

Awake!

NOVEMBER 22, 2005



**WHO WILL
FEED THE
CITIES?**

WHO WILL FEED THE CITIES? 3-11

Rapid urban growth is raising concerns about the food supply. Will there ever be a time when no one will have to worry about where his next meal is coming from?



Science and the Bible Helped Me Find the Meaning of Life 12

Learn why a doctor of physics disagrees with the claim that science contradicts the Bible.



Must We Have a Formal Wedding? 21

Some couples plan a simple wedding ceremony. Others favor a more elaborate one. What can help you to make a wise decision?

- 3 If the Food Runs Out
- 4 The Challenge of Feeding the Cities
- 11 A World Without Hunger?
- 16 The Birth of the Modern Diamond Industry
- 20 A Different Kind of Walking!
- 24 What Can You Do About Traffic?
- 28 Watching the World
- 30 From Our Readers
- 31 More Choices, Less Satisfaction?
- 32 Her Classmates Changed Their Opinion



IF THE FOOD RUNS OUT

IN SOME parts of the world, city dwellers take it for granted that there will be an adequate supply of produce on sale at affordable prices when they go to their local store or market. When there is, consumers may not give food supply and distribution a second thought. Yet, in times of crisis, people begin to think about what it takes to get food into their shopping baskets. If for some reason the food supply is threatened, the results can be disastrous.

Consider what happened in one economically troubled country in North Africa. As a result of the discontinuation of food subsidies, the price of bread doubled overnight. In protest, angry mobs rampaged through the streets smashing shop windows and attacking banks and post offices. Unrest spread throughout the country, and a state of emergency was declared. When, in an effort to quell the riots, security forces opened fire on the crowds, 120 people were reportedly killed and many more injured.

That the food supply can be a problem even in economically stable countries is shown by what happened in Britain in September 2000. Protesters against high fuel prices blockaded oil refinery exits, preventing deliveries from leaving them. Within days, gas stations ran dry, cars and trucks had no fuel, and the food-distribution system ground to a halt. Across the country, stores and supermarkets, which usually depend on "just-in-time" delivery schedules, had empty shelves.

There are various problems related to food distribution in the developing world. For a number of reasons—including drought, economic crises, civil unrest, and war—"inefficiencies

and service breakdowns do occur with great frequency," states *Feeding the Cities*, published by the Food and Agriculture Organization of the United Nations (FAO). "When they occur, even though the effects may be localized or temporary, it is the poor who suffer."

Analysts believe that rapid urban growth will present "enormous challenges" to food suppliers and distributors. It is estimated that by the year 2007, over half the world's population will live in cities. According to FAO, "supplying [city dwellers] with safe and affordable food will strain the food supply and distribution chain to the breaking point."

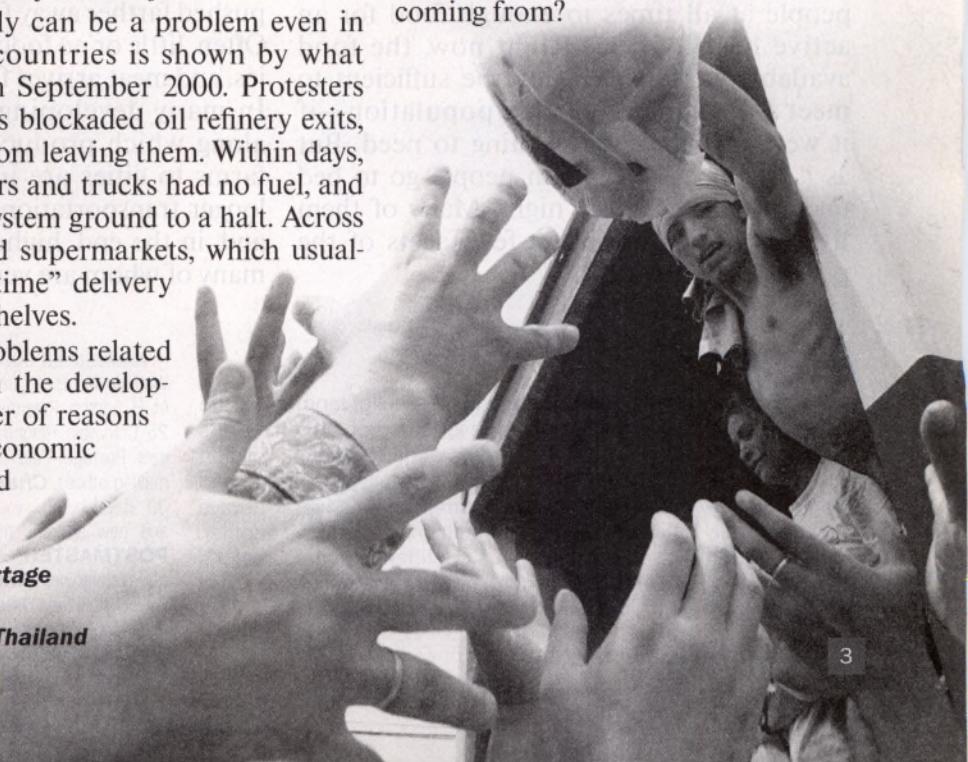
Getting food into your shopping basket and onto your table is a matter of utmost concern. So just how secure is the food-supply system? Why are experts worried that it is being stretched to the limit? And will there ever be a time when no one will have to worry about where his next meal is coming from?

