

# Awake!



## WHERE IS YOUR MONEY HEADING?

● **LOOKING INTO THE WORLD OF SMALL THINGS**

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● **HORMONES AS MEDICINE**

**PAGE 13**

**JANUARY 22, 1974**

## THE REASON FOR THIS MAGAZINE

News sources that are able to keep you awake to the vital issues of our times must be unfettered by censorship and selfish interests. "Awake!" has no fetters. It recognizes facts, faces facts, is free to publish facts. It is not bound by political ties; it is unhampered by traditional creeds. This magazine keeps itself free, that it may speak freely to you. But it does not abuse its freedom. It maintains integrity to truth.

The viewpoint of "Awake!" is not narrow, but is international. "Awake!" has its own correspondents in scores of nations. Its articles are read in many lands, in many languages, by millions of persons.

In every issue "Awake!" presents vital topics on which you should be informed. It features penetrating articles on social conditions and offers sound counsel for meeting the problems of everyday life. Current news from every continent passes in quick review. Attention is focused on activities in the fields of government and commerce about which you should know. Straightforward discussions of religious issues alert you to matters of vital concern. Customs and people in many lands, the marvels of creation, practical sciences and points of human interest are all embraced in its coverage. "Awake!" provides wholesome, instructive reading for every member of the family.

"Awake!" pledges itself to righteous principles, to exposing hidden foes and subtle dangers, to championing freedom for all, to comforting mourners and strengthening those disheartened by the failures of a delinquent world, reflecting sure hope for the establishment of God's righteous new order in this generation.

Get acquainted with "Awake!" Keep awake by reading "Awake!"

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# Awake!

"It is already the hour for you to awake."

—Romans 13:11

Volume LV

January 22, 1974

Number 2

## WHERE IS YOUR MONEY HEADING?



crease their incomes enough to make up for inflation. Hence, their living standard drops.

### Authorities Worried

Regarding the rate of inflation, *U.S. News & World Report* said: "Not in a quarter of a century . . . have prices gone up so fast for so long." And the *New York Times* added:

"If American consumers are irritated over an 8 per cent inflationary rate, consider the Japanese. . . current wholesale prices in Japan are up 16 per cent and consumer prices 13 per cent from last year's levels. . .

"The rate in South America has far exceeded 100 per cent in some countries. In relatively stable Peru prices have been rising about 12 per cent a year over the last two years."

In August of 1973, prices in the United States jumped the fastest in twenty-six years. Since the United States is the main foundation for the Western world's economic system, authorities all over the world were very much concerned about the consequences of such inflation.

The havoc that world inflation has caused prompted the head of the Bank of Zambia, Africa, to call the future of the world's money systems "bleak." Also, the *Nigerian Daily*, noting the chaos in the world economy, urged African nations 'to establish their own monetary exchange

**I**N ALL parts of the world, the prices of nearly everything keep going up. This is called *inflation*. While it is not new, the scope and pace of it are.

How serious a problem is it considered to be? The publication *Money & Credit* said recently: "Inflation is the number one problem, the problem that makes all others pale into insignificance. If allowed to rage on at its present pace it could easily destroy the fragile fabric of this and every other democratic society."

What makes the situation so serious is that never before in history has the entire world been caught up in such inflation at the same time. And, in recent years, the rate of price increases in many nations has gained speed.

This means that your money buys less and less. And, for persons on relatively fixed or low incomes, it is a growing tragedy. They find themselves unable to in-

system in order to eliminate losses resulting from the world monetary crisis.'

Why is there such worldwide inflation now? There are several reasons for this very complicated situation. But, as economist Milton Friedman wrote in *Newsweek* recently, some of the reasons are: "Too much creation of money, too much government spending," and too much government intervention. Many nations are now spending more money than they make. To pay for such things as the huge cost of armaments and for fighting wars, for public services and other things they want to do, they have constantly gone into debt. To pay their bills, they have to borrow money or create it on their printing presses. In addition, the general public has engaged in vast borrowing themselves. But the effect of all this excess money chasing goods and services is that prices are pushed up.

What cure is there for the situation? It is of interest to examine what more and more authorities are now saying.

### "Heading for Crash"

Late in 1973, the *New York Times* carried this headline: "Boom Economy in Europe Feared Heading for Crash." At about the same time *U.S. News & World Report* stated: "Fears are widespread among bankers, economists and politicians all over Europe that governments are losing control over the wage-price spiral, and

that runaway inflation is leading toward economic disaster."

Whereas just a few years ago the number of economists making such dire predictions would have been few, now there are more and more. Nicholas L. Deak, president of a large foreign money exchange in North America, said that 'inflation will lead to a world-wide depression that will make the 1930s look like a summer holiday.' He also said: "Inflation creates a boom that ends in disaster. The trend can't be reversed without a major depression."

London's *Financial Times* called the prospects for the near future "spine-chilling," commenting:

"When Dr. Schaefer, the highly respected chairman of Switzerland's largest bank, recently warned of the danger of the [world's] entire economic system 'meeting with a tragic end,' he was not exaggerating.

"He was merely ringing round a worry that even the most sober observers of the international scene no longer find it easy to dismiss—that . . . inflation has now reached the point at which nothing can stop it [from] completely destroying the world's monetary base, with consequences too frightful to contemplate.

"Dr. Schultz, the international monetary chronicler, puts it bluntly when he says in his latest news letter that . . . 'Money is dying.'"

A member of Britain's parliament, Sir Henry d'Avigdor-Goldsmid, a banker whom the London *Sunday Telegraph* of July 22, 1973, described as "a very model of judicial caution," warned:

"When [Mount] Vesuvius erupted the citizens of Pompeii were probably discussing plans for new public baths. No doubt that was a matter of great moment to them, but they were completely unconscious of the del-

## INFLATION LIKE VESUVIUS?

A member of Britain's parliament warned about the danger of unconcern regarding inflation, likening it to the unconcern some people in Pompeii showed when Mount Vesuvius erupted

## **'NOTHING CAN STOP INFLATION'**

**Inflation has now reached the point at which nothing can stop it [from] completely destroying the world's monetary base, with consequences too frightful to contemplate.—London "Financial Times."**

uge of death and destruction that was about to descend upon them . . .

"We are facing what amounts to an eruption of Vesuvius. Price inflation all over the world in the last 18 months is something which will bring much of the Western world as we know it to an end."

### ***Can the Tide Be Turned?***

If the unchecked tide of inflation will bring disaster, can it be halted? Is it realistic to hope that it will?

The record is not comforting for those who put too much trust in money. For instance, regarding the American inflation, the *New York Times* said:

"The present rapid rate of inflation in the American economy . . . is a mystery, at least in good part, to the experts . . .

"Hardly an economist, in or out of government, dreamed that the inflation rate of the last three or four months would be as great as it has proved to be."

So the experts did not foresee what has taken place in recent times. And even more ominous is the fact that some of them do not think that much can be done about it at this late date. The *Financial Times* of London remarked:

"The fact that the so-called monetary managers are almost everywhere behaving as though they see the problem as having got far too big for them to tackle, either individually or collectively, inevitably adds weight

to these spine-chilling [indications of coming disaster]."

In this same line of thought, *U.S. News & World Report* stated: "A feeling of helplessness and anxiety about the world monetary outlook seems to have gripped top bankers from the United States and Europe." The Bank for International Settlements warned that no end was in sight for world inflation. And the *Economic Education Bulletin*, published in the United States, declared:

"No matter how strong and wealthy the nation where inflating occurs, this at first insidious process ultimately can wreck the nation's economic system and deform the moral character of its people.

"Such has been the invariable experience of mankind in all the centuries of recorded history *without a single exception to date.*" (Italics ours)

Do you think our time, which is experiencing the first worldwide inflation of such magnitude, will be the exception to that rule?

Consider this too: In an editorial in the *London Sunday Telegraph*, P. Worsthorne said that inflation "represents instincts of human greed and selfishness so primitive and fundamental as to challenge the confines of common sense." This observer went on to say:

"Could it be that inflation is also a form of mass madness, rooted in evil, no more curable and controllable by economic rationality and political common sense than Nazism was curable and controllable by the normal therapy of international diplomacy?"

...  
"When one talks in private to people who know about such things, their description of the challenge of inflation is so dark and ominous, almost so apocalyptic, as to suggest that the cure of it must require truly painful remedies."

Do you think that world leaders can change the selfish, greedy human nature that is so apparent today? Do you think

they could do that on the worldwide scale needed? There is no evidence whatsoever that this is being done—or will be done by today's human leaders.

### **Grim Reminders**

A large firm representing manufacturers wrote to its clients in late 1973 and reminded them that the present inflation "is unfortunately reminiscent of 1929. It is accompanied also by another condition that appeared in 1929, namely, the lack of faith in governments."

Also of interest is the reminder that, for example, in the United States paper money has been pumped into the economy much faster than it was before the Great Depression. Other nations have done the same. As *The Wall Street Journal* noted:

### **U.S.A. Stockpile of Strategic Minerals ( Tons )**

|          | 1965      | 1972      | Decrease   |
|----------|-----------|-----------|------------|
| Aluminum | 1,893,000 | 1,275,000 | 32 percent |
| Copper   | 1,002,000 | 259,000   | 74 percent |
| Nickel   | 211,000   | 39,000    | 81 percent |
| Tin      | 292,000   | 251,000   | 14 percent |
| Zinc     | 1,416,000 | 1,040,000 | 26 percent |

Growing shortages of minerals contribute to pushing prices upward. In the United States, the world's largest user, the strategic stockpile has been dropping

"The money supplies in dozens of nations are swelling by double digit annual rates these days, the International Monetary Fund's figures show. Such speeds stand out as especially excessive."

You need to understand that such concern over the collapse of money standards is not just an idle thought or opinion. It has happened over and over again, to many nations. At various times this has led to anarchy, radical changes in society, dictatorship, even war.

