

Awake!

DECEMBER 22, 1983

ARMAGEDDON

NUCLEAR HOLOCAUST OR A NEW START?



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AWAKE! is for the enlightenment of the entire family. It shows how to cope with today's problems. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it stays politically neutral and does not exalt one race above another.

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Feature Articles

So many people today are saying, "I want to grow up, not blow up." This is because they believe that the threatened nuclear holocaust is the same as Armageddon. If you are one of these fearful persons, then we urge you to read the following articles. You will learn what the real danger is that threatens all mankind

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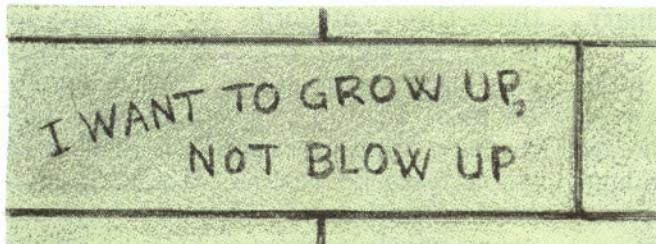
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—NUCLEAR HOLOCAUST— —HOW REAL THE THREAT?—



THESE are the poignant and thought-provoking words that an unknown author has scribbled on a wall in downtown Frankfurt, Germany. Do you blame this young man—or woman—for feeling that way?

Probably not, particularly if you are among the millions of persons throughout the world whose fear goes beyond the fear of a limited atomic war—however terrible even this would be. The threat, as they see it, is that of an all-out nuclear war that would annihilate all mankind. It would leave the earth uninhabitable.

A word often used to describe such a nuclear holocaust, particularly in English-speaking countries, is one borrowed from the Bible. It is "Armageddon." For example, in 1961 former U.S. President Eisenhower said that the growing nuclear threat put Chicago "but thirty minutes from Armageddon." And of the early 1970's, Henry Kissinger, former U.S. secretary of state, wrote: "No previous generation of statesmen has had to conduct policy in so unknown an environment at the border line of Armageddon."

In the meantime we have reached the 1980's. Years of political discussions and negotiations have not yet succeeded in defusing the nuclear bomb upon which the world seems to have been sitting for almost four decades. Despite increased pressure from their citizens for a nuclear freeze, the superpowers continue to stockpile nuclear weapons.

Threat Still Growing

Giving yet another reason for the increasing threat of a nuclear holocaust, scientist Joseph Weizenbaum of the Massachusetts Institute of Technology said: "The danger has become greater, because many more countries now have atomic weapons." Since their number will no doubt continue to grow, the outlook for the future is not bright. "In most likelihood we will not survive the next 20 years," warns Weizenbaum. "We are moving ever more rapidly toward the abyss. And I am afraid there is no one to stop us. Perhaps we are already hopelessly lost."

Meanwhile, modern technology continues to perfect missile guidance systems. Long-range missiles can already travel thousands of kilometers and strike within less than 180 meters (197 yd) of their target. That is like throwing a ball at a target a mile away—if a person could throw that far—and missing the bull's-eye by less than one inch!

How Do You React?

Perhaps you are *trying to prevent* a nuclear holocaust. True, you are probably not a politician or a disarmament negotiator. But by engaging in peace movements or anti-nuclear demonstrations of one kind or another, you may feel that you are doing your part. There are hundreds of thousands of ordinary citizens who share that view.

On the other hand, you may feel little motivation for getting involved. You may be simply *trying to ignore* the threat, blotting it out of your mind by filling your life with other interests. Subconsciously you are hoping for the best.

Or do you consider a nuclear war

inevitable? If so, you are perhaps *seeking means for personal survival*. You may have made certain survival plans already. Possibly, you have even joined a "survival group"—any number of which have sprung up recently in all parts of the world.

Whether a person fits into one of these three categories or not, none of us can sidestep the fact that the threat of a nuclear war is real. Like it or not, we must face up to questions with far-reaching consequences. Will mankind's worst fears be realized? Is an "Armageddon" nuclear war inevitable? Are our young people doomed to blow up before they grow up?

NO NUCLEAR ARMAGEDDON!

SINCE the threat of a nuclear war is real, it is only logical that mankind's prayer be that this threat may never be realized. Interestingly, Francis Cardinal Spellman at the beginning of the 1960's called "for prayers to spare the world from 'thermonuclear Armageddon.'"

The word "Armageddon" appears only once in the Bible, although many other scriptures speak of it in other terms. Do these scriptures show Armageddon possibly to be a nuclear holocaust, which, it is hoped, can be avoided? Is Armageddon a war man can start?

ARMAGEDDON IS GOD'S WAR

The Bible says: "Expressions inspired by demons . . . go forth to the kings of the entire inhabited earth, to gather them together to **the war of the great day of God the Almighty . . . to the place that is called in Hebrew **Har-Magedon** [or, Armageddon].**"—Revelation 16:14, 16.

However: How could a nuclear holocaust, brought about by human governments for the furtherance of political goals, rightfully be designated God's war? Would not such a holocaust more correctly be man's war?

ARMAGEDDON IS TO BE A RIGHTEOUS WAR

The Bible says: "I saw the heaven opened, and, look! a white horse. And the one seated upon it is called Faithful and True, and he judges and carries on war in righteousness."—Revelation 19:11.

"With righteousness he must judge the lowly ones, and with uprightness he must give reproof in behalf of the meek ones of the earth. . . . With the spirit of his lips he will put the wicked one to death. And righteousness must prove to be the belt of his hips, and faithfulness the belt of his loins."—Isaiah 11:4, 5.

However: What would be righteous or moral about a nuclear war that would kill indiscriminately both good and bad? In fact, a committee of the National Conference of Catholic Bishops in the United States recently said that they "judged immoral even the threat to use such [nuclear] weapons." Now, if even the threat of a nuclear war is considered immoral, with what logic could we consider the real thing a righteous war?

AT ARMAGEDDON ALL NATIONS WILL BE ALLIES

The Bible says: "I saw the wild beast and the kings of the earth [“with all the kings of the earth,” “The Jerusalem Bible”] and their armies gathered together to wage the war with the one seated on the horse and with his army."—Revelation 19:19.

However: Would not a nuclear holocaust be the consequence of a conflict between opposing nations, rather than nations united on the same side?

AT ARMAGEDDON ONLY THE WICKED WILL BE DESTROYED

The Bible says: "There is a controversy that Jehovah has with the nations. He must personally put himself in judgment with all flesh. As regards the wicked ones, he must give them to the sword."—Jeremiah 25:31.

"For the upright are the ones that will reside in the earth . . . As regards the wicked, they will be cut off from the very earth; and as for the treacherous, they will be torn away from it."—Proverbs 2:21, 22.

However: Would only the guilty, "the wicked ones," perish in a nuclear holocaust? What happened during the nuclear holocaust in Hiroshima and Nagasaki, Japan, in 1945? Among the tens of thousands of men, women and children who perished were a large number of Catholic nuns, many foreigners who had gone to Japan to study and had become trapped there by the war, thousands of Koreans brought to Japan to serve as forced laborers and even a handful of American prisoners of war. Were all of these the guilty ones, "the wicked ones"?

ARMAGEDDON SURVIVAL IS ASSURED FOR SOME

The Bible says: In “the great and fear-inspiring day of Jehovah . . . it must occur that **everyone who calls on the name of Jehovah will get away safe; for in Mount Zion and in Jerusalem there will prove to be the escaped ones, just as Jehovah has said, and in among the survivors, whom Jehovah is calling.”—Joel 2:31, 32.**

However: From a human standpoint, would anyone survive a man-made nuclear war? Not likely. Only a small percentage of the people would have access to radiation-proof bunkers. And even their possibility of survival would be slim. Thirteen international experts were asked by the Swedish Royal Academy of Science to predict what would happen should 15,000 nuclear bombs be exploded in the northern hemisphere within the space of a few days. They answered: “No one would survive the inferno.”

ARMAGEDDON WILL NOT RUIN THE EARTH

The Bible says: “The nations became wrathful, and [God’s] own wrath came, and the appointed time . . . to bring to ruin those ruining the earth.”—Revelation 11:18.

However: From a human standpoint, there is little doubt that a nuclear holocaust could bring about the end of all human life. Jonathan Schell in his best-seller, *The Fate of the Earth*, warns: “It would be not merely a human but a planetary end—the death of the earth.”

What do we learn from the above scriptures? We learn that God’s war at Armageddon will be quite different from what a man-made nuclear holocaust would be. Armageddon is not designed to destroy the earth. It is designed to destroy those who are threatening to ruin the earth. To speak of a possible nuclear holocaust as being Armageddon, therefore, is a misapplication of the term. But regardless of what we call it, we still want to know: Will there be a nuclear holocaust or not? Once again we can turn to the Bible, confident that it will give us a reliable answer.