Looting during a food shortage

BETAH/SIPA

Left: A floating market in Thailand

© Jeremy Horner/Panos Pictures





THE CHALLENGE of Feeding the Cities

"The task of feeding the world's cities adequately constitutes an increasingly pressing challenge, requiring the coordinated interaction of food producers, transporters, market operators and a myriad of retail sellers."

—JACQUES DIOUF, DIRECTOR GENERAL OF THE FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS (FAO).

FOOD distribution experts go so far as to say that urban food security could well become "the greatest humanitarian problem" of the 21st century.

Food security is defined as "access by all people at all times to enough food for an active healthy life." Right now, the food available worldwide would be sufficient to meet the needs of earth's population—if it were distributed according to need. But as it is, some 840 million people go to bed undernourished every night. Many of them live in cities. Consider a few facets of the problem.

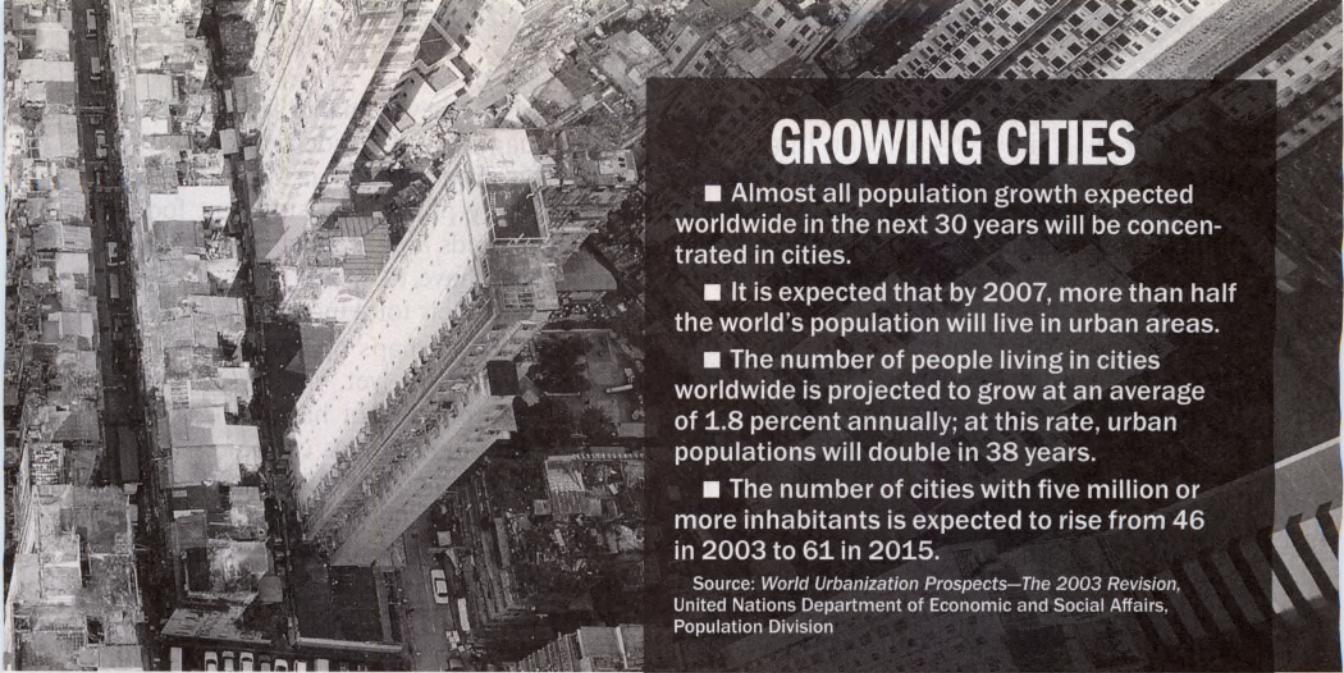
Megacities With a Voracious Appetite

As cities grow, the surrounding fields once dedicated to agricultural production are progressively lost to new housing, industry, and roads. Consequently, croplands are being pushed farther away from the cities they feed. Often, little or no food is grown within the cities, and meat arrives from distant rural areas. In many developing countries, the roads along which produce is transported from farms to cities are inadequate. This means longer transportation times, greater wastage and, in the end, higher prices to consumers, many of whom are very poor.