For example, in August of 1922, the money supply in Germany was 252 billion

(252,000,000,000) marks. Just 15 months later it had soared to 497 *quintillion* marks (497 followed by 18 zeros)! That was about two thousand million times as much as 15 months earlier! This inflation destroyed the German money. The savings of people were annihilated, the economy wrecked. Anarchy resulted, paving the way for Hitler and Nazism.

Similar inflation in the late 1940's helped to pave the way for the Communist takeover of mainland China.

### **Another Important Factor**

As noted earlier, a basic reason why many countries have had rising inflation is that their governments have been spending more money than they have been making. But now there is another new element that makes the situation worse.

What is that? It is the arrival of worldwide shortages in some basic commodities, such as food, fibers, energy sources, minerals and other things. These shortages on a global scale mean that the increasing money supply will be purchasing relatively fewer of such goods. That will give already rising prices another boost upward. Of this, the *New York Times* commented:

"This runaway inflation of commodity prices is not wholly due to Administration policies; there has been an upsurge in world demand for food and other resources at a time of crop failures and feed shortages around the world. . . .

"In the case of food and other commodities, the big plungers are national governments—the Soviet Union, China, Japan, Brazil, and many other countries. Fearful of shortages and outright hunger, nations are stockpiling food as fast as they can, trying desperately to outbid one another."



Many authorities say that whatever temporary relief the nations get from shortages and high prices would soon be nullified by a world population "exploding" at the rate of 75 million a year

Harvard economist Otto Eckstein called the resulting spectacular rise in world commodity prices, especially for food, "an economic disaster of historic proportions."

True, in some periods, the production of basic commodities rises enough to ease shortages temporarily. For instance, in the autumn of 1973 good harvests helped the food situation in some lands.

However, world population is growing at the rate of 75,000,000 persons a year! That is the *net increase* of births over deaths. This "exploding" world population is why experts are so certain that, whatever relief may come at times in the production of basic commodities, it will be very temporary. Population pressures will eventually result in ever-increasing demands on all commodities.

Also, available good land that can be devoted to crops and production of other commodities is now decreasing. This is due to erosion, mismanagement of land, the growth of cities, the building of highways, houses, factories and other things that eat up land.

Too, the desire of developing nations to have a better standard of living, to enjoy a better diet, better clothing, and have more material things creates a huge increase in demand for basic commodities. So, even without a population increase, this 'rising expectation' in developing lands would strain supplies. But when added on

top of a staggering population increase each year, it puts tremendous pressures on earth's resources.

Of this growing problem, *U.S. News & World Report* says: "Current shortages of food, fuel, other items are only a hint of what's coming. . . . Authorities warn that the whole world—not just this nation—is starting to press against the outer limits of earth's resources."

All these pressures, of course, mean that in the long run, prices are likely to continue in one direction—up.

### Where It Leads

Already, in the relatively wealthy United States, high prices and shortages have led to a marked increase in stealing. More elderly shoppers also are being caught stealing from food stores. As one woman of sixty-eight years said when caught pilfering a few tomatoes: "I just couldn't afford it."

When such behavior becomes more widespread at a time that is considered 'peak prosperity,' what may be expected when conditions become even more severe? In the London *Sunday Telegraph* article, P. Worsthorne said: "To be absolutely blunt, my fear is that this country [Britain], like the rest of the industrial world, is moving into a period of cruel political turbulence and strain, as the masses . . . begin to suffer, or think they suffer, a decline in their standard of living."

Some indication of the way things may go can be seen in what has been happening in India. There, the conservative *Times* of India said of that country: "Everywhere there are signs of strife and unrest, among youth, among workers in factory and field, and most ominous of all among those who run the Government." The Indian government admitted that the country faces its worst economic crisis since independence.

In the United States, the New York *Times Magazine* spoke of "a growing sense of frustration" among people because of inflation. It added: "All the ills, all the flash points, all the threats to social order and stability spring from the same source—chronic inflation, which breeds social injustice with the speed of a fever virus. . . . the poor and the aged are the fever's first victims, but not the last. Bitter social tension is the one certain result of inflation."

Hence, throughout the world the economies of most nations are in deep trouble due to inflation. The fact that this is happening all over the world at the same time, with such persistence and severity, is indeed unique in history—and also highly significant.

### **Warning Signals**

What is taking place today throughout the world economy is a clear, advance warning signal that we are nearing the end of the present economic systems on earth. While temporary measures by some governments may halt, or even reverse, the trend for a short while, these will do no good in the long run. Why not? Because present world conditions, including the economic uncertainties, provide unmistakable evidence that the entire world system, not just the financial part of it, has entered its time of the end. The perilous economic situation is only one of the many problems that is filling people with dread. Truly, what Jesus Christ prophesied about the "last days" of the system of things is undergoing fulfillment: "On the earth anguish of nations, not knowing the way out . . . while men become faint out of fear and expectation of the things coming upon the inhabited earth."—Luke 21: 25, 26.

The "last days" were foretold to culminate in a "great tribulation such as has

not occurred since the world's beginning until now, no, nor will occur again." (Matt. 24:21) That tribulation will clear the earth of the economic factors that have brought and continue to bring hardships upon millions. In fact, all human governments and their monetary systems will be replaced by one government—a righteous administration in the hands of the self-sacrificing Son of God, Jesus Christ.—Isa. 9:6, 7; Dan. 2:44.

When the "great tribulation" strikes, even the most stable of the world's monetary systems will be unable to buy protection. The situation will then parallel that of the inhabitants of Judah and Jerusalem in the seventh century B.C.E. Regarding them, the prophet Ezekiel foretold:

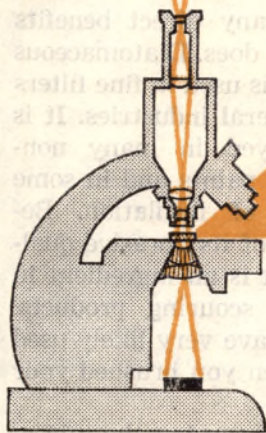
"Into the streets they will throw their very silver, and an abhorrent thing their own gold will become. Neither their silver nor their gold will be able to deliver them in the day of Jehovah's fury."—Ezek. 7:19.

So the danger in which we find ourselves today is far graver than the collapse of all national currencies. Bible prophecy clearly establishes that the generation now living faces an unequaled "great tribulation," at which time only an approved standing with God will be of any real value. (Matt. 24:34) People everywhere should therefore think seriously about what they can do to survive that destruction. Are you endeavoring to build up a record of fine works with the Creator so that you may be among those hidden in the day of his fury?

Because of what is sure to come, those who put their trust in money now, who build their lives around it at the expense of doing God's will, are only deluding themselves. God's sure promise is: "The one trusting in his riches—he himself will fall; but just like foliage the righteous ones will flourish."—Prov. 11:28.

# Looking into

## THE WORLD OF SMALL THINGS



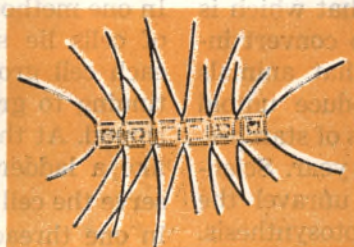
**I**F YOU look at the very best of manufactured objects, such as a chair or a table, you see a fine, beautiful finish and appearance. But if you turn the furniture over and look on the underside, you will likely find it rough and unattractive, even crude. And if you examine any part of the fine finish with a strong magnifying glass, you see that even this actually appears very rough and irregular.

What would you say about a workman whose product was so fine that even when you turned it over and gave it magnified inspection it revealed only beauty, orderliness and symmetry? And what if you found that the closer the examination the more entrancing the beauty? You would undoubtedly remark that the work was done by a superior craftsman, with extraordinary ability and wisdom, and was carried out in detail with loving care.

Such is exactly what you see in the handiwork of the Creator. And more than beauty, there is also a marvelous functional value and a most intricate, close-knit interdependence in all that the Creator has made. How each living thing works in behalf of all the others becomes more and more evident as men are able to examine the world of small things with increasingly powerful microscopes.

Of God's workmanship, Jesus Christ said: "Take a lesson from the lilies of the field, . . . I say to you that not even Solomon in all his glory was arrayed as one of these." (Matt. 6:28, 29) It is easy to appreciate the delicate beauty of a flower, its unmatched color and fragrance. But when examining it closely under a microscope, down to the very cell structure, one marvels at the beauty of design and the engineering skill represented.

In our critical examination, then, let us go to the real "underside"—the world of plants and animals that is not normally seen by human eyes, and which



Diatoms

would never be seen were it not for the microscope. In this tiny realm we find just as glorious an array.

### ***The Kingdom of Water Plants***

Where do you find this glamorous world? Take a drop of brackish water or seawater and place it between two pieces of glass. Put this "slide" on the stage of the microscope. You will see small figures, some stationary, some moving slowly, others dashing about wildly. There are those that are spinning like a top; others take an irregular and apparently aimless course. Some are plants—"algae"; others are animals—"protozoans."

Plant life actually produces all the food for human and animal life on earth. (Gen. 1:29, 30) Plants, by the process called "photosynthesis," utilize the carbon dioxide in the air or that which is dissolved in earth's waters, to convert inorganic material into food that animals can digest. Water algae produce untold thousands of millions of pounds of starches, sugars, proteins and oils each year. Scientists have not been able to unravel the mystery of their process—photosynthesis. This complex chemical operation, on which all earthly life depends, gives testimony to the unsearchable wisdom of the Creator.

Now bring your microscope up to higher magnification. You will behold an array of exquisite jewels. These are diatoms. These glasslike plants have a hard case made of silicon in a great variety of intricate, symmetrical patterns.

Great deposits of diatom shells are found in thick layers, where they were laid down centuries ago when water covered what

are now land areas. Such deposits are called "diatomaceous earth." The shells of these plants are so small that there are more than fifty million of them in one cubic inch!

Does man receive any direct benefits from diatoms? Yes, he does. Diatomaceous earth is used in fine filters in several industries. It is employed in many non-glossy paints and in some types of insulation. Because of its abrasive qualities it is an ingredient in many scouring products. You have very likely used it when you brushed your teeth.

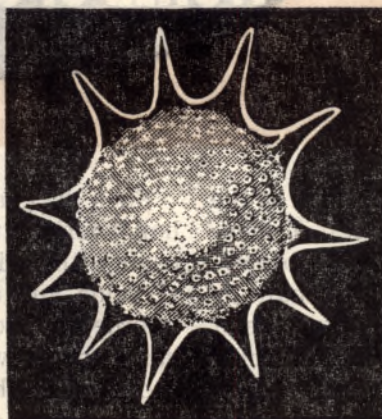
In observing the microscopic plants, you see a variety of color. You may also watch some of these plants reproduce in front

of your eyes. A freshwater plant, *Spirogyra*, grows in long threads of single cells attached end to end. Each cell is like a tube. In one method of reproduction, two threads of cells lie side by side. As you watch, each cell grows a bump, the bumps continuing to grow until they join the other thread. At this point the two threads look like a ladder with many rungs. You observe the cell material move from each cell in one thread across into the other. This is a sexual process that leads to the forming of new cells and a new thread.

While watching this, you may also see a colony of *Volvox*, another plant, roll by like a ball. It may have hundreds or even thousands of individual cells making up this spherical "community," yet it is no bigger than half the head of a pin.

### ***Microscopic Animal Life***

While some fish and other larger sea animals eat the algae, the greatest con-



**Radiolarian**

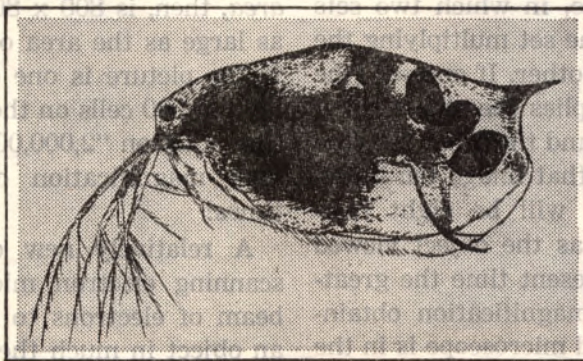
sumers of it are animals that are themselves microscopic. These, in turn, are eaten by the larger sea creatures. Among these minute animals many are one-celled, such as the foraminifera, found in the salt water of the oceans. Their shells form a major part of the sea floor. The chalk-white cliffs of Dover on the English Channel are formed of the shells of foraminifera. In your drop of water you may also see other one-celled animals, for example, the beautiful Radiolaria, also living in a shell. It would be impossible to mention them all, for there are more than thirty thousand types of one-celled animals living on earth today.

A remarkable fact is that these small sea animals, as well as the microscopic plant life, while so minute and delicate, have persisted in the billions in great variety for many centuries. And, what is more remarkable, they have not changed. The same characteristics are passed on from generation to generation, so that a fossil of ages ago is no different from the present living specimens. What stability! But when one realizes that all creation, with its interdependence, is the design of a supreme Intelligence, it is logically seen that such has to be the case if life is to continue on earth. This is because each creature fills its essential place in the network of life.

No description of one-celled animal life could afford to bypass the amoeba. We often hear of people becoming sick from drinking impure water containing amoebas. However, amoebas have their impor-

tant role. Amoebas do not have a shell. They move about by a "flowing" action of their soft inner substance. They therefore constantly change shape. Whenever an amoeba encounters food—bacteria, decaying matter or protozoans—it stretches out *pseudopodia* or false "feet" to surround the object and bring it into the amoeba's body, where it is digested. (The white blood cells in our bodies act like amoebas in flowing over and destroying bacteria and other enemies in our bloodstream.)

Going to a larger yet extremely small animal, we find in our drop of water the *Daphnia*, called "water fleas" because they appear to jump in the water much as a flea does on land. Actually, they swim by means of two large antennae. The water flea has five pairs of legs that serve primarily to circulate water containing food through its shell. Though it is little more than a speck, it has one eye, a "brain," a digestive system and a heart that beats up to three hundred times a minute, pumping blood through its body, but there are no veins or arteries.



**Daphnia**

You might wonder what part these insignificant "fleas" play in behalf of man. Their life-span is probably only about thirty-six to fifty days, but most never live out this span, because they are eaten by water bugs, certain worms and beetles and small fish. In their uncounted millions they are food factories for these somewhat larger animals. And, as yet larger sea creatures, in turn, eat these, man eventually has fish, shrimp, lobster and other seafood to delight his palate.

Also, the water flea becomes a real friend in solving one of man's difficult engineering problems. City water reservoirs often are ideal breeding grounds for microscopic algae. When the algae multiply greatly they impart a bad taste and smell to the water. If screens are used to filter out these microscopic plants, they soon become clogged. The water flea here comes to the rescue. Engineers add water fleas to the water to "graze" on the algae. They are so efficient that they keep the algae cleared out. The water fleas are then filtered out by coarser screens, and the people of the city are happy with pure, fresh-tasting water to drink.

### **A Brief Story of the Microscope**

Early investigators into the world of small things may have used pieces of quartz as natural lenses. Some used drops of water. But one of the first really effective microscopes had a glass bead as its lens. Things as small as diatoms could be seen through it.

The simple microscope today uses just one lens or one set of lenses. An improvement over the simple microscope is the compound microscope, in which two sets of lenses are used, one set multiplying the magnification of the other. If one set (the objective lens) multiplies the object being viewed eighty times and the other set (the eyepiece) multiplies that image ten times, the resultant image will be eight hundred times as large as the object viewed ( $80 \times 10$ ). At the present time the greatest highly detailed magnification obtainable with a compound microscope is in the neighborhood of a thousand times. Beyond this, images do not have good "resolution," that is, they are not completely sharp and clear.

In the constant desire to peer deeper into the world of small things, microscope

builders have turned from the visible portion of the light spectrum to ultraviolet, X ray and electron beams, which have much greater frequency of vibration and shorter wave lengths, thus affording better resolving power. This is because the wave lengths of ordinary light are longer than the dimensions of objects or the detail in them. They "jump" over the detail and therefore bring back no signal to the eye.

Constant improvement is being made. The transmission electron microscope can give clear enlargements of 100,000 to 200,000 times. Then, by employing a viewing telescope that further enlarges the image thus obtained, a good magnification of more than a million times can be reached. Things of dimensions of only a few Angstrom units can be seen in sharp detail. (An Angstrom unit is one hundred-millionth of a centimeter.)

A microscopic photograph is usually labeled as to the magnification (as, 800x). It is the *linear* magnification that is meant. In other words, the length and width of the picture are each 800 times the length and width of the object photographed. The *area*, then, is  $800 \times 800$ , or 640,000 times as large as the area of the object viewed. If the picture is one of a cell, you could lay 640,000 cells on the picture to cover it. The notation "2,000,000x" would mean an *area* magnification of 4,000,000,000,000 times!

A relatively new development is the scanning electron microscope. It uses a beam of electrons to scan the surface of an object in much the same way that the electron beam in a television tube scans the screen. With recent improvements it can achieve a resolution comparable to the earlier mentioned electron microscope, which produces an image of all the illuminated points at one time. Each micro-

scope has its advantage and use, but the scanning electron microscope's main advantage is that it gives great depth of focus, making its images have a three-dimensional appearance. Certain structures can be studied more accurately in this way.

There are endless things in earth's waters and on the land that bring amazement to users of the microscope, and all these things confirm more solidly the Creator's wisdom and purpose in all the things he has made.

It has been said that, while the universe is of unimaginable bigness, perhaps approaching infinity, the world of small things is likewise unfathomable. The limit has not nearly been reached. Think of the size of the earth, the billions of people living on it, and the time required to travel around it. Then look at a golf ball. The golf ball is as big to an atom as the earth is to the golf ball. Surely this beautiful universe has enough marvels to keep men's minds employed in interesting research to all eternity.

# HORMONES



**"D**ENVER Woman Gives Birth to Sextuplets." So read a front-page headline of the *New York Times*, September 18, 1973. The article featured pictures of the father and mother, both smiling. What accounted for their having these sextuplets? Hormone injections!

The mother had been unable to conceive after giving birth to a son four years ago. Her doctor experimented with various hormones, and finally the injections of one derived from the urine of women who had passed their menopause caused the woman to conceive again. However, a side effect of the injections caused her weight to jump from 130 to 196 pounds just before the premature birth of the sextuplets.

Trying to help women who have been unable to conceive to become pregnant is just one of the many uses to which physicians put hormones today. And this is not at all surprising when we learn that all

biological processes of the body are at least in part under hormonal control. Since you, or a relative or close friend, might be urged to accept hormones under medical supervision, it would be good to know something about them. In that way you will be in a better position to understand the factors involved and to make a wise decision.

## What Are They?

Human hormones are chemicals naturally secreted by your body. In proper balance they exert important effects on the finely tuned human organism. For example, hormones play a particularly vital role in helping the body to adjust to changes in its environment, which adjustment is often necessary for survival. Thus the

body temperature of 98.6° F. must be held with but slight variations, and yet the temperature outside may vary as much as from 90 degrees below zero to 130 degrees above. Then again, strenuous labor creates so much heat that if the body did not have the means for cooling itself our muscles would literally cook. This sustaining of the body's internal balance in temperature despite changes in its environment is termed "homeostasis."

Among the various activities of the body that make homeostasis possible are those of the hormones, literally meaning "exciters" or "arousers." They are extremely powerful tiny bits of either simple or compound substances that accomplish their mission in quantities so small as to defy imagination. Just how small? Some hormone particles are so small that it would take three thousand million (3,000,000,000) of them to equal one ounce!

That hormones are produced by eight kinds of ductless glands in the human body is widely known. These are the pituitary, the thyroid, the parathyroids, the adrenals, the thymus, the pineal, the islands of Langerhans and the gonads or sex glands. But not so well known is the fact that many other organs and parts of the body also produce hormones. Thus the hypothalamus, a part of the brain, releases several hormones that trigger the release of hormones in the pituitary and other ductless glands, and also influences a wide variety of metabolic processes. The small intestines, the kidneys and especially the placenta of pregnant women likewise release hormones.

For the various organs of the body to function harmoniously they must be in touch with one another. A main means for transmitting messages from one organ to another is the nervous system. The other is the hormonal system. The nerves might be said to work like a telephone. It re-

quires a hookup at each end and a line along which the message or impulse travels, and this is also true of nerves. Thus in the skin there are tiny receptors that pick up such sensations as heat, cold and pain and carry them to the brain.

On the other hand, hormones have been likened to radio. A radio station sends out its messages in all directions and it takes a receiver able to tune in on its wavelength and pick up the messages. So too with hormonal influences. The producing glands or organs send them out to all the cells of the body by means of the blood, but they affect only certain cells that have specific receptors for particular hormones. Recently, research indicates that the genes play a vital role in this response.

Another interesting characteristic of the way hormones work is the feedback principle. A gland will keep pouring its hormone into the blood until its target organ, which has the receptors for that particular hormone, has received a sufficient amount. Then that target organ will signal back to the gland to stop emitting its hormone for the time being.

### *Therapeutic Use of Hormones*

The study and application of hormones is termed "endocrinology." It is so called because it deals with the hormone products of the *endocrine* or ductless glands. In particular, today there is much interest in the therapeutic or healing use of hormones. Such hormones may be either natural or synthetic. The glands of cattle, hogs and sheep are the main sources of natural hormones. Other natural sources of certain hormones are the urine of pregnant mares and the Mexican yam or sweet potato. Synthetic hormones are produced from synthetic amino acids, from sodium salts and from other inorganic substances.

Do you know what is probably the most widespread use of hormones? It is in the

birth-control pill, which contains two sex hormones, *progestin* (progesterone) and *estrogen*. The most commonly used oral contraceptives, the combination pill and the sequential pill, are thought to prevent conception by suppressing ovulation—a woman consistently using them does not get pregnant because she does not release eggs that might become fertilized.\* But even on this

authorities disagree, for, as *Natural History* for August-September 1972 pointed out: "At the present time more is known of the reproductive functioning of the sow, for example, than of women."

The hormones in these pills, though small in quantity, are powerful. So it is not surprising that a limited number of women taking them experience unpleasant side effects, such as temporary nausea and fluid retention. And other more serious side effects, such as blood-clot problems and high blood pressure, have been implicated. However, this is understandable, for a potential risk is associated with taking any drug preparation, even a thing as common as aspirin or penicillin. Whether the risk involved seems to be justified is something for each individual to decide.

And what is quite likely the next most widely used hormone? Insulin, prescribed by many physicians for patients suffering

from diabetes. It is obtained from the pancreases of oxen, sheep and hogs, the pancreases containing the tiny "islands of Langerhans" that produce insulin. There was a time when it was thought that insulin solved all the diabetic's problems. But

now it is appreciated that equally important, if not more so, are the right kind of diet and physical exercise.

Are you a woman plagued with premenstrual tension or are you going through that difficult phase of womanhood known as the menopause? If so, it may be that your physician will prescribe hormones for your condition. The female hormone estrogen is, in particular, recommended by doctors. And in recent years it has been found that very small amounts of the male hormone androgen can also be helpful. However, there is recognition on the part of some in the medical profession that hormones can cause malignancy if a woman happens to be sensitive to such hormones. For this reason careful supervision of such treatment is advisable if this type of hormone treatment seems necessary.

Mention has been made of certain hormones used to keep women from conceiving. Others can and are being used to help women to bear children in cases in which they have been aborting their fetuses. And there are hormones from other humans that may help those who have been unable to conceive to become pregnant, as in the case of the Denver woman previously referred to. However, some women might object on principle to accepting a hormone derived from another human.

- **What Your Children Face in School.**
- **The Marvelous Womb.**
- **Serve Something Hot on Wintry Days.**

—In the next issue.

\* A newly developed hormone pill is beginning to be used. It consists solely of a minute dosage of progesterone, and thus has been dubbed the "minipill." Regarding it, *Newsweek* of January 15, 1973, reported: "The minipill is believed to confine its action to the lining of the uterus itself; it does not prevent ovulation, but apparently makes the uterine lining unsuitable for implantation of the fertilized egg," which means that it evidently allows conception to occur. Thus, for Christians there is a definite moral aspect to consider, should a physician recommend the "minipill."

Among the more commonly known hormones is DES. It was being used on a wide scale to spur growth in farm animals. But when it was found that the residues of this hormone in meat caused cancer in experimental animals, it was banned by the United States Department of Agriculture.

However, now it has been released by the U.S. Drug Administration as an emergency "morning after" pill, as in treating rape victims. If pregnancy has occurred, it will prevent implantation of the fertilized ovum when taken within seventy-two hours after intercourse. However, *The National Observer* focused on an important ethical aspect of the matter, stating: "DES does not prevent pregnancy. Its popular designation as a contraceptive is misleading. DES causes abortion. . . . Just how effective it is constitutes part of the current debate over the validity of its use." And another factor is that daughters born to women taking this synthetic hormone, upon their reaching adulthood, have been reported as having a higher than average risk of genital cancer. For this reason warnings have been issued as to its use.

Do you suffer from hay fever or some kindred illness? If so, it may be that your physician will prescribe cortisone, which in its natural state is produced by the adrenal glands. Some years ago cortisone was heralded as a "wonder" or "miracle" drug. Especially were high hopes held out for it in the treatment of arthritis. However, now it is recognized as being just one aspect of the treatment of arthritis, and there are some who hold that simple aspirin is just as effective, has fewer side effects and costs a great deal less.

A certain hormone called oxytocin contracts a mother's uterus, helping her to give birth to her child and initiates the flow of milk in her breasts. It is now being

produced synthetically, and some obstetricians are using it to induce labor so that mothers can have their babies on demand, anytime they want instead of having to wait until their bodies themselves initiate labor. But is that wise? There are authorities, such as Dr. E. De Costa, of the Northwestern University Medical School, who disapprove of resorting to induced labor merely as a matter of convenience; they contend that only when the life of the mother or the child is involved should it be employed.

And hormones are used medically to treat other illnesses or disorders. For instance, with diabetes insipidus the kidneys produce large quantities of water, causing the patient to suffer from intense thirst; often a hormone is used to treat this condition. And myxedema and simple goiter involve lack of the thyroid hormone; so the hormone obtained from the thyroid glands of hogs may be administered. Of course, in view of the potency of these and other hormones, it is recognized that their use should be carefully supervised by competent medical personnel.

From the foregoing it can be seen that hormones are more and more being administered to make up for a deficiency of natural hormones in a patient's body. And hormone therapy is being increasingly used by doctors as a means to cope with special illnesses or to produce certain physical effects. But since hormones are so potent and their potential effects so numerous, they should not be taken casually or without due consideration to possible alternative treatments. And especially should the Christian give attention to the moral aspects that may be involved in certain cases. Such a thoughtful approach to hormones as medicine will put you in position to take a balanced view of their use.

“WHO can say that one religion is right and another is wrong?” a teacher asked one of Jehovah’s witnesses in West Africa. “Here in Africa we see people of many religions going to their church or temple, and you preaching as one of Jehovah’s witnesses. Really, are not all worshipping the same God?”

What do you think? Does Almighty God approve of all religions? Does all worship eventually go to the same God anyway? This view is widespread.

### **‘Same God’ View Widespread**

For example, the Hindu “holy book,” the *Bhagavad Gita*, represents God as saying: “Even those who are devoted to other deities and worship them, filled with faith, they too really worship Me.” The Bahai World Faith considers all the world’s major faiths as part of the same evolving religion, with the same source of wisdom and spiritual power. A clergyman of Christendom said: “I believe God speaks through all religions.”

Those who hold this view often encourage interfaith. A Bahai leader stated: “All must abandon prejudices and must even go to each other’s churches and mosques.” Last year the All Africa Council of Churches expressed its desire that new converts might feel equally at ease in any church. The Roman Catholic Church, too, has become involved in interfaith. There are even hopes that one day all mankind will achieve unity of worship through interfaith.

Of course, many still feel that theirs is the most correct form of worship. Others say that ‘you should stick with the religion in which you were brought up,’ regardless of its teachings. Few who profess Christianity, for example, would feel comfortable worshipping at a Buddhist wat

# *Do All Worship* **THE SAME GOD?**

or a Hindu shrine. Yet what difference should it make, if all worship goes to the same God?

Clearly there is confusion when it comes to the type of worship that God accepts. Is there any source that really tells the truth on this matter?

### **Why Go to the Bible?**

There are many religious books in the world. Some of them claim to be revelations from God. But there is one book of religion that truly inspires the confidence of its readers. That book is the Holy Bible. How is the Bible different from other “holy” writings?

The Bible is a book of facts. Its historical accounts have won the admiration of scholars because of their accuracy. The Bible is filled with names of persons and places and descriptions of events that have been verified by archaeological investigation. The Genesis account of creation contains none of the fanciful myths found in the literature of pagan nations but presents matters in a straightforward way that agrees with scientific facts. The Bible

contains hundreds of predictions that have been fulfilled to the letter. Its counsel on human relations is unequaled. The Bible's honest presentation of the shortcomings of its characters in addition to their virtues also recommends it as a book of truth. Then there is the marvelous internal harmony of the Bible's sixty-six books, although recorded by some forty writers over a period of sixteen hundred years.

### ***Does All Worship Go to the Same God?***

Does the Bible teach that all worship goes to the same God? Consider what is written at 1 Corinthians 10:20: "The things which the nations sacrifice they sacrifice to demons, and not to God."

How much of mankind's religion is of this perverted type? Revelation 12:9 reveals that Satan the Devil "is misleading the entire inhabited earth." Noteworthy, too, are the words of Jesus Christ: "Broad and spacious is the road leading off into destruction, and many are the ones going in through it; whereas narrow is the gate and cramped the road leading off into life, and few are the ones finding it." (Matt. 7:13, 14) That means that the majority of mankind, in spite of having some form of religion, are not worshiping God acceptably.

### ***Interfaith or True Worship?***

In view of this, does Jehovah God approve of interfaith? Jehovah's law to ancient Israel strictly forbade religious fellowship with the surrounding nations. (Ex. 22:20; 23:32, 33) Is it the same for Christians? Consider what God's Word says at 2 Corinthians 6:14, 16, 17: "Do not become unevenly yoked with unbelievers . . . what agreement does God's temple have with idols? . . . Therefore get out

from among them, and separate yourselves," says Jehovah."

One must go to the Bible to learn the distinctive marks of true worship. Let us take note of some of these.

To Moses, God said: "A prophet I shall raise up for [the Israelites] from the midst of their brothers, like you . . . And it must occur that the man who will not listen to my words that he will speak in my name, I shall myself require an account from him." (Deut. 18:18, 19) Other Bible prophecies show that that "prophet" would come through the Israelite tribe of Judah in the family of King David and that he would be born in Bethlehem.—Gen. 49:10; 2 Sam. 7:12-16; Mic. 5:2.

Jesus Christ fulfilled those requirements. (Heb. 7:14; Matt. 1:1; 2:1) By his miracles and teachings he proved that he was "the Christ, the Son of the living God." (Matt. 16:16) He himself said: "I am the way and the truth and the life. No one comes to the Father except through me." (John 14:6) The true religion, therefore, must accept Jesus Christ as God's chief spokesman in matters of worship.

As an example, Bahais accept Jesus but believe that later spokesmen of God would succeed him and that their teachings would outweigh those of Jesus. For the Bahais, the one succeeding Jesus is a certain Bahaullah of the nineteenth century; for other people, he is another religious leader. But such a succession of prophets after Jesus is not necessary according to what is written of Christ Jesus at Hebrews 7:24, 25:

"He because of continuing alive forever has his priesthood without any successors. Consequently he is able also to save completely those who are approaching God through him, because he is always alive to plead for them."

But more is involved than simply professing belief in Jesus or belonging to a church that bears his name. Jesus said: "By this all will know that you are my disciples, if you have love among yourselves." (John 13:35) Jesus demonstrated outstanding love for mankind, even giving his life in their behalf. Do the members of your church display such genuine love for one another, even in times of war? Do they try to imitate the things Jesus did?

What did Jesus do for the benefit of others? In addition to his miracles, the Bible relates: "And Jesus set out on a tour of all the cities and villages, teaching in their synagogues and preaching the good news of the kingdom." (Matt. 9:35) He trained his followers to do this too. (Mark 1:35-39; Luke 8:1; 9:1-6; 10:1-11) Those who truly follow in Christ's footsteps today likewise teach people publicly and privately that God's kingdom, his heavenly government, is the only hope for solving the world's problems. (1 Pet. 2:21) Is this true of your church? Does your minister regularly call attention to the heavenly kingdom of God?

Closely related to this is another identifying mark of true worship: "Pure religion and undefiled before God and the Father is this, . . . to keep [oneself] unspotted from the world." (Jas. 1:27, *Authorized Version*) Because of their allegiance to God's heavenly kingdom, those who practice "pure religion" from God's standpoint do not involve themselves in the nationalism, wars and politics of this world. Do the churches of Christendom measure up to these requirements of true worship? What about the church to which you belong?—See also John 15:19; 17:16.

Outstanding among Jesus' activities was that he "made [God's] name manifest" to people. (John 17:6) He helped them to get

to know God as a person. Those who imitate Jesus also make God's name known to others, helping them to develop a personal relationship with the Creator. Does your church publicize God's name Jehovah? You can find that name 6,970 times in the Hebrew text of the "Old Testament." When was the last time you heard your minister or priest mention it?

In spite of Christendom's failure there are people on earth today who do live up to the Bible's requirements for true worship. Because of their love for Jehovah God and their fellowman, these people refuse to engage in the world's wars. By means of a worldwide public witnessing campaign they point people to God's kingdom as the only solution to the world's troubles. These people also make God's name Jehovah manifest. In fact, in most parts of the earth, one can scarcely mention the name Jehovah without thinking of this group of people. Doubtless you know who they are.

Not all people worship the same God, nor are all religions acceptable to the true God. The Bible specifies that there is only "one faith" that God approves. That faith is the religion revealed by him in his own Word, the Holy Bible.—Eph. 4:5.

Jehovah God desires people to study his Word carefully. When they learn what is acceptable worship to God, he expects them to conform their lives to it. This may require considerable adjustments in one's life, even changing one's religion if it does not measure up to the Bible's standard for true worship. Would you be willing to do that in order to please God? That is the only right thing to do, for James 4:17 says: "If one knows how to do what is right and yet does not do it, it is a sin for him."

# Serving the "Living and True God"

**B**Y THE hundreds of thousands, people from many nations, tribes and languages are abandoning false worship. They are making great changes in their lives and often put forth extraordinary efforts to gain an approved standing before the "living and true God." (1 Thess. 1:9) Consider a few examples from widely scattered places.

## India

Some people in India practice religious rites of such a revolting nature that the government has found it necessary to outlaw their rituals.

A case in point involves the Kasi tribe in eastern India. Most of the members of this tribe belong to a church of Christendom. Yet a considerable number of them are snake worshipers. Their snake cult calls for a human sacrifice once a year. Though this is prohibited by law, newspapers continue to report instances of such sacrifices.

People of the Kasi tribe also have a matriarchal system, that is, the wife is the head of the house. She owns the property and money. The children bear her name, not that of the father.

The churches of Christendom have failed to help these people to make a clean break from their detestable worship and from their way of family life that is contrary to the Scriptures. On the matter of headship, the Bible says: "The head of a woman is the man." (1 Cor. 11:3) True, people who view things differently from the Bible's standard may find it very difficult to change. But can they do so?

Yes, they can. Take the example of one woman of the Kasi tribe. After studying the Bible with Jehovah's witnesses she came to see the need for making changes in order to be among God's approved servants. She was living with a man to whom she was not legally married. Besides coming to recognize the need to straighten this out, she began to realize that she would have to give up the position of headship in the family. But when she spoke to the man about it, he turned down the position, telling her that he did not know how to

fill it. Concerned about wanting to live in harmony with God's will, she approached him yet another time, assuring him of her help in discharging his responsibilities as family head. He then reluctantly agreed. After this she got her marriage registered and became a baptized witness of Jehovah.

## Panama

At times, in addition to cleaning up their lives, people have had to learn a new language to equip themselves to serve the "living and true God." This has been the case among the Guaymi Indians of Panama.

About fifteen years ago a Guaymi man left his Indian village to work on a banana plantation. There he learned to read and write Spanish. Not long thereafter he came in touch with Jehovah's witnesses, began to study the Bible with them and eventually progressed to the point of being baptized. Later, he returned to his native village, the inhabitants of which belonged to the Methodist Church.

The Witness made God's requirements clear to his entire family, relatives and, in fact, to all the villagers. This stirred within them a real desire to gain accurate Bible knowledge. But Bible study aids were not available in their native tongue. How did they overcome the problem? They set themselves to the task of learning to read and write Spanish.

In time the entire village accepted the truth as proclaimed by Jehovah's witnesses. As a result, the Methodist minister gave up his job and moved to another community. There he lived with two wives. His unscriptural conduct resulted in the members of his church in this new community returning to their Indian cult.

The Guaymi Witnesses, however, continue holding high the standards of God's Word and putting forth diligent efforts to teach still others. To reach others with the Bible's message, they make long and often dangerous trips through jungles and, along the coast, in canoes. Every weekend they have their meetings in the Guaymi language. Only the reading is done in Spanish, as there are no Bible study aids in

their native tongue. Over one hundred persons attend these meetings regularly in the one village. Additionally, two smaller groups meet elsewhere. What a fine example they are of what people properly instructed in God's Word can do!

### ***Dahomey***

Regardless of local customs, Jehovah's Christian witnesses do not compromise on the lofty principles of the Bible. They insist on conformity to God's Word. This is well illustrated in the case of a Catholic man in Dahomey, Africa.

This man was opposed to the work of Jehovah's witnesses, mainly because a friend had told him that they were misleading people. So when Jehovah's witnesses would call on him, he would refuse to listen to them.

While visiting his second wife in Nigeria, this man was called on by a Witness. Wanting to prove the Witness wrong, he asked what the difference was between Jehovah's witnesses and Catholics. The Witness answered with a brief explanation of the unscripturalness of such things as the Trinity doctrine, the use of images in worship, and the teaching of the immortality of the human soul. Impressed with the Bible proofs presented, he accepted the Bible study aid "The Truth That Leads to Eternal Life." That evening he read late into the night in order to finish this publication.

He was convinced that it was the truth, and upon returning to Dahomey, he searched for the Witnesses. Knowing that he had often seen the missionaries pass in front of his place of work, he watched for them. One morning he stopped a missionary on a bicycle and asked for a Bible study. Soon he was attending all the meetings of Jehovah's witnesses. He began to see even more clearly the difference between Jehovah's witnesses and Christendom's churches. As a Catholic, he had been a good member of the church even though he had several wives and was not legally married to any of them. Eventually he straightened out his marital situation. He also saw to it that his former second and third wives were provided for materially, renting two apartments for them. Hav-

ing cleaned up morally, he began sharing with Jehovah's witnesses in teaching Bible truth to others.

### ***Japan***

Before some can take up the service of the true God they first have to recognize that he actually exists. That was the case with a young man in Tokyo, Japan.

When called on by a Witness, he stated that his studies in science proved to him that there is no God. But he was taken aback at the reply of the Witness that true science confirms God's existence. "I have never heard such a thing," he said, "but I shall be willing to listen to your side of it." A return visit was arranged for the next morning. He was waiting. On a blackboard he had written "science's view" on the left-hand side and the "Bible's view" on the right, leaving a large gap in the middle. "Explain the gap to me," he said, when the Witness called. A lively discussion followed. The information called to his attention kindled further interest, and he agreed to yet another discussion.

A few weeks later he was studying the Bible twice a week. He made startling progress, changing his appearance from that of a scraggly student to a well-dressed young man. He soon brought his younger brother to a meeting. This eighteen-year-old college freshman had shoulder-length hair and looked like a very tall girl. But by the next meeting he, too, had a neat, masculine appearance. Both young men are now zealously helping other people to find joy in serving the true God.

Thus it can be seen that serving the "living and true God" does not mean membership in a church of Christendom. It means knowing the truth of God's Word and living in harmony therewith. As Jesus Christ put it: "Not everyone saying to me, 'Lord, Lord,' will enter into the kingdom of the heavens, but the one doing the will of my Father who is in the heavens will." —Matt. 7:21.

If it is your desire to know what the Bible teaches, Jehovah's Christian witnesses will be happy to assist you. Why not avail yourself of their free home Bible study arrangement?

**I**N MANY places fuel for heating the home—natural gas and oil—is in short supply. Regardless of what the economic or political causes may be, homeowners want to know what can be done to keep warm.

Ideally, the answer is to live in an insulated house that keeps cold air out and allows little of the warmth produced by valuable fuel to escape. Many persons, however, live in rented houses or apartments; they have little control over their home's insulation. If this is your situation, what can you do to get maximum benefit from whatever fuel you do have available?

### **Save Fuel by Making**

#### ***Changes in Your Home***

To keep cold air out, *find all the leaks in your home.* This can sometimes save more heating fuel than insulation does. The magazine *Popular Mechanics* reminds us: "Warm air leakage or cold-air infiltration can mean 15 to 30 percent of your heating bill is going 'out the window.'" You may think your home is leakproof, but have you made an inspection? One way to discover leaks is to move a lighted candle slowly around closed windows and outside doors and in other spots where leaks are likely to be found. If the flame flickers, you have discovered a leak.

Storm windows are a very effective way of blocking window leaks, as is a professional weather-stripping job. But if your home has neither of these advantages, there is still much that you can do.

Inexpensive, easily installed felt strip-

When

**FUEL  
FOR  
HEATING**

Runs Short

ping can be obtained for sash windows. Is new caulking needed around windowpanes? Old caulking gets brittle with age and allows air to enter. Additionally, good caulking can block air from entering underneath or alongside a window sash. Wide tape can be used to seal windows. Or, if you prefer it, use clear sheet vinyl over the entire window.

Heavy drapery can be helpful in keeping warm air inside a room, impeding its flow toward a cold windowpane where it will be dissipated. Of course, it is wise to have the drapery open when the sun shines

on a particular window, to take advantage of its warmth. Be careful, too, that drapery or furniture does not block the flow of heat from outlets or radiators.

Doors, also, may have leaks around them. Rubber stripping, attached to the bottom of the door, stops a draft. Other leaks may be near fireplaces or around air-conditioning units built through the wall. Check for leaks near baseboards too. Proper steps can be taken to caulk or otherwise fill or cover these openings.

Remember, further, that fuel is consumed in heating the water in your hot-water heater. Do you have a dripping hot-water faucet? One drop per second, it has been estimated, adds up to 650 gallons in a year. That is a lot of water to heat and yet never use. You can save fuel by fixing that faucet. Also, you will be helped to get maximum benefits from hot water if you hold off washing clothes in your machine until you have a full load.

Have you considered an alternate source of heat in your home? Some families once

used a fireplace, but stopped when they found that it sometimes smoked. Possibly a few adjustments are all that are needed to reactivate your fireplace. Smoking may be caused by the way a draft from a nearby entryway strikes your fireplace, or soot may build up because of the kind of wood you burn. If family members can cut wood for fuel, you may find that a fireplace is an economical substitute or supplement when oil or natural gas is in short supply.

This is only one aspect of the matter. There are also other secrets to help you to stay warm when fuel is limited.

### ***Save Fuel by Changes in Your Manner of Life***

Could it be that, by your way of life, you use more fuel than necessary? Why not investigate and see if that is true? To start with, do you heat the whole house? In some parts of the world, even in fashionable homes, only one or two rooms are heated. It saves fuel.

Is heat in your home thermostatically controlled? It might be beneficial to make it a habit to set the dial lower than you have in the past. Every degree of reduction may result in a 4-percent fuel savings. In a short time you may actually come to prefer a cooler home. One U.S. physician says that 'in a temperature of 66 to 68 degrees you're really more healthy than when it's 75 or 78.' Also, air in a heated room is drier and some people find this very uncomfortable.

Even if your home's heat level is not automatically controlled, a similar principle applies: You can save fuel by living in a slightly cooler environment. Why, for instance, keep a kitchen radiator heating while also cooking? Further, if you are going to be in a room for only a limited time, why keep the heat on until you leave? A few minutes of heating will generally provide enough warmth for reasonable

comfort during the time you will be there.

You can be aided to be comfortable and healthy when using less fuel if you dress properly for cooler temperatures. During the day one can become accustomed to wearing a sweater. One key to warmth seems to be in wearing several layers of clothes rather than just heavy garments; two lighter shirts will probably serve better than one bulky one. At night more clothing, like socks on your feet, may mean you can keep warm without heat.

Just as important as good dress is a good diet. A high-protein diet, as Eskimos in the far North show, results in higher metabolism, making it easier for one to combat cold weather. Of course, protein is found, not just in meat, but also in lentils and beans and in other foods. Hot drinks—coffee, tea, soup, broth, chocolate—will also help to keep you warm.

Patient repetition may be needed to make your children aware of the need to save heat. It would be worth while to teach them that doors and windows should be *completely* shut, so as not to allow the escape of warm air.

Stay warm, too, by remaining busy. Sew. Cook. Write letters. Repair furniture. That will aid you to keep your mind off any small discomfort caused by the cold.

There is something else that Christians in particular can do to save fuel: *Share*. During any emergency an elderly person or someone who lives alone may be able to stay with you temporarily.

Rather than become irritable because a fuel shortage is demanding special measures, use the opportunity to cultivate the godly qualities of love, long-suffering, kindness and self-control. (Gal. 5:22, 23) Then, the application of some practical suggestions, and the knowledge that the winter will end, can aid you to get along with a fair degree of comfort even when fuel is short.

# KISANGANI *Comes Back to Life*

**K**ISANGANI is our home. It is a city that is undergoing a rebirth. Formerly known as Stanleyville, after the famous explorer, the city straddles the wide river Zaïre, the larger portion being on the northern side. Lying not fifty miles from the equator, in the middle of the vast Central African rain forest, it has plenty of sun as well as rain.

The large city that grew here became a white man's paradise—only whites lived in the city center, and Africans were not allowed into the city center after dark without a special "chit." There were wide boulevards with modern shops and offices, topped by luxury apartments, also residential areas lined with graceful palms shading beautiful villas or spacious bungalows. Electricity was supplied from the city's own hydroelectric scheme. With a good river port and a modern airport, the town was prosperous.

The last decade, however, saw disaster come to Stanleyville. There were rebellion and uprising on three different occasions in just four years. The once-beautiful city was left in ruins, many of her menfolk were slaughtered and most of the white population fled for their lives. Nearly all businesses were in tatters. But since the last trouble in 1967, a rebirth has taken place.

## **Out of the Ruins**

Renamed Kisangani by order of the president of the Republic (this being the original name of the place in Swahili), the town began slowly to get over its mourning. In 1969 the Europeans who had fled began to filter back to see what they could

salvage of their homes and businesses. Here and there houses began to be patched up. At the end of the same year some friends of ours, Jehovah's witnesses, arrived, and we joined them a few months later.

Almost every day we would see new faces in town and notice another building back in use or another shop open its doors to customers. At first one could cross the street without first looking both ways, but soon this was not possible, as the number of vehicles increased very rapidly. Today, the wide streets teem with life—the traffic is quite dense and fast moving. There are modern city buses (referred to as "mammoths"), supplemented by smaller commercial vehicles known as "taxibuses." The shops are well stocked. There are good hotels and restaurants. A textile factory is under construction, as is a new international airport. A truck-assembly plant has started work. A modern sawmill exports wood cut from the great rain forest. If one did not notice the occasional bullet hole in the window of a shop or in the windscreen of an old car, one would never imagine that this bustling metropolis of a quarter of a million people had been the scene of so much destruction a short time back!

## **The Rebuilders**

Who is behind this astonishing rebirth of a city? Africans, the men of Zaïre. What kind of people are they? On the whole, they are easygoing, friendly and pleasure loving.

At the top of the list, socially and economically, is the businessman and/or politician, together with certain high-ranking government executives. He lives in a big,

beautiful house on the outskirts of town—usually one of those previously reserved for white people in preindependence days. He speaks good French and always wears an “abascos,” the national costume for men. He works in an air-conditioned office, and has his own car or goes everywhere by taxi (60 cents to cross town one way). He views the white man very much as an equal, not usually as an enemy. He has one or more of his fellow Africans working for him in his home as servants, known as “boys.” His wife or “girl friend” is richly dressed, and sometimes with an exotic hairdo or a wig. A problem is that he often has wives (two or three, all legal) and “girl friends.” As an example, one has three wives and twenty-two children and still “goes out” in the evenings in his Mercedes.

Next on the social and economic scale come the government workers, the clerks and office men. They sometimes live in once-beautiful houses that have been abandoned and are now in ruins, but, for the most part, they live in small dwellings in the African communes. Their dwellings are often not well kept. With the African tendency for large families, it takes all their cash just to stay alive. One qualified electrician (who has opened a pharmacy to try to supplement his income) has twenty-seven children by his three “legal” wives.

To help feed the hungry mouths, the wives often engage in a little commerce. They buy goods wholesale and sell retail, or they cultivate fruit in their gardens to sell at the market or from house to house. These are the real hard workers, the women of the market. They get very excited when haggling with you for the sale of their wares and will pretend to be most offended when you offer too little. They are usually good natured in reality, though, and their friendly rivalry is often a source of amusement to observers. These are

working mothers, and usually the youngest child goes everywhere with mother, on her back, while the next child toddles along holding her hand. Breast-feeding is done anywhere, anytime.

With these little ones to cope with, how does Mum carry the things she wants to sell, to and from the market? On her head. The women are very skillful and graceful despite the burdens they bear. One will have a wide bowl of pineapples; another, a bucket of fish. They have such a sense of balance, these women, that they can carry anything this way—from a sewing machine to a bed! At home they have all the chores to do, yet they still have time to till and plant—or they stay at home and make doughnuts or little cakes to sell outside their front door.

Then there are those men—usually the younger ones—who do not have regular jobs. Many of them, however, display good initiative. Those with a little capital set up small shops. Africans love to have their photo taken, so there are at least five photo studios operating in Kisangani. Some have got hold of an old treadle sewing machine and become tailors. It is simpler to buy a crate of soft drinks and a block of ice and sell cold drinks on the street corner, making a quick two cents profit on each bottle of Coke—this is thirst country, where the afternoon temperature often goes over 35 degrees Centigrade (95° F.).

If you have goods to transport economically and there is no great hurry, you can hire a “pousse-pousse,” which is a little cart that a man has to “push-push”—that is what the name means. The men who push or pull these carts really work hard. They may take a load of 300 pounds across town for a dollar or less, and it is not all level ground. The carts vary in construction, but most are metal, welded together from scrap, with a single wheel on each side—often not exactly the same size!

On the other side of the river there is the railway, which by various links takes goods to the east of Zaïre. How does one cross the river? Take a pirogue. It can be quite an adventure.

A pirogue is a dug-out canoe, made from a single tree trunk. They range in size from small to enormous—the biggest being capable of carrying up to fifty people, although since a couple of fatal accidents the law limits this to thirty. Each pirogue provides work for two men—one to drive and one to take the fares. Drive? Yes. They are equipped with outboard motors, which propel these spearlike craft across the nearly half mile of water in about five minutes! Besides people, everything goes in—bicycles, chickens, manioc, bananas—anything you happen to have with you. Each person pays four cents for the one-way trip, plus four cents for each bike. There are plenty of these fast boats.

You can, of course, take the car ferry, powered by twin Diesel marine engines, but it is not so much fun, although it is free. You can also take your life in your hands and hire a pirogue without a motor, and have the fishermen battle against the strong current of the mighty Zaïre with just their paddles.

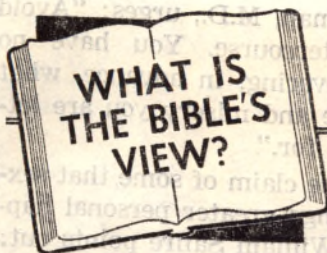
Here, then, is a vibrant community of courageous people who are transforming a ruin into what has now been declared by President Mobutu Sese Seko to be the third city of Zaïre.

### ***Spiritual Awakening***

In spite of the material prosperity and modern conveniences, the majority are still superstitious. Ancestral customs are still slavishly followed, even by those in the higher income bracket. Even here in the residential area of the city, if someone dies, they hold a "wake," with ceremonial wailing, dancing and drinking to the early hours. If someone has a baby, the child is

"protected" from the evil spirits by having its wrists and ankles and waist tied with black cords from which are suspended small bones, pieces of bamboo or stones. If someone is ill, efforts are made to find out whose "spirit" is attacking this one, and there is a consultation with the local fetish doctor, who will often prescribe a small pouch to be worn next to the skin, slung around the neck of the patient on a black cord. Ancestor worship, fear of the dead, black magic to cause death, enchantment to make friends or lovers—all these things abound in modern Kisangani. The majority will tell you that they are Catholic, but many, especially the women, cannot read or write, and thus have never been able to study God's Word the Bible for themselves. True, the Protestants have done good work in Bible distribution and even in the translation of the Bible into Swahili and Lingala—but they have not followed through with systematic and regular Bible study.

But here in Kisangani two African witnesses of Jehovah began to call on the people in 1965, offering them personal help in Bible study, and Jehovah blessed their work. Now there are four congregations of Jehovah's people actively preaching the good news of God's kingdom. The attendance this past year at the Lord's Evening Meal was nearly 500. Here are happy, Bible-loving souls. They have put away their secondary wives, quit prostitution and braved the fury of family and acquaintances when they refused to continue pagan practices. They have taken a courageous, nonpolitical stand for true worship. They come from a variety of backgrounds: medical auxiliary, university student, chef, post office executive and others, but all have one thing in common—their devotion to the true God, Jehovah. We are truly happy to be living among them in Kisangani, this fascinating place that is experiencing rebirth.—*Contributed.*



## FORNICATION—WHY NOT?

**T**HIS generation has seen the world caught up in a "sexual revolution." People are clamoring for freedom to have sexual relations with whomever they wish and in any way that they choose.

The pressure to engage in premarital sex today is powerful in many places. In some areas a woman may be expected to prove her ability to bear children before marriage. In other locations "convenience" is the reason why many couples live together without being married. "Wife swapping" and "group sex" are now popular with many. Homosexuality among both males and females continues to rise.

Conflicting attitudes toward sex cause uncertainty for many individuals. A college girl tells of a typical problem she encountered on a date: "He would say, why not? I would spend half the date trying to explain to him what was so special about morality. Then afterward I would ask myself, why not?"

Might you, too, have

wondered "Why not?" as to sexual relations outside of marriage? Do you know the Bible's view of this matter? Certainly no one knows more about the purpose and correct function of sex than Jehovah God, man's Creator. Hence, what does God's Word say about sexual relations?

Jehovah God created the first human pair "male and female." He gave them reproductive powers, with the command: "Be fruitful and become many and fill the earth." (Gen. 1:27, 28) So the Bible did not condemn proper sexual relations. This is the way the human family would reproduce their kind, and God purposed that they have pleasure in doing so. But under what conditions was this reproduction to take place?

Genesis chapter two shows that, after creating Eve, Jehovah proceeded "to bring her to the man." Then God said: "That is why a man will leave his father and his mother and he must stick to his *wife* and they must become one flesh." (Gen. 2:22, 24) So God married Adam and Eve and purposed that marriage be the arrangement within which they and their offspring would use and enjoy their God-given sexual powers. (Prov. 5:15-18) Marriage would provide a basis for the economic and emotional security of family members.

The Bible refers to all sexual relations outside the marriage bond as "fornication" (including sodomy and homosexuality). The Scriptures command: "Flee from fornication," for "no fornicator . . . has any inheritance in the kingdom of the Christ and of God." (1 Cor. 6:18; Eph. 5:5) This is the most important reason why people should avoid fornication.

Is Jehovah's law forbidding fornication harsh and unreasonable? Actually it reflects God's love for mankind and his wisdom. How so? For one thing, the Bible recognizes that other persons are involved besides the two who may feel a passion for each other. If the couple engage in fornication, how will their conduct affect those who love them? Could reproach be brought on the family name of either one? Will loved ones suffer mental anguish because of their immoral act?

God's prohibition of fornication also protects any children that might result from sexual union. A child's secu-

rity and development emotionally, intellectually and morally depend greatly upon the stability of his home environment. Children vitally need the influence of both parents, especially during the early years of their lives. Will this need be met in a relationship in which each parent feels free to "walk out" on the other?

Some who condone fornication feel that use of contraceptives will permit them to enjoy sexual relations without the responsibility of children. But birth-control methods sometimes fail. Unwanted pregnancies often end up in abortions. Do you feel that the momentary pleasure of fornication is worth taking such chances?

A powerful reason to avoid fornication is found at 1 Corinthians 6:18: "Every other sin that a man may commit is outside his body, but he that practices fornication is sinning against his own body." This is literally true. How so?

In contrast to sexual relations with one's marriage mate (if that one is chaste), fornication often exposes one to venereal disease. Early in 1973 the World Health Organization warned that the world is now "in the grip of a virtual venereal disease [VD] epidemic," and this *"despite the fact that treatment is effective and diagnosis reliable."* The term "venereal disease" (so named after Venus, Roman goddess of love) includes many different types of infections, the most common of which are gonorrhea and syphilis.

Venereal disease can be devastating, especially to women, who often show no symptoms of the disease until it is too late. During 1972, in just one country, over 100,000 hysterectomies were directly related to gonorrhea. Venereal disease can also bring about insanity, blindness, brain and liver damage, and sterility, and can even result in death.

Do you wish to risk such dangers for a few fleeting moments of pleasure? Dr. Har-

old Thomas Hyman, M.D., urges: "Avoid promiscuous intercourse. You have no means for discovering, in advance, what distress, expense and misery you are letting yourself in for."

What about the claim of some that sexual freedom brings greater personal happiness? Writer William Safire points out: "The unmarried state of people living together is less a mark of independence than a mark of uncertainty; less an expression of the strength of mutual respect than a confession of the weakness of people to commit themselves to each other." Can a relationship built upon "uncertainty" and "weakness" provide security? In your own experience have you found that pleasure seekers who are unwilling to accept responsibility are happy?

The research report entitled "Sexual Revolution: Myth or Reality" explains that, in spite of greater sexual freedom today, "evidence abounds that anxiety about sex still persists . . . Large numbers of people continue to consult psychiatrists about sexual problems, sex crimes are steadily increasing."

Women who become involved in "affairs" often suffer from severe emotional problems. A psychiatric counselor observed: "There's a lot of self-deception. The woman will rationalize and think she can carry the thing through. But after the affair is over, she'll feel shot down, that she's a fallen woman." Some individuals even commit suicide if their partner leaves them.

The Word of God plainly states: "God is not one to be mocked. For whatever a man is sowing, this he will also reap." (Gal. 6:7) "Sowing wild oats" through fornication benefits no one. On the contrary, it has caused an unprecedented epidemic of physical, mental and emotional disorders throughout the world. How wise and loving is God's command: "Flee from fornication"!—1 Cor. 6:18.



### "Better" Without Blood

◆ Is blood necessary or therapeutically beneficial in open-heart surgery? Dr. Jerome Harold Kay writes to *The Journal of the American Medical Association*: "Because of the increasing demand for blood... and the possibility of hepatitis, with its morbidity and mortality, we have avoided blood transfusions as much as possible. . . . We have now done approximately 6,000 open-heart operations at the Saint Vincent's Hospital in Los Angeles. Since we have not been using blood for the majority of patients, it is our impression that the patients do better."—December 3, 1973, page 1231.

### Juvenile Patient's Rights

◆ The Pennsylvania Supreme Court ruled that the wishes of a polio-crippled 17-year-old boy should be considered in support of his mother's refusal to allow an operation using blood transfusions. *American Medical News* reports that "at the hearing, the boy answered all questions without hesitation and seemed to understand both the benefits that he might receive from the surgery and the possible consequences of not having it." The court found that, under the law, he was not a neglected child and dismissed the petition to appoint a guardian who would allow transfusions.

### Energy-saving Bonuses

◆ Half the lights in thirty hallways of Virginia's Norfolk General Hospital were turned off to save power. Down went the noise too. "Suddenly, everyone is walking around very quietly," says a hospital official. Lower speed limits probably accounted for most of the drop in U.S. Thanksgiving holiday deaths—from 679 in 1972 to 527 in 1973.

### Pampered American Drivers

◆ The European business magazine, *Vision*, reports that 90 percent of American cars have automatic transmissions. Britain, in contrast, has 30 percent automatic; West Germany, 25 percent; France, 8 percent, and Italy, just 2 percent. Use of automatic transmissions generally requires more fuel.

### Religion Loses at U.N.

◆ No document on religious freedom has issued from the U.N. after thirteen years of debate. A recent draft declaration was attacked primarily by the Soviet bloc. Bulgaria wanted the statement to make clear that "religion should not be used to incite hatred and hostility, or for political goals, or in ways harmful to peace."

### A 'House Divided'

◆ "A fist-swinging brawl broke out in the newly estab-

lished Northern Ireland Assembly today between rival Protestant factions," says a *New York Times* report. The fight was over "sharing power with the minority Roman Catholics." Some Protestants are "opposed to giving up political domination."

### Bishop's Expensive Insult

◆ A High Court justice ordered the leader of the United Church of Cherubim and Seraphim in Nigeria to pay the equivalent of \$4,500 in damages for spitting in a lawyer's face and using violent language. The justice said: "The least that can be said of the conduct of the defendant, who holds the exalted position of a bishop, is that it is primitive and constitutes a stain on the progress of any civilised society."

### Church-Council Politics Scored

◆ "The true face of the NCC [National Council of Churches] is revealed in the support of radical and deviate causes and groups," says an Indianapolis (Indiana) *News* article. "Its persistent political pronouncements have turned off the man in the pew." The newspaper cites a number of political and radical causes that the Council supports financially and goes on: "Understandably many churchmen don't want one cent of their contributions . . . in support of left-activist or decadent enterprises favored by the NCC."

### Church Meddling in Philippines

◆ "The gulf between church and state continues to widen in the Philippines," observes a Washington *Post* writer. Resistance against the present government by activist priests is widening the rift. "Vatican 2 made it clear that we had to be more conscious of social and economic development," explains a church source. So, the church became deeply involved in social action during

the past decade. Some priests and nuns have joined Communist-oriented rebel groups antagonistic to the government.

#### **Esteem for Religion Drops**

◆ A recent Gallup survey shows that during the past decade employment as a clergyman has dropped 75 percent in the esteem of Americans under 30 years of age. In 1962 4 percent preferred a religious career over others. Now only 1 percent do. Another poll shows that less than one third of the Americans have confidence in organized religion as an institution. Other institutions, such as the medical profession and even garbage collection, have the confidence of over half the people. Government nears the bottom of the list.

#### **Religion's Worldwide Pains**

◆ "The bottom has fallen out of the North American (Roman Catholic) Church," says Panamanian priest T. Leo Mahon. Anglican Bishop R. W. Stopford, speaking in Johannesburg, South Africa, joins in: "If we are honest with ourselves we have to admit that, all too often, the church . . . is faltering and even incoherent in its message." Dr. A. J. Van Der Bent, librarian of the World Council of Churches in Geneva, admits concerning hopes for denominational unity "that the battle has now become a sham fight."

#### **Inaugural Scripture**

◆ The first U.S. vice-president to fill a midterm vacancy, Gerald Ford, was inaugurated in early December. He became the fortieth vice-president in the nation's history. When taking the oath of office, Ford's hand rested on *The Jerusalem Bible* opened to the 20th Psalm: "May Yahweh answer you in time of trouble; may the name of the God of Jacob protect you!" The office of vice-

president was left unfilled during 16 previous vacancies.

#### **U.S. Cancer Deaths Up**

◆ "The cancer death rate accelerated in 1972 at the fastest pace in 22 years . . . a rate of increase triple the annual average since 1950. . . the increase was blamed on greater exposure to cancer-causing chemicals in the environment," reports the American Cancer Society. The male/female death ratio is predicted to be 54:46 in 1974. "The rise [since 1936] among men is due mainly to 1,400% increase from lung cancer." Contributing to this rise, no doubt, is smoking, which King James I of England long ago said is "loathsome to the eye, hateful to the nose, harmful to the brain, dangerous to the lungs."

#### **Transplant Cancer**

◆ The immunosuppressive drugs given to transplant patients to keep the body from rejecting a new organ also keep it from rejecting malignancies. Dr. Israel Penn of the University of Colorado Medical Center found from long-term studies of kidney-transplant patients that the incidence of cancer after transplantation "is about 100 times that observed in the general population in the same age range."

#### **Pestilence Among the Poor**

◆ The World Health Organization (WHO) reports over 90,000 cases of smallpox through August 7 of 1973, almost twice as many as in the same period in 1972 and the highest total of cases since their "eradication programme began in 1967. Bangladesh, Ethiopia, India and Pakistan suffered most. Onchocerciasis or river blindness now affects an estimated 20,000,000 people throughout tropical Africa, Guatemala, Mexico, Venezuela and other countries. Thread-like worms living in the skin

"cause itching so severe as to lead to suicide," says *World Health*. These worms also penetrate the eye, eventually causing blindness. About 70,000 adults of the 10 million persons living in the West African Volta River basin, stricken with blindness, do not do productive work.

#### **The Pain "Game"**

◆ "Most hockey players have to play with pain of one kind or another nearly all of the time," says a major team trainer. A doctor who specializes in sports medicine says of the aggressive player: "He's looking to cause enough pain so that the opponent doesn't challenge him later on in the game." *Physician's World* magazine observes that "hockey is a game of violence and probably always will be. The philosophy behind the game is perhaps best expressed by Ferguson, the ex-Montreal mauler. 'In hockey you always hate the opposition—no matter who they are . . . There are no friends on the ice.'"

#### **U.S.—China Trade**

◆ "A number of American officials describe as astonishing and unpredicted the extent to which trade with China has swollen," reports the *New York Times*. China's leaders formerly seemed "determined to preserve their country's self-contained economy." Trade between the two nations grew tenfold over 1972 to \$900 million in 1973; U.S. exports to China accounted for over 90 percent of this figure.

#### **The Cycle Is Complete**

◆ Theorists say that 'primitive' men bartered or traded goods until money, supposedly a better arrangement, was devised. But today virtually every monetary system rests on shaky foundations. In fact, J. T. Connor, chairman of Allied Chemical Corporation, says that U.S. firms wanting to buy foreign goods are be-

ginning to find that huge amounts of currency are no longer wanted. So, how is some "modern" business carried on? By bartering! "I believe," says Mr. Connor, that "we are going to see more and more of this . . . barter arrangement."

#### **Holiday Deaths**

◆ Japan's worst department-store fire killed at least 101 persons in Kumamoto in late November. It was fueled in part by Christmas decorations. Many of the dead were Christmas shoppers. Though only about 1 percent of the Japanese profess Christianity, the country has celebrated the holiday with enthusiastic gift-giving since World War II.

#### **Russia's Morality Woes**

◆ A Soviet sociologist bewails Russia's growing moral problems. Writing in the youth

newspaper *Moskovsky Kom-somolets*, he reveals results of a study of students from 14 to 17 years of age in the port city of Odessa. They display what he calls an "industrial psychology . . . which regards love exclusively as a physical necessity." He notes that about a fourth of the youngsters "had already had premarital sex." Venereal disease, thought to be under control in the 1950's, has greatly increased since 1965.

#### **Divorces Up Sharply**

◆ Latest figures show that two marriages are now breaking up in the U.S. for every five new ones. The divorce rate has increased more than 25 percent since 1970.

#### **Church Sex Therapy**

◆ A Baptist minister in California's First Baptist Church of San Carlos, and his wife, offer sex counseling as part

of the church's services. In addition to married persons, they have persons unmarried, those just living together and others, in their classes. Of this, they say: "Each person must struggle with his own morality and find his own righteousness."

#### **Britain's Working Mothers**

◆ One million more mothers in Britain are working to help support the family than did so a decade ago, reports the *London Daily Mail*. This represents more than a 50-percent increase. Forty percent of all British mothers now work.

#### **Fighting Cock Kills Man**

◆ A fighting cock turned its spurs on the leg of an elderly Singapore man in his own backyard. He went to the hospital two days later for treatment but died from the infection that had developed.

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