At Isaiah 45:18 we read: “For this is

what Jehovah has said, the Creator of the heavens, He the true God, the Former of the earth and the Maker of it, He the One who firmly established it, who did not create it simply for nothing, who formed it even to be inhabited.” Since the “Former of the earth” has not created it “simply for nothing,” he will never permit a nuclear holocaust to turn it into a radioactive wasteland, uninhabitable by man or beast. This would be contrary to His purpose as expressed at Psalm 37:29: “The righteous themselves will possess the earth, and they will reside forever upon it.”

‘But does not 2 Peter 3:7, 10 at least

ARMAGEDDON WILL BE

- God's war
- A righteous war
- A war to destroy only the wicked

A NUCLEAR HOLOCAUST WOULD BE

- A human war
- An unrighteous war
- A war that destroys both good and bad

allude to a nuclear holocaust?" someone may ask. There we read, according to the *Authorized Version*: "But the heavens and the earth, which are now, by the same word are kept in store, reserved unto fire against the day of judgment and perdition of ungodly men. But the day of the Lord will come as a thief in the night; in the which the heavens shall pass away with a great noise, and the elements shall melt with fervent heat, the earth also and the works that are therein shall be burned up."

Obviously, however, this is symbolic speech and does not refer to a literal nuclear holocaust, which, while destroying the earth and man upon it, could not cause the literal heavens to "pass away with a great noise." Actually it is this wicked system of things, the "ungodly" human society and its governmental "heavens," that will suffer complete destruction, as if by fire. The worldly factors, in all their elemental parts will be dissolved in the heat of God's anger, along with the materialistic "works" of this human society, the symbolic "earth." This will pave the way for "new heavens and a new earth" of which Peter next spoke—a new earthly society of redeemed mankind under the new governmental

"heavens" of Christ's Messianic Kingdom, in which righteousness will dwell. (2 Peter 3:13) Gone will be the Satanic influence that has led men away from God. A nuclear holocaust would not rid man of the Devil and his demons. Armageddon will open the way for Christ Jesus, at the direction of his Father, to do this.—See Revelation 20:1-3.

World events indicate that the expression of God's judgment is due at any time. Thus the following prophecy must also shortly undergo fulfillment: "Whenever it is that they are saying: 'Peace and security!' then sudden destruction is to be instantly upon them." (1 Thessalonians 5:3) While not ruling out conventional wars or even a possible *limited* atomic war, this scripture does rule out a nuclear holocaust. How so? Well, ask yourself: After a nuclear holocaust, who would be left to cry out "peace"? And if there were survivors, just how much reason would they have to cry out "security," living as they would be upon a radioactive, polluted earth?

Now you may wonder of what benefit it is to be relieved of the fear of nuclear holocaust only to be faced with the new fear of "sudden destruction" at Armageddon? Let our next article explain.

ARMAGEDDON CLEARS THE WAY FOR A NEW START!

WHEREAS a nuclear holocaust would clearly be a cause for fear, the war of Armageddon does not have to be. Respond to the Bible's message about it in the right way and it can mean for you an entirely new start in life.

Just as people respond to the threat of a nuclear holocaust in various ways, so it is with Armageddon. Some *try to prevent it*, others *to ignore it*, and a minority, believing it to be inevitable, *seek means for personal survival*. How will you respond?

Armageddon Cannot Be Prevented

Since Armageddon means "the war of the great day of God the Almighty," no one can prevent it. (Revelation 16:14) But some foolishly try. How? In the sense that they deny that it will ever come and they oppose those who sound a warning. They thereby place themselves in the company of persecutors of Christians in the first century who scoffed at the warning of Jerusalem's pending destruction. But when the city was destroyed in 70 C.E., some of those scoffers may have remembered the warning that wise Gamaliel had given them earlier: "Let them [the Christians] alone; . . . otherwise, you may perhaps be found fighters actually against God."—Acts 5:34-39.

Included among "fighters actually against God" today are religious clergymen who deny the real Armageddon message of the Bible. They lead people to believe that Armageddon is a man-made

nuclear holocaust that political negotiations and peace movements can prevent.

Jonathan Schell points this out in his book *The Fate of the Earth*, writing: "A closely related, and more serious, perversion of religion is the suggestion, made by some Christian fundamentalists, that the nuclear holocaust we threaten to unleash is the Armageddon threatened by God in the Bible." Then he correctly argues that "extinction by nuclear arms would not be the Day of Judgment, in which God destroys the world . . . [but] would be the utterly meaningless and completely unjust destruction of mankind by men."

The clergy that thus confuse the two are overlooking the far greater danger of Armageddon. By becoming involved in movements to prevent a "thermonuclear Armageddon," as they mistakenly call it, they are actually fighting to preserve a wicked system of things that God has purposed, with good reason, to destroy. Their attempt to prevent Armageddon is ill-advised and futile.

The Archbishop of York recently as much as said so. Speaking about the proper stand the Church of England should take on nuclear weapons, he said: "This debate is about the end of the world and about how we may best delay it." But why should Christians want to delay the "end of the world" about which the Bible speaks? Why should they want to pray for the world to be spared an Ar-

mageddon that God considers necessary?

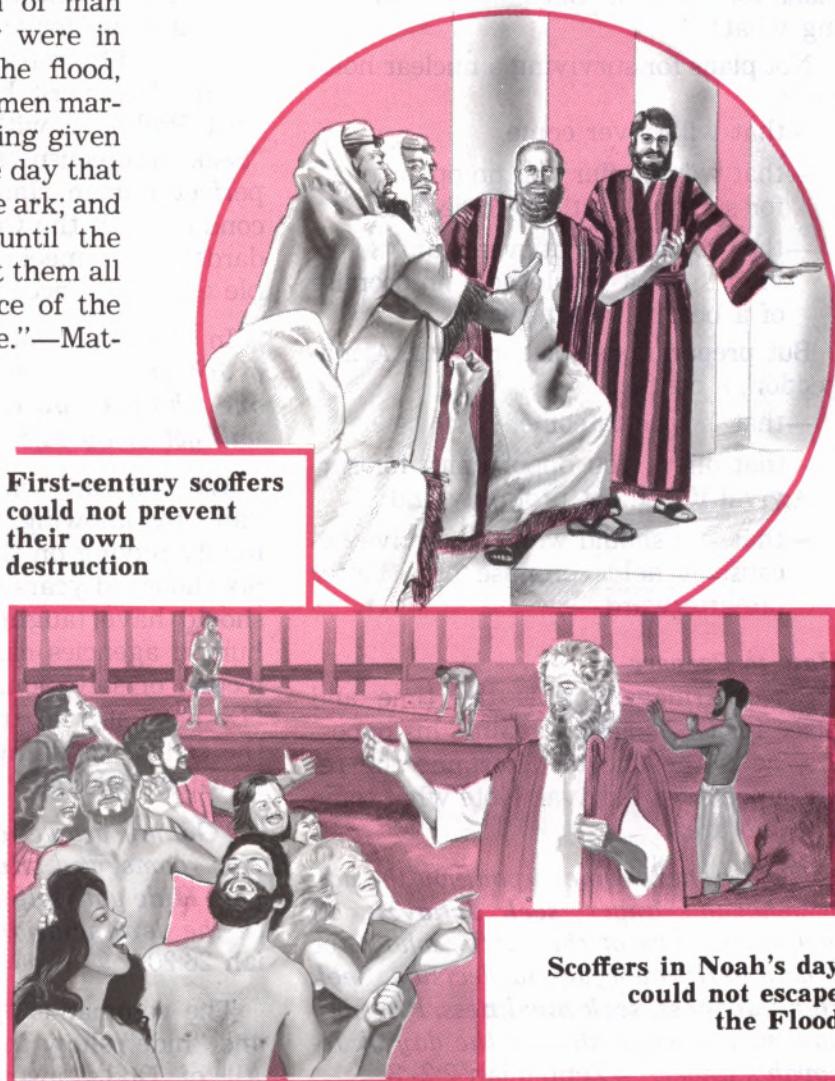
Do Not Ignore Armageddon

Equally dangerous is any attempt to ignore the Bible's message about Armageddon. This is how many people in Noah's day reacted to the message of the Flood. During his earthly ministry Jesus referred to this, saying: "Just as the days of Noah were, so the presence of the Son of man will be. For as they were in those days before the flood, eating and drinking, men marrying and women being given in marriage, until the day that Noah entered into the ark; and *they took no note* until the flood came and swept them all away, so the presence of the Son of man will be."—Matthew 24:37-39.

Those pre-Flood earthlings who took no note ignored Noah's message about the Flood. But once the Flood came, they could not ignore its catastrophic consequences. It will be the same with those today who ignore the Bible's warning about Armageddon. When "sudden destruction" is "instantly upon them . . . they will by no

means escape."—1 Thessalonians 5:3; compare 2 Peter 3:3-10.

Those few, comparatively speaking, who seek to follow God's instructions for surviving Armageddon do not view that war as a cause for fear. Confident of divine protection they view it as the opportunity for a new start. Would you like to do this also? Please read on.



PREPARE NOW TO SURVIVE ARMAGEDDON

IN VIEW of world conditions and the fulfillment of Bible prophecies, it is urgent that no time be lost in making plans for survival. But plans for surviving what?

Not plans for surviving a nuclear holocaust

- that will never come,
- that would offer you no opportunity for survival if it did come, and
- that you might not even want to survive, since it would hold no promise of a better life afterward.

But preparations for surviving Armageddon, a conflict

- that is sure to come,
- that offers you opportunity for survival if you act promptly and
- that you should want to survive because it holds promise of a better life afterward.

How to Prepare

Since Armageddon is the time and place for God's action against his opposers, he is the one to determine the requirements for survival. Note what some of them are:

"Before there comes upon you the day of Jehovah's anger, seek Jehovah, all you meek ones of the earth, who have practiced His own judicial decision. Seek righteousness, seek meekness. Probably you may be concealed in the day of Jehovah's anger."—Zephaniah 2:2, 3.

Yes, "seek Jehovah" by studying his Word, the Bible, by yourself and with others. Get acquainted with God. Gain his friendship by meeting the requirements he sets down for those who will be his friends and by refraining from doing the things that merit his displeasure. (*Contrast Psalm 15 with Galatians 5:19-21.*) "Seek righteousness" by replacing imperfect human standards of acceptable conduct with the Creator's perfect standards. "Seek meekness" by being humble enough to accept divine direction.

In "the great and fear-inspiring day of Jehovah . . . it must occur that everyone who calls on the name of Jehovah will get away safe."—Joel 2:31, 32.

We can call "on the name of Jehovah" by knowing it, respecting it and totally relying on the God who bears it. Six thousand years of human experience should have taught us that humans or human agencies can never ensure protection or salvation. Psalm 146:3 warns: "Do not put your trust in nobles, nor in the son of earthling man, to whom no salvation belongs."

"Go, my people, enter into your interior rooms, and shut your doors behind you. Hide yourself for but a moment until the denunciation passes over."—Isaiah 26:20.

The commands "go," "enter," "shut" and "hide" show that action is required. All of God's instructions—as he pro-

gressively reveals them to us—must be followed closely, thus allowing him to maneuver us into the place of safety that he himself has prepared. "For he will hide me in his covert in the day of calamity," said King David. "He will conceal me in the secret place of his tent." —Psalm 27:5.

This certainly does not mean withdrawing from society and making survival plans of our own initiative as did one American "survival group" several years ago. Their survival preparations are clearly not the kind that will ensure protection at Armageddon. For example, they purchased membership in a secret mountain hideaway for \$12,500 plus annual dues of \$300. Jehovah, however, puts no price tag on Armageddon survival, nor does he charge rent for being concealed "in the secret place of his tent."

Blessings of Armageddon Survival

The battle of Armageddon will clear the way for the restoration of righteous

conditions on the earth. Both man and his environment will, under the direction of God's Messianic Kingdom through Christ Jesus, progressively be brought back to the perfect, sinless condition God purposed at the beginning. (Revelation 21:1-5; Genesis 1:28) Millions of the dead will be resurrected and given an opportunity to conform their life to God's requirements. Happily, this will even include many of the Hiroshima and Nagasaki atomic-bomb victims. (Acts 24:15) Would you enjoy welcoming them back to a world where nuclear war—in fact war of every kind—will be unknown? —Psalm 46:9.

If you would enjoy living in such a world, we encourage you to learn more about the requirements for Armageddon survival. Jehovah's Witnesses stand ready to assist you in learning about these from your own Bible. Prepare now, so that you, too, can live forever in Paradise on earth.



What a blessing to survive Armageddon!

"You Will Die Without Blood!"



I WAS getting up to fix lunch when I felt something pop in the lower right side of my abdomen. I doubled up with pain, but I figured it was just one of those many catches you get late in pregnancy.

The pain, however, intensified. My stomach was throbbing, walking was difficult; something was terribly wrong. A woman who lived next door to our home in Arlington, Texas—a dear friend throughout this ordeal—rushed me to the hospital.

"No!" I clamored, when the medical personnel suggested that I was probably simply in labor. Having had two other children, I knew what labor pains felt like, and these were not labor pains. So tests were taken.

By the time my husband, Mike, could get there, I was wild with pain. Groans and tears were coming out of me not only because of the pain but also because no one seemed to believe that something was seriously wrong with me. Mike, however, took one look at me, pivoted and asked the head nurse to please get a doctor quickly—any doctor. When the doctor on call showed up, he was not

alone. He had an ob (obstetrician), my private doctor and a pediatrician with him.

The ob gently laid his hand on my abdomen. I screamed. His light touch felt like a knife cutting me open. "My God!" he gasped. "She has at least two pints of blood in her abdomen right now. It's probably *abruptio placenta* [premature separation of the placenta from the uterus]. We've got to do a cesarean section immediately."

Suddenly I turned to my husband and automatically blurted out, "Oh, Mike, no blood!"

Our Stand Was Tested

As calmly as he could, Mike took the three doctors aside and briefly explained our view on blood transfusions as Jehovah's Witnesses.

"The Bible book of Acts commands Christians to abstain from blood," he said. "That would mean to keep free from blood in any form. Under no circumstance will my wife receive blood." —Acts 15:20, 29.

According to the doctors my blood count was dangerously low. At time of admission my hemoglobin count was at 10 and hematocrit at 30. They were sure the count was lower now. (Normal hemoglobin is 12 to 16; hematocrit is 34 to 50.)

Now came what might have been a sincere plea, but to me it was a scare tactic. "You will die without blood, do you know that?" asked one doctor.

"Yes," I answered. "But I cannot violate God's law and my conscience."

Oddly enough, it was easy for me to say: "Yes, I know I may die." A sort of calm came over me because I know the dead are peaceful in the grave and that dying is like going to sleep. The dead "are conscious of nothing at all," I had learned from the Bible.—Ecclesiastes 9: 5, 10.

The only thing that saddened me was the thought of leaving my husband and children. My heart went out to Mike. 'What will he do to take care of (possibly) three children?' I wondered. 'How will my daughters take my death?' For me, I had the easy part. Either I'd wake up here in the hospital or in God's New Order by means of the resurrection. It was my family who would have it hard.

I signed a legal waiver relieving the hospital and doctors of any liability due to operating without blood, and 15 minutes later I was wheeled into surgery where a cesarean section was performed. At 6:01 p.m. Megan was born, weighing in at five pounds four and a half ounces. She was put in the intensive care nursery.

The doctor now came out of the operating room and told Mike that I was in profound shock. They did not know the source of the bleeding and, unless it

was found soon, I would bleed to death on the operating table.

"I'm sorry," Mike began. "We already told you no blood even if Sherry dies. Not only would I be going against what I believe if I said yes but I would also violate my wife's conscience. I couldn't live with that. It's not a decision we made on the spur of the moment. We made it a long time ago based on Bible principles. There are other things you can use, such as blood-volume expanders."

Although he didn't agree with our stand, he promised my husband that he would do everything he could to help without using blood.

Crises can muddle clear thinking. Putting off making such a decision until faced with the problem could easily cause one to compromise under pressure from doctors or hospital staff. I'm glad my husband and I saw the importance of deciding ahead of time to stand firm in such emergencies.

The doctor returned to the operating room and found the source of my hemorrhage—a ruptured uterine vein, apparently weakened by my previous pregnancies. It took 20 stitches to repair it. Though I had lost more than half of my blood, the nonblood fluid Ringer's lactate helped keep up the fluid volume.

"The greatest problem now is infection," the doctor told my husband. He explained that an infection would kill me because my blood level was too low to fight off a disease. Again a blood transfusion was recommended.

"You mean you can guarantee my wife won't get an infection such as hepatitis or something else if you give her blood?" Mike asked.

"No," answered the doctor.

Mike concluded that there would be

less chance of infection by my not taking blood. The doctor agreed to respect my husband's decision.

"Megan Is Alive!"

Two days had gone by and I had not seen my newborn yet. Even though I had been told that our daughter was alive though very sick, down deep I felt she was dead. When my uncle from Houston arrived toting a Polaroid camera, Mike got an idea. 'If Sherry just had proof that Megan was alive,' he thought, 'this would help her to recover.' So he borrowed my uncle's camera and convinced the nursery nurse to take a picture of Megan. "She really is alive!" I exclaimed, overjoyed to see my little Megan for the first time, even if it was only a picture. I *had* to live, for not only did the rest of my family need me but so did this little one.

I had excellent nurses and doctors. The head nurse from the intensive care nursery reported Megan's progress to me twice a day, no matter how insignificant it may have seemed.

By the fourth day I felt better. My blood counts were stabilizing. Things looked cheery for the first time since this ordeal began. Yet Mike looked exhausted. He had spent the last two days and nights at my side. He could now go home and rest.

On the fifth day I was well enough to have all the tubes that were inserted on the second day removed. What joy when I was told I could go to the intensive care nursery! I could hold and nurse my Megan for the first time. There she was, naked and so tiny. We were finally together in spite of such odds—what a touching moment! I was so happy I cried, and so did the nurse.

Setback

Later that evening as Mike and I were talking I began to feel worse. 'Oh, no! This can't happen,' I thought. 'Maybe if I go to the bathroom I might feel better.' Instead, I began to vomit violently. Mike helped me back to bed and rang for the nurse.

My stomach was swelling with blood again. As the doctor ordered all the tubes put back, Mike gently wiped my forehead and tightly held my hand. Suddenly all was quiet. All our cheer vanished. Mike broke down sobbing.

Having had a setback, I found myself relying more and more on Jehovah to give my family and me the strength to go on. Often my dear father and father-in-law would offer a most welcome bedside prayer. This proved to strengthen us further. So did the phone calls, get-well cards and prayers of our brothers and sisters in the faith.

On the ninth day all the tubes were removed again. I was elated because Mike was coming and I wanted to surprise him. So I spruced myself up and sat up in bed. Was he happy to see me without those tubes! Arm in arm we walked down the corridor to see our Megan, this time to the regular nursery where all the other healthy babies were.

Another Setback

Later that evening that horrible sick feeling came back. 'I just can't let Mike know I'm getting sick again,' I said to myself. 'I know what to do. I'll encourage him to go home early and get a good night's sleep.' He took me up on my offer. No sooner had he left than my vomiting started.

I pulled the emergency cord. The nurses came running. I was helped into bed and the doctor was called.

The doctor entered my room, bent down and said, "Sherry, I hope you will not be angry. I'm going to have all the tubes put back in and call a specialist to look at you tomorrow." Suddenly I became very scared and I started crying uncontrollably. This would make the third time for the tubes to be inserted. I was fed up with the false hopes, the pain, the needles. I had had it!

After the nurses left I approached God in prayer. 'Was Jehovah tiring of my asking for so many things?' crossed my mind. I felt I was presuming on his loving-kindness since he had helped me to endure this far.

When Mike entered my room the next morning his face showed great disappointment. When he left last night I was doing so well and now—I felt so sorry for him. We cried a little and then prayed.

The specialist arrived and confirmed what the other doctor feared. I had a partial small-bowel obstruction. Since my

blood counts were still low the specialist cautioned: "You, little lady, cannot undergo surgery again for quite some time."

Massive doses of iron were given to build up the blood—two injections of five cc's each, which were very painful. A healthy person may not tolerate such a high dose, but I could because of my severe anemia.

Good News

On the 11th day of my hospital stay, X rays showed that my bowel obstruction was getting smaller. And Megan was given a clean bill of health. I had to hurry to get better because Megan was waiting for me to take her home.

The following days brought more good news. I was tolerating liquids. My blood counts were rising. X rays showed that my partial bowel obstruction was gone. And for the first time in 13 days I saw my two other daughters through a window. Were they excited! And so was I.

More good news. After 17 days in the hospital, I was going home—tomorrow!

The day we all prayed for arrived. 'Truly God has heard; he has paid attention to the voice of my prayer,' I thought. (Psalm 66:19) I thanked the doctor for all he did, including his respecting my Bible-trained conscience, and for not giving up on me. I told him how grateful I was for his efforts to save my life. "You are one lucky girl," he said kindly. Of course, I gave credit to Jehovah.

Megan was dressed and brought in, followed by a parade of nurses. We hugged and said our good-byes. Then off to the car and home to a tearful reunion with our daughters and parents. How good it felt to be home and alive!—*As told by Sherry Flemming.*



Our healthy daughter Megan

When Bamboo Flowers

The flowering of bamboo is one of the rarest and most unusual events among plant life.

A few years ago, Dr. Thomas Soderstrom planted several specimens of bamboo from Puerto Rico at the Smithsonian Institution in Washington, D.C. When the leaves of the only surviving plant started to fall off and the plant looked sickly, Dr. Soderstrom was sorely disappointed. "But then I realized this was what happened when bamboos were about to flower, a rare event," said Dr. Soderstrom. "Then I got excited." A friend in Puerto Rico told him that the species was in bloom "all over the island." That particular species had last flowered in 1910, 66 years earlier.

In 1979 another beautiful and popular species, the umbrella bamboo, started to flower, first in northern Europe, then in North America and eventually all over the world. That was the first time the plant was seen to bloom since its discovery in the Himalayas in the 1800's. But that was also the umbrella bamboo's last show.

Most species of bamboo have a built-in timing mechanism in the cells that tells them when to flower—and when to die. It may be triggered at intervals ranging from 10 to 120 years, depending on the species. When that time comes, young and old plants of that species around the world follow the signal and begin to perform their final ritual. First, a particular plant flowers, then the whole grove, then all the bamboos of that species in the area and finally all around the world. Within a year or two, the whole species dies out. Does this mean the end of the plant? Happily, no. Regeneration will take place by means of the numerous rice-kernellike seeds resulting from the flowering, but this may take a decade or longer.

When bamboo blooms, branches near the top of the main stem burst out with tiny, white blossoms. In many species the

flowers are covered by green scales, or bracts, making them quite difficult to see. This adds to the bamboo flower's being a seldom-seen rarity. In fact, botanists find them hard to examine with the unaided eye—they must be brought into the laboratory and studied under a microscope. And studied they are, because bamboo is so extensively used in the Far East, India and South America that when a growth suddenly dies out, the effect can be devastating. The disappearance of the umbrella bamboo, for example, almost wiped out the principal food supply of the giant pandas in Szechwan Province, China—a near disaster.

So bamboo and its synchronized flowering ritual still remains largely a puzzle to scientists. But it is another fascinating example testifying to the creation of living things.



**It may take decades
for bamboo to flower**

Young People Ask...

Does It Matter What I Read?

WHEN Jacques was not enjoying archery, running or gymnastics, he was often found reading a book. "I was searching for the truth," he says, "and so I got absorbed in books about psychic phenomena. However, far from adding enjoyment to life, books made me so depressed that I decided to commit suicide."

Jacques' sad experience illustrates that what you read affects you—for better or for worse. And while few books might affect a person so drastically, it would be foolish to conclude that one can read just *anything* and not be affected—especially when you consider just how much reading material is available today.

Make a visit to a good-sized library. It likely contains thousands or even millions of books—"romance" novels, science fiction, history, sports stories. A lifetime would not be long enough to read all of this! No wonder, then, that long before the era of mass printing King Solomon warned young people: "Take a warning: To the making of many books there is no end, and much devotion to them is wearisome to the flesh." (Ecclesiastes 12:12) Solomon was not discouraging reading; he was just advising you to be selective. But what should you select?

Choosing Your "Conversations" Carefully

Your mind, like your body, thrives—or starves—on what you feed it. No nutrition-minded person would eat a

junk-food diet. But what about how you feed your mind? English philosopher Francis Bacon put it this way: "Some books are to be tasted, others to be swallowed, and some few to be chewed and digested." And we might add, some books are not worth reading in the first place!

Consider, too, what 17th-century French philosopher René Descartes said: "When one reads good books it is like having a conversation with men of breeding who lived in the past. We might even call it a selective conversation in which the author expresses only his most noble thoughts." The problem is, however, that not all writers' thoughts are really noble—not even those who "lived in the past." And what of today's crop of writers? They are part of a generation the Bible predicted would be "lovers of themselves, lovers of money, self-assuming, haughty, blasphemers, disobedient to parents, unthankful, disloyal, having no natural affection, not open to any agreement, slanderers, without self-control, fierce, without love of goodness." (2 Timothy 3:1-3) Would you want to "converse" with people like this? 'Why not?' you may ask.

The Bible answers by stating: "Bad associations spoil useful habits." (1 Corinthians 15:33) Yes, the people with whom you associate can mold your personality. Have you ever spent so much time

with a friend that you found yourself beginning to act, talk and even think like your friend? Well, reading a book is like spending hours with the one who wrote it. Unwittingly, you can be strongly influenced.

Two youths, for example, read a book featuring reincarnation. Reportedly, they were so moved by what they read that they began to think of death as an escape from the problems they were facing. So they stole a car and deliberately smashed it into a concrete wall! How profoundly they were affected by their "conversation" with the author of that book!

Of course, to what extent a writer might influence you would have a great deal to do with the subject he writes about. A "conversation" with an expert cook, a foreign-language teacher or a tourist guide might reveal little about the writer's morality or view of life. But a "conversation" with a philosopher or even a teen-romance novelist could reveal an unrealistic or even warped view of life.

You may therefore conclude that it is safer to stick with books on factual subjects. Even here, however, the principle Jesus stated at Matthew 24:15 is pertinent: "Let the reader use discernment." Learn to analyze and weigh what you read. Be aware of the fact that all humans are afflicted with a certain amount of bias and are not always totally honest in their portrayal of facts. The Bible cautions us against accepting unquestioningly everything we read or hear: "Anyone inexperienced puts faith in every word, but the shrewd one considers his steps."

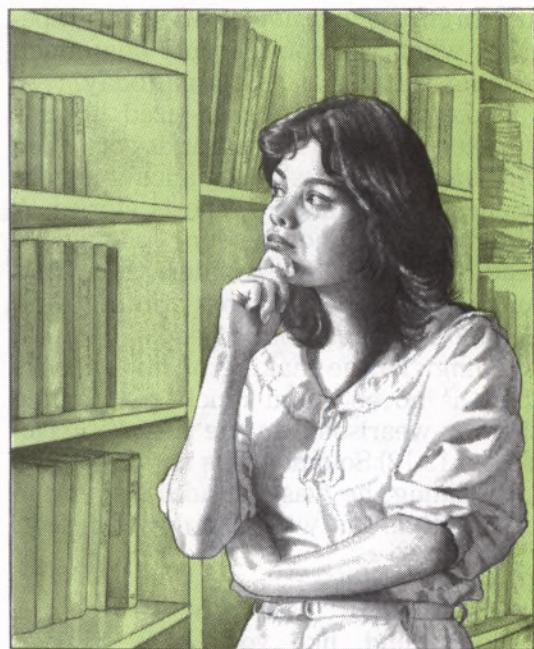
—Proverbs 14:15.

Is fiction "off limits"? Not necessarily. There are *some* books, written especially for teenaged youths, that are not

only entertaining but educational. And, of course, there are "classics" and other fictional works that have real value. Nevertheless, care should be exercised in selecting a book of this type. Does it feature senseless violence, sex or occult practices? Just a glance at the cover will often answer these questions. And what about the book's characters? Are the "heroes" people who indulge in things God condemns, such as fornication and drunkenness? If so, have the strength of character to put the book down. There are so many upbuilding things to read that it is foolish to waste time on books that do not build up.

"Look Out . . . "

Caution should also be taken in reading anything that expounds a philosophy of life. Teen magazines, for example,



With so many thousands of books, you must be selective

are full of advice on everything from dating to premarital sex—not always advice a Christian could use, however. And what about books that plunge into weighty philosophical questionings? Are they wholesome reading?

A young Frenchman named Jean-Marc says: "At age 13 I started reading books dealing with death, suffering and the purpose of life. However, the wide diversity of answers, which included philosophical, religious and political theories, left me dissatisfied. I wondered why life is so uncertain."

Jean-Marc did not wonder for long, however. Two young girls who were Jehovah's Witnesses helped him see what the Bible had to say about the purpose of life; namely, that man exists to serve God. (Revelation 4:11) They also helped him develop a Bible-based hope for a coming better world where peace and justice will prevail. (2 Peter 3:13) Jean-Marc thus received satisfying answers to his questions, not just empty speculations. No wonder the Bible cautions: "Look out: perhaps there may be someone who will carry you off as his prey through the philosophy and empty deception according to the tradition of men . . . and not according to Christ." (Colossians 2:8) Go, instead, to the real source of wisdom—the Bible. Nevertheless, Jean-Marc's experience illustrates that reading can also affect you beneficially.

It Matters What You Read!

Studying the Bible and Bible-related publications has had a profoundly good effect on many youths. One Japanese girl, for example, says that reading the Bible helped her keep her mind off sex—often a problem for youths. "I always put the Bible near my bed and make a point

of reading it before going to sleep," she says. "It is when I am alone and have nothing to do (such as at bedtime) that my mind sometimes turns toward sex. So reading the Bible really helps me!"

Another youth fell into sexual immorality. The reason? "I was starving spiritually," he said. But he adds: "I started to read the *Watchtower* and *Awake!* magazines, as well as the book *Your Youth—Getting the Best out of It.** Gradually I regained my spiritual strength and cleaned up my life. Now I am happy." So "conversing" with the people of faith written about in the Bible can give you real moral fiber. This can greatly add to your happiness.

Will you take the time to read the Bible and publications that help you understand it? Remember, what you read can help or hurt you, confuse or enlighten you. But if you give priority to reading God's Word you are sure to benefit. And if you still have time to do other reading, no one will begrudge your taking the time to do so occasionally. Just be sure that you are selective about what you read. For it can truly be said: "Tell me what you read, and I will tell you what kind of person you are."

* Publications of the Watchtower Bible and Tract Society.

In Our Next Issue

● *Many Religions—What Does It Mean to You?*

● *Do I Have to Go to School?*

● *Why They "Scrape" the Sky*

The Marvel of Our Changing Tides

A DAY at the beach! The little boy can no longer wait. Ahead of the family, he speeds through the palm trees on to the beach. But he stopped dead in his tracks. The glee on his face turns to dismay.

"Dad!" he shouts, "the sea is all gone! Where is all the water?"

"Don't worry, Son," replies the father. "It's just the tide. It's gone out. You'll see it come right back in again after lunch."

A short way up the shore, a group of young snorkelers are glad that the tide is out. For without the big waves at high tide, the sand settles gently to the bottom, leaving the water crystal clear, warm and safe. Swimming slowly through the shallow, azure-blue waters around the reef, they gaze in wonder at a whole new world of corals, shells, greenery and myriads of brightly colored fish.

A couple of hours later the flood tide is in. The little boy, now atop a high cliff jutting out into the sea, watches intently as the majestic rollers pound on the rocks below, shooting spray and mist high into the air. Crash—there goes another one, surging and churning the water foamy white.

Mesmerized by the brute power of this awesome spectacle, he can no longer contain his curiosity.

"Dad, where does all the water come from? Why does it go out and then come in again?"



Can you explain how this gigantic task is accomplished? What is it that moves those billions of tons of water to within inches of a predictable "waterline"?

An Incredible Feat

For thousands of years, the daily rise and fall of the sea had been a mystery to men. Some thought it was the earth breathing. It took a mind like Isaac Newton's to come up with an answer. In his thesis on gravitation he included an explanation of the tidal movement.

Tides are essentially the result of the gravitational pull of the sun and moon on the sea. But since the moon is so much nearer, its pull is more than twice that of the sun. It attracts, or pulls, the water directly beneath it into a high spot, or tidal "bulge." In the middle of a large ocean, this bulge may only be a foot high. But when the tidal bulge is pushed up against a broad landmass, as at Nova Scotia's Bay of Fundy, the incoming tide is a sight to behold. Helped by the unique combination of a wide inlet and converging shores there, the dif-

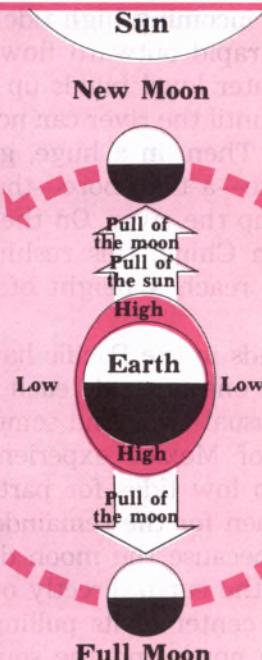
ference between extreme high and low tides can reach 50 feet (15 m). So when the moon is overhead, you can expect a high tide.

As the moon moves on, it pulls the water away with it. The tide begins to ebb, or go out, until the moon has moved one quarter of the way around the earth from you. The tide has now fallen to its lowest point, or low tide. Since it takes the moon 24 hours and 50 minutes to

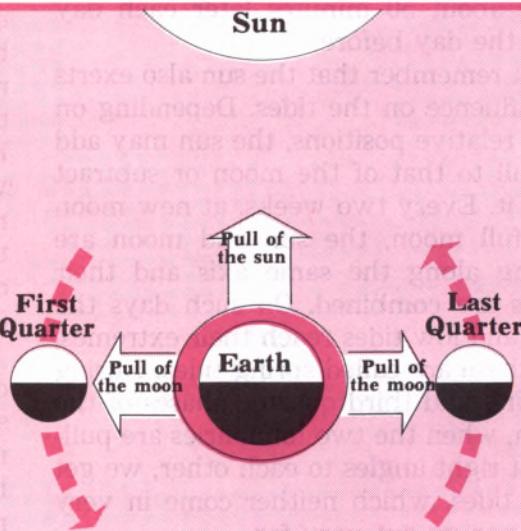
travel around the earth, low tide usually occurs about six hours after high tide.

Now, you may be wondering why low tide occurs when the moon is one quarter the way around the earth from you rather than when it is on the opposite side of the earth. Again, we look to the law of gravity for the answer. Simply stated, the closer an object is to a source of gravity, the more strongly it is attracted. When the moon is creating a

Spring Tides



Neap Tides



During new and full moon each month, earth, moon and sun are in line, and the sun and moon combine their strength to produce extra high and low tides called spring tides

At the first quarter and last quarter of the moon, when the moon and sun are pulling at right angles to each other, the tidal range is not so great and we get neap tides

high tide on one side of the earth, the water on the other side is 8,000 miles (12,800 km) farther away and so experiences a much weaker pull. It is, in effect, left behind and forms itself into a bulge almost identical to the one beneath the moon.

Thus, when the moon has gone half way around the earth, or 12 hours and 25 minutes after the first high tide, you will see a second high tide. This is followed by another low tide about six hours later when the moon is three quarters of the way around the earth from you. So, in most places, there are two high and two low tides each day, and they come about 50 minutes later each day than the day before.

But remember that the sun also exerts an influence on the tides. Depending on their relative positions, the sun may add its pull to that of the moon or subtract from it. Every two weeks, at new moon and full moon, the sun and moon are pulling along the same axis and their forces are combined. On such days the high and low tides reach their extremes, and these are called spring tides. During the first and third quarter phases of the moon, when the two luminaries are pulling at right angles to each other, we get neap tides, which neither come in very high nor go out very far.

A Never-Ending Variety

Although the sun and the moon provide the force behind the tides, it is the actual configuration of the shoreline, the sea bottom and many other factors that determine the final outcome. Thus, tides are strictly local affairs, and there is a never-ending variety.

Where the coastal seabed is very shallow and flat, the low tide can recede

many hundreds of yards, leaving large areas exposed. For example, the famous Mont-Saint-Michel in Normandy is left high and dry at low tide, allowing people to walk out to it over the sand. But when the tide comes in, this medieval fortress is completely surrounded by water, except for a built-up road linking it to the mainland. So the next time you walk out a long distance to explore an exposed reef, make sure you know when the tide will return. A fast incoming tide can leave you stranded and out of your depth a long way from shore.

At the estuaries of the Amazon, the Severn in England and a number of other rivers, the incoming high tide is held back by the rapid outward flow of the river. The water level builds up outside the entrance until the river can no longer hold it back. Then, in a huge, gushing, wall-like wave—a tidal bore—the water rushes back up the river. On the Chien-tang River in China, this rushing wall of water can reach a height of 25 feet (7.6 m)!

A few islands in the Pacific have only one high and one low tide each day instead of the usual two. And some places in the Gulf of Mexico experience two high and two low tides for part of the month and then for the remainder, only one. This is because the moon does not always orbit the earth directly over the equator. The center of its pulling effect moves to the north and the south in a constantly changing pattern. Also, large bodies of water in motion have a momentum of their own. All of this alters their reaction to the influence of the sun and moon.

Although tides differ greatly from place to place, the exact levels they will reach

at a particular spot can be predicted with great accuracy more than a year in advance. These are published in 'tide books,' which also tell us when the sun and the moon will be closest to the earth, bringing the highest and lowest tides of the year.

Salvage tugs, for example, are greatly aided by these different tides. For when a ship goes aground, it is often necessary to wait for the next spring tide to 'float it off.' But woe to the ship that goes hard aground during a high spring tide! It may have to be left where it is—abandoned. Remember, never moor your boat with a short rope at high spring tide. Otherwise, when the tide goes out, your boat may still be there, securely moored, but dangling high and dry.

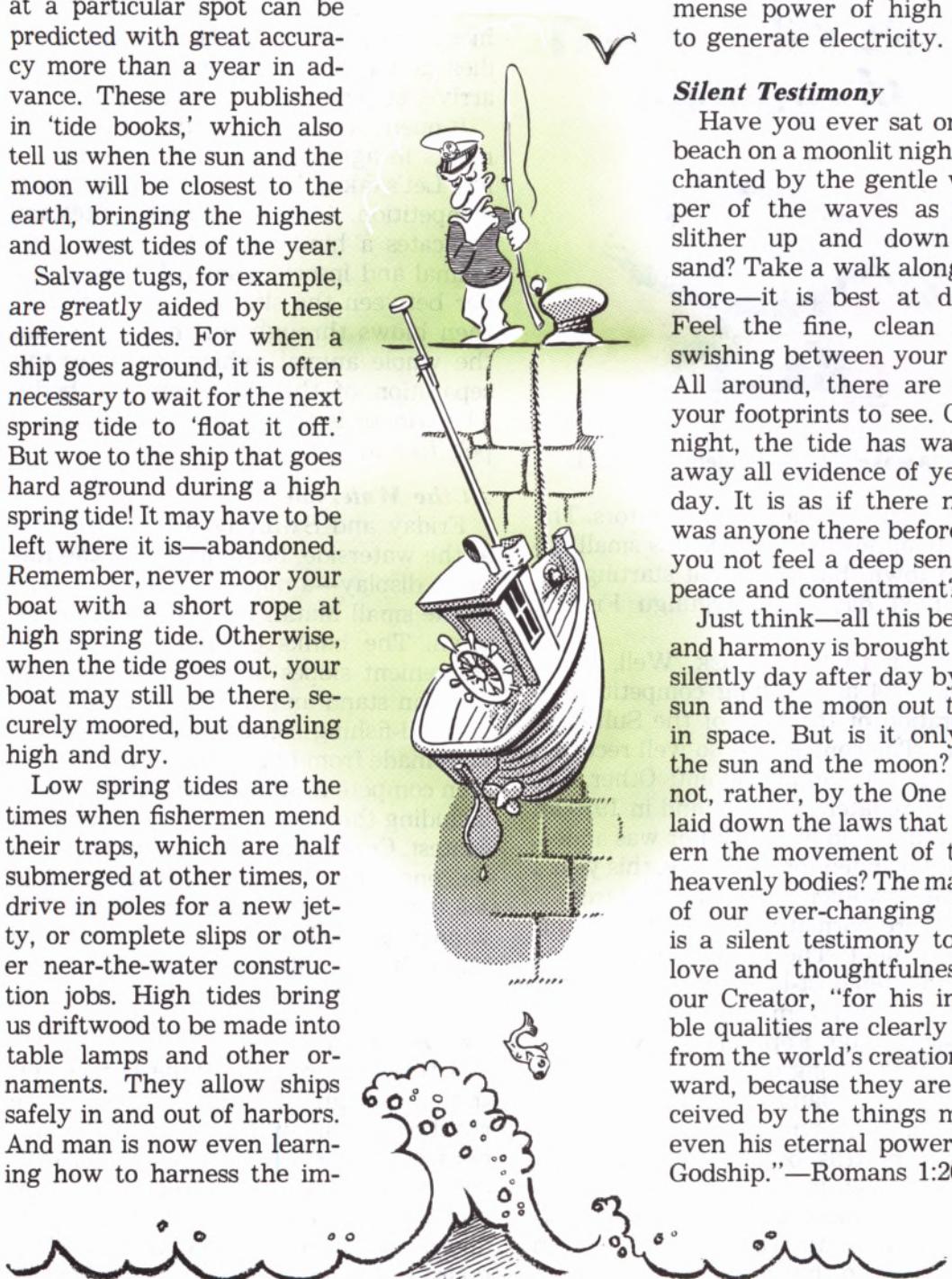
Low spring tides are the times when fishermen mend their traps, which are half submerged at other times, or drive in poles for a new jetty, or complete slips or other near-the-water construction jobs. High tides bring us driftwood to be made into table lamps and other ornaments. They allow ships safely in and out of harbors. And man is now even learning how to harness the im-

mense power of high tides to generate electricity.

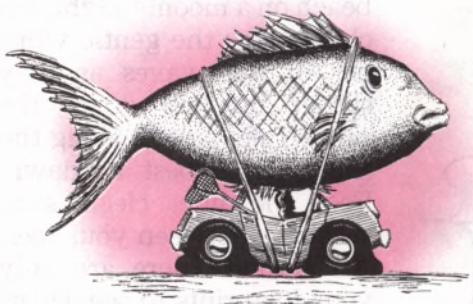
Silent Testimony

Have you ever sat on the beach on a moonlit night, enchanted by the gentle whisper of the waves as they slither up and down the sand? Take a walk along the shore—it is best at dawn. Feel the fine, clean sand swishing between your toes. All around, there are only your footprints to see. Overnight, the tide has washed away all evidence of yesterday. It is as if there never was anyone there before. Do you not feel a deep sense of peace and contentment?

Just think—all this beauty and harmony is brought to us silently day after day by the sun and the moon out there in space. But is it only by the sun and the moon? Is it not, rather, by the One who laid down the laws that govern the movement of these heavenly bodies? The marvel of our ever-changing tides is a silent testimony to the love and thoughtfulness of our Creator, "for his invisible qualities are clearly seen from the world's creation onward, because they are perceived by the things made, even his eternal power and Godship."—Romans 1:20.



The Big Fish of Argungu



By "Awake!" correspondent in Nigeria

Argungu is already full of visitors. The attraction, however, is not this small Nigerian town, but the event starting the very next day: The Argungu Fishing Festival.

"What is that?" you ask. Well, it began in 1934 as a fishing competition in celebration of the visit of the Sultan of Sokoto. The contest was so well received it became an annual event! Other features were later included, and in 1970 an agricultural and livestock fair was added. Usually planned for February, this year's festival, however, was held in March.

A severe harmattan season forced this postponement. The harmattan is a cool, dry and often dust-laden wind that blows southwestward from the Sahara from December through February. As we travel to Argungu, strong winds still stir up dust from the bare land and sweep it along like a thick, brown, windblown fog. Our lips and nostrils become sore from the dry wind. Men in flowing robes, mounted high on camels, draw up the neck-pieces of their turbans to cover mouth and nostrils so that only their eyes peep

out through the swirling dust. Motor vehicles creep along slowly until the wind dies down. Soon, however, the people arrive, eager to see the festival begin.

It opens with an exhibition of achievements in agriculture and livestock rearing. Let's take a look at the goat-skinning competition. At a signal, each contestant truncates a hind leg of his slaughtered animal and inserts a small hollow cylinder between the skin and the flesh. He then blows through this hole to inflate the whole animal, which facilitates the separation of the skin from the body. The winner is able to lift an undamaged pelt free in just three minutes!

At the Waterside

Friday and Saturday feature contests at the waterside, beginning with the Kabanici display—a number of water events in the small Matan Fada River near the town. The banks of the river provide convenient slopes on which the spectators can stand and watch. Girls compete in hand-fishing contests and races in canoes made from hollowed-out palm trees. Men compete in similar and other events, including the underwater breath-holding contest. Contestants pop up from the water, one after the other, disappointed to see that others are outlasting them. The winner is clocked at $4\frac{1}{2}$ minutes, and might have continued longer if he had not been stopped by anxious assistants.

The Big Fish

Saturday's program is the high point: the Argungu fishing contest. The rhythmic music of drummers and chanters sets the mood for the event. Crowds of fishermen station themselves on either side of the river, equipped with giant gourds and triangular fishing nets. Each gourd has an open end and is used either

as a buoy on which the fisherman can float or as a container for fish.

Anticipation grows among the craning spectators. Many are wondering if this year's winning catch will be bigger than the 98-kilogram (216-lb) fish caught in 1979. Since last year's festival, no fishing has been allowed in this portion of the river. The water has become quite shallow during this dry season and is doubtless now teeming with fish.

At the sound of a gunshot, the charge of the fishermen begins. Wave after wave of men with their gourds and fishing nets surge down the river banks. Within minutes the shallow smoke-gray water swarms with men. A shout goes up: The first catch has been made!

Whenever anyone nets a heavy fish, other contestants come to his aid. Men in a patrolling boat take the catch to be weighed and tagged. The pace of weighing increases, but few catches are heav-

ier than 30 kilograms (66 lb). Many pick up fish no bigger than sardines. Suddenly one weighing more than 40 kilograms (88 lb) is caught! Since most of the contestants have already left the water, the fisherman thinks this is the winner and makes the champion's gesture. A few, however, continue fishing, hoping to catch something bigger. Perseverance pays off. Before the hour expires there is a shout of triumph! It is a 1.3-meter (4.27-ft) *Bukuiki*, as it is named in Hausa. At 50 kilograms (110 lb), it weighs much less than the record catch of 1979, but it is this year's winner nonetheless.

The three-day festival at Argungu soon ends. Now will come the May rains, covering the dry land for a while with green grass and the varied colours of flowering vines and shrubs. The river will become filled with water again—and fish. And fishermen will let it lie untouched, waiting till next year for a chance to catch one of the big fish of Argungu.

Letter of "Complaint"

After a district convention of Jehovah's Witnesses, held at Glens Falls, New York, the following letter to the editor was published in the *Glens Falls Post-Star*:

"Last week, Jehovah's Witnesses came from all over to Glens Falls for a convention. I just don't know how much longer we can tolerate such revolting behavior.

"Nobody smoking pot. Nobody under the influence of drugs or alcohol. No head-splitting, ear-deafening music. No immoral songs. No illicit sex. No ticket scalping. No yelling and screaming. No pushing. No shoving. No fighting to get in or to get out. No one swearing or cursing. Nobody yelling obscenities. No obscene gestures. No dirty jokes or foul language. No police necessary for rowdy behavior. No arrests for disorderly conduct. No one telling the police where to go. Instead, they let the

police give directions. No smoke-filled Civic Center; the air was breathable.

"Women wearing dresses and looking like women. Men with neat looking haircuts, wearing suits and ties and looking respectable. Husbands arm and arm with their own wives. Parents and children together as families. Children obeying their parents, and not being disrespectful or destructive. People carrying Bibles, instead of knives or switchblades. No stealing or shop-lifting.

"No one throwing beer or soda cans on Glens Falls lawns. No one smashing beer or soda bottles on Glens Falls streets.

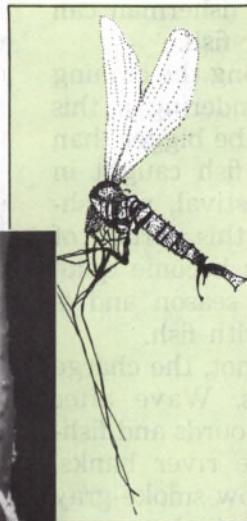
"It was really unusual. I mean, what in God's name was going on? Would it be so awful if more of us would act like that? Makes one wonder, doesn't it?"—S. N. G., Whitehall, N.Y.

Conquering Peru's Ancient Killer

By "Awake!"
correspondent
in Peru

THE year was 1531. The Spanish conquistador Francisco Pizarro and his men were on their march to capture the treasures of Peru's ancient Inca Empire. Dressed in their heavy iron mail and thick quilted cotton doublets, they trudged through the Ecuadorian province of Coaqui (now Manabí) in the unbearable January heat and humidity. Already suffering from hunger and exhaustion, Pizarro's men were suddenly struck by a strange and hideous disease—verruga peruana.

Garcilaso de la Vega, an Inca historian whose father served for a time with Pizarro's forces, reported that the disease "took the form of excrescences that broke out all over their bodies, but principally on their faces. They thought at first that these were warts, because, at the beginning, they looked like warts [hence the name verruga peruana, or Peruvian wart]. But as time passed, they grew larger and began to ripen like figs, of which they had both the size and shape: they hung and swung from a stem, secreted blood and body fluids,



and nothing was more frightful to see or more painful, because they were very sensitive to touch. . . . Indeed, some died of them."

Other writers gave a more subdued description: "It took the form of ulcers, or rather, hideous warts of great size, which covered the body, and when lanced, as was the case with some, discharged such a quantity of blood as proved fatal to the sufferer."

Three centuries passed and the disease still remained a mystery. Then came the 1870's and the construction of the Central Railroad. Just 40 miles (64 km) above Lima, at Cocachacra, verruga peruana struck again. This time it was so devastating that, according to the natives, there were "as many deaths as cross-ties." All the engineers who inspected the trans-Andean railroad contracted the disease. One authority reported that 7,000 workers died during this period, and the construction nearly came to a halt due to large-scale desertion among the workers.

Wrestling With a Medical Puzzle

By the 1800's the dreaded disease had attracted the attention of the medical profession. Daniel Alcides Carrión, a promising young medical student at the hospital "Dos De Mayo," spent several years studying the disease, and was hard at work on his bachelor's thesis on verruga peruana. In order to determine the precise nature of the disease, on Au-

gust 27, 1885, Carrión told his colleagues that he was going to inoculate himself with fluid obtained from one of the reddish, warty growths on a patient in the hospital who was recovering from verruga peruana. His friends protested, but when they saw his determination, one of them assisted him in performing four inoculations in his arms. That began an ordeal that made Daniel Carrión a martyr in the medical annals of Peru.

Three weeks after his inoculation, Carrión was in pains when he walked. On September 18 and 19, according to his diary, he experienced sharp cold chills and high fever with accompanying insomnia. His temperature first soared to 104° F. (40° C.), then dropped to 95° F. (35° C.). Sharp cramps, depression caused by severe anemia, vomiting, abdominal pain, jerking of the arms and legs—all these punished his body and mind. Almost to the end of his life, he was able to record his own medical observations; but it was over all too soon. On October 5, just 39 days after his inoculation, Daniel Carrión was dead, only 26 years old.

Did Carrión expect to die? "Happen what may, it doesn't matter," he said. "I want to inoculate myself." But it appeared that he was optimistic about the outcome. The infected liquid was from a patient who had a very benign form of the disease. Carrión was working on his bachelor's thesis and his career in medicine was ahead of him. On September 28 he had reassured his concerned colleagues: "You have been too alarmed about my illness; the symptoms that I feel can only be those of the invasion of the wart, soon to be followed by the period of eruption and all will disappear." He also received some medical treatment.

Daniel Carrión's suffering and death provided firsthand, documented information about the disease. Among other things it proved that Oroya fever (a misnomer, as no one ever caught the fever in La Oroya, but on the railroad that was being built to La Oroya) and the Peruvian wart were but two separate stages of the same disease. It was not until several decades later that Dr. Albert Barton discovered the cause of the disease—a microorganism transmitted by a night-biting sandfly that infests the valleys and ravines of the Andes. Thus, today verruga peruana is often referred to as Carrión's disease or bartonellosis.

What About Now?

After so many years of research and struggle, people still suffer from Peruvian wart. In Peru alone, hundreds died from it throughout the 1940's and 1950's. Even in the 1980's there are still small outbreaks and more deaths. But by government-sponsored spraying of infested areas and the use of antibiotics, the disease has now been largely controlled. Today, one literally has to go out of one's way to the remote regions and then deliberately ignore all precautions to contract the disease.

The story of Peruvian wart, or Carrión's disease, is but one chapter in a long and moving saga of man's struggle against diseases and human suffering. However, the complete eradication of the many maladies that afflict mankind must lie yet in the future. That remains the province of God's Kingdom when neither "mourning nor outcry nor pain" will be anymore.—Revelation 21:4; compare Isaiah 33:24.

From Our Readers

World War I

I have taught American history in high school for eight years. I found your three articles about World War I the most concise and informative I have ever read. (September 8, 1983; September 22, 1983; October 8, 1983) All the classic reasons for the war were explained as was the terrible suffering and the tremendous number of deaths. This was tied in splendidly with Jesus' prediction of the time of the end.

N. H., Indiana

World Economy

I would like to thank you for the article "The World Economy—Where Is It Heading?" (April 22, 1983) It helps all of us, especially us Brazilians who have suffered so much from it, to understand the economic crisis in all its aspects. At the moment I am studying in the Faculty of Economic Sciences, and the article was of great assistance to me. I cannot wait until it comes in the Portuguese edition so that I may share the information with my colleagues.

P. P. S., Brazil

Safeguarding Hearing

I'm just writing briefly with a minor point of criticism of the otherwise good article "Safeguard Your Gift of Hearing." (August 22, 1983) On page 27 of the article you imply that rock music causes hearing loss. Surely this is not the fault of rock music in itself. Rather it is the fault of the person who should turn the volume down. The fact is that any kind of music, whether it is country, classical, polka or big-band swing, can cause the

same hearing damage when played at unreasonable volume.

T. A., Canada

We agree that it is the volume that causes the damage. But rock music especially doesn't easily lend itself to keeping the volume low—at least the temptation is to keep it high. In commenting on the potential danger of stereo headphones, the article stated: "Keeping the volume low might therefore save your hearing!" But at rock concerts the listener has no control over the volume, and unwary listeners are often exposed to dangerously high decibel levels.—ED.

Creation or Evolution

Thank you for the fine scientific articles that you have been publishing, such as "Creationism—Is It Scientific?" and "Evolution, Creation, or Creationism—Which Do You Believe?" in Portuguese. (March 8, 1983; March 22, 1983, in English) My husband and I work at the government's research institute, which enables us to see at close range the intelligence and wisdom of the Creator in the minute things of creation, including microorganisms. With the aid of these articles, we have been able to awaken the interest of some agnostics, even conducting studies with some we work with here at the institute.

F. and R. L., Brazil

Battery Warning

Thank you for the item in "Watching the World" on "Battery Warning." (August 8, 1983) Today one of our sons swallowed a small watch battery. I wouldn't have known it was a cause for concern if it hadn't been for your timely item.

T. O., Washington



Third World Health Problems

● The president of the World Health Assembly (governing body of the World Health Organization), Chong Hon Nyan of Malaysia, in a speech to the Assembly in Geneva, Switzerland, said that health problems "once thought of as being the byproducts of affluence" now plague Third World nations. Ailments caused by alcoholism, drug abuse and smoking, along with psychosocial illness and cardiovascular diseases, are now common in the Third World. "Lifestyles are no longer purely conditioned by climate or culture," he said. "They are imitated as fast as communications can speed images from one country to another."

Europe's First

● Europe's first "quick-build" Kingdom Hall of Jehovah's Witnesses was recently constructed in Northampton, England. Laboring round the clock, Witness work crews, made up of more than 500 volunteers, turned a foundation in an open field into a completed building in three and a half days. Is speed of construction the Witnesses' main objective?

"The aim," says local elder Sam Tree, as quoted in Northampton's *Chronicle and Echo*, "was to get the building work out of the way as soon as possible so that we could get on with our preaching work."

A policeman visiting the site during the swift construction of the Kingdom Hall could not believe his eyes. He touched a wall and then leaned against it because, as he said, "I just wanted to see if it was real." Since about 200 two-day Kingdom Halls have been built in the United States and Canada, over 40 construction workers from North America came to assist their fellow Witnesses in England. More "quick-build" Kingdom Halls are being planned for Britain.

Juvenile Delinquency Increases in Japan

● "Juvenile delinquency is still on the rise in Japan, and is spreading to coeds and younger students, the National Police Agency (NPA) warned," reports *Asahi Evening News*. "More minors are now being charged with criminal offences than adults, the agency noted." The largest group of offenders were 14-year-olds, followed by

those 15 years of age, up over 6 percent and 17 percent respectively.

Finnish Faith

● The influence of organized religion in Finland is waning, according to a recent report by the Suomen Gallup poll organization. The study examined religion's role in Finland over the past 30 years and found that not only are Finns praying less but Finnish parents have stopped teaching their children evening prayers. During the past three decades, Sunday church attendance fell from 16 percent to its present 12 percent. Support for the ordination of women ministers rose among the Finns. Today, 77 percent endorse women's ordination compared to 52 percent 30 years ago.

New Planetary System?

● The first direct evidence implying the existence of another planetary system was discovered by the Infrared Astronomy Satellite. This orbiting observatory, a joint project by Britain, the Netherlands and the United States of America, discovered solid objects orbiting the star Vega. The objects, which varied from pebble-size to planet-size, are within a cloud or shell enveloping Vega that is more immense than the area covered by the planets of the solar system. Officials at the Jet Propulsion Laboratory of the California Institute of Technology describe the discovery as "the first scientific opportunity to study what may be an early solar system accreting from stellar debris." Vega is 155 trillion miles (250 trillion km) from earth and is double the size of the Sun.

Window on Atoms

● For the first time, pictures of atoms within solids have

been seen directly with the aid of a high-voltage electron microscope called ARM (atomic resolution microscope). ARM, with its more sophisticated electron system, is different from other electron microscopes because atoms deep within solids are viewed without the help of computer enhancement. Usually computers are needed to interpret the fuzzy images that electron microscopes create. ARM, designed and built in Japan, occupies three stories of the National Microscopy Center at the Lawrence Berkeley Laboratories, California. It can become a tool for designing new types of steel and ceramics.

Employee Fitness

● Working out in the workplace is proving to increase worker morale and decrease trips to the company doctor, saving the employer tens of thousands of dollars, reports *Medical Tribune*. Fitness Canada, a government agency, instituted a model fitness program for the employees of two companies. The results? After ten months, absenteeism among the "high adherence" exercisers dropped 42 percent. Apply this percentage to the whole company and a savings of \$175,000 per year would be realized. "In addition," the article continues, "participants in the fitness program quit their jobs at the rate of 1.5% compared with a rate among other employees during the same period of 15%." If projected to the entire company, "the annual saving would be \$510,000." In the United States over 500 companies sponsor physical fitness programs on the work site.

Children of Lesbians

● "Children reared by homosexual couples . . . may suffer sexual disorientation," says Kathy Roberts, director of child

psychiatry at Stanford University Medical Center. From her observation of artificially inseminated Lesbians, she noted: "In one case that I've seen personally, when the (daughters) reached adolescence, there was a big issue of how you showed affection to your mother without it being homosexual. There was a threat of sexual uncertainty, and I'm not sure it was ever worked out."

Youth Unemployment

● What appears as good news for the jobless youth may not be so. Though the number unemployed in the industrial world is beginning to drop, according to a new study by OECD (Organization for Economic Co-operation and Development), the economic and social cost of ten years of rising unemployment has left scars that will not easily go away. In the eight countries studied by OECD—Belgium, France, Britain, Holland, West Germany, Sweden, United States and Canada—the number of people who have been unemployed 12 months or more has risen. Long spells of unemployment can devastate motivation and become self-perpetuating. Commenting on OECD's report, *The Economist* states: "More young people will be caught in the trap of long-term unemployment. If so, when unemployment begins to fall, they will be left behind: unemployed, unemployable and angry."

Pacemakers: Yes or No?

● Pacemakers, those silver-dollar-size pulse generators that regulate the heartbeat through electrical impulses, are found in 500,000 Americans. About 120,000 new ones will be implanted this year at a cost of \$12,000 for each procedure, estimates Dr. Michael Bilitch, director of the Pacemaker Center

at the University of Southern California School of Medicine. U.S. Senate investigators on the Special Committee on Aging concluded that there may be as much as \$500 million worth of waste, fraud and abuse in the pacemaker area each year. What should a person do? Find out exactly why the physician believes a pacemaker is necessary, suggests Dr. Bilitch. "If a physician can't explain why a person needs a pacemaker," he says, "the patient should wonder about that—and perhaps find another doctor."

Breast-Feeding Benefit

● Scientists have made a new discovery about mother's milk—it is a parasite killer! "Until now [there] has been no information concerning antiparasitic factors in *human milk*," reports *Science* magazine. For the first time *under laboratory conditions* researchers found evidence that certain microorganisms that cause disease in the digestive tract fall victim to human milk. Infection by one of these parasites is widespread in children and can result in severe diarrhea and decreased absorption of food nutrients. Milk from cows and goats did not have this ability to kill parasites. Although not one of the tests was performed on people, the scientific summary states: "Human milk may play a protective role in infants exposed to this parasite."

The \$169,834 Body?

● How much is your body worth? The *New England Journal of Medicine* claims that a 154-pound human body has components worth the following: cholesterol, \$525; fibrinogen, \$739.50; hemoglobin, \$2,550; albumin, \$4,819.50; prothrombin, \$30,600; IgG class antibody, \$30,600; and myoglobin, \$100,000.

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