Awake!®

THIS JOURNAL IS PUBLISHED 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 always stays politically neutral and does not exalt one race above another. Most important, this magazine builds confidence in the Creator's promise of a peaceful and secure new world that is about to replace the present wicked, lawless system of things.

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GROWING CITIES

- Almost all population growth expected worldwide in the next 30 years will be concentrated in cities.
- It is expected that by 2007, more than half the world's population will live in urban areas.
- The number of people living in cities worldwide is projected to grow at an average of 1.8 percent annually; at this rate, urban populations will double in 38 years.
- The number of cities with five million or more inhabitants is expected to rise from 46 in 2003 to 61 in 2015.

Source: *World Urbanization Prospects—The 2003 Revision*, United Nations Department of Economic and Social Affairs, Population Division

Some cities in the developing world are already big and are destined to become even bigger. By 2015, Mumbai (formerly called Bombay) is expected to have 22.6 million inhabitants, Delhi 20.9 million, Mexico City 20.6 million, and São Paulo 20 million. It is estimated that a city of ten million people—such as Manila or Rio de Janeiro—has to import as much as 6,000 tons of food per day.

That is no simple feat, and it is not getting any easier, especially in areas that are experiencing rapid growth. Lahore, Pakistan, for example, not only has a high birth rate (2.8 percent) but also has what is defined as an “alarmingly” high rate of migration from rural areas. Many developing nations

are seeing millions of new inhabitants flow into already overcrowded cities in search of better living conditions, jobs, goods, and services. Because of such migration, the city of Dhaka, Bangladesh, is expected to grow by one million or more per year for the foreseeable future. According to projections, by 2025 the population of China, now two-thirds rural, will become predominantly urban. By the same time, 600 million people are expected to be living in the cities of India.

The migration of people to cities is changing the overall character of many parts of the world. In West Africa, for example, only 14 percent of the population lived in urban areas in 1960. By 1997 the urban population

Semimonthly Languages: Afrikaans, Albanian, Arabic, Cebuano, Chinese, Chinese (Simplified), Croatian, Czech,[#] Danish,[#] Dutch, English,[#]^① Estonian, Finnish,[#] French,[#] German,[#] Greek, Hungarian, Iloko, Indonesian, Italian,[#] Japanese,[#] Korean,[#] Latvian, Lithuanian, Norwegian, Polish, Portuguese,[#] Romanian, Russian, Serbian, Slovak, Slovenian, Spanish,[#] Swahili, Swedish,[#] Tagalog, Ukrainian

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Would you welcome more information? Write Jehovah's Witnesses at the appropriate address: America, United States of: Wallkill, NY 12589. Australia: Box 280, Ingleburn, NSW 1890. Britain: The Ridgeway, London NW7 1RN. Canada: Box 4100, Halton Hills (Georgetown), Ontario L7G 4Y4. Ghana: P. O. Box GP 760, Accra. Jamaica: P. O. Box 103, Old Harbour, St. Catherine. New Zealand: P. O. Box 75-142, Manurewa. Nigeria: P.M.B. 1090, Benin City 300001, Edo State. South Africa: Private Bag X2067, Krugersdorp, 1740. Zambia: Box 33459, Lusaka 10101. Zimbabwe: Private Bag WG-5001, Westgate.

was 40 percent, and by 2020, it is believed, the figure will rise to 63 percent. In the horn of Africa, urban populations are expected to double within a decade. And it is predicted that 90 percent of total population growth in developing countries in the near future will take place in towns and cities.

Stepping up the flow of food into urban areas to feed all these hungry mouths is a mammoth task. It requires the synchronized efforts of thousands of farmers, packers, truckers, traders, and handlers, as well as the use of thousands of vehicles. Yet, in some places the increased demand for food from urban centers is outstripping the capacity of surrounding areas to provide it. Moreover, in most cities in the developing world, services such as transportation and structures such as storage buildings, markets, and slaughterhouses are already overextended.

Widespread Poverty

The challenge of feeding growing populations is further complicated where there is widespread poverty. Many large cities in the developing world, such as Dhaka, Freetown, Guatemala City, Lagos, and La Paz, already face poverty rates of 50 percent or more.

When discussing food supplies for such populations, analysts make the distinction between availability and accessibility. Food may be on sale in city markets—that is, available—but this is of little comfort to the urban poor if the price is beyond their reach. It has been noted that as the income of some city

dwellers rises, they demand and consume a greater quantity and a wider variety of food-stuffs. The urban poor, on the other hand, have difficulty purchasing sufficient food to meet their needs and preferences. Such poor families may have to spend between 60 and 80 percent of their total income on food.

Costs could perhaps be lower if food was purchased in bulk; yet, that is impossible if people simply do not have enough ready money. Many households cannot even meet their minimum dietary requirements, and the inevitable result is malnutrition. In the cities of sub-Saharan Africa, to name just one area, malnutrition is said to be "a serious, widespread problