakos, an adviser to Prime Minister Constantine Karamanlis, said: "It is 100 percent true that we have the worst accident rate in Western Europe and the United States. It is undeniable that Greek drivers are extremely temperamental. They have the mistaken impression that everyone is out to challenge and demean them and therefore must be defeated, which leads to a vicious circle of illegality and recklessness."

Woman in Coma Gives Birth

◈ A pregnant woman in Israel, injured in an auto accident, went into a coma. After more than four months in this state, she gave birth to a healthy five-and-a-half-pound (2.5-kg) boy. The baby, delivered by cesarean section, was kept in an incubator for 24 hours after birth. The mother remained in a coma.

Seven Ways to Live Longer

◈ Researchers at the University of California at Los Angeles' School of Public Health have come up with seven health habits that have a strong relationship to longevity. They are: (1) Never smoke; (2) get regular physical activity; (3) use alcoholic beverages moderately or not at all; (4) get seven to eight hours of sleep each night on a regular basis; (5) maintain correct weight; (6) eat breakfast and (7) do not eat between meals. The more of these habits followed, the healthier a person will be, reported the researchers. A 45-year-old man who adheres to only three of the habits was said to have a life expectancy of 21.6 more years. But under normal conditions a man of the same age who follows six or seven of them could expect to live another 33.1 years.

Largest Population

◈ Recent estimates of the most populous countries in the world are: China (975 million), India (676 million), the Soviet Union (266 million), the United States (222 million), Indonesia (144 million), Brazil (122 million), and Japan (117 million). The longest average life expectancy is 76 years, in Iceland, and the shortest is 37 years, in Afghanistan.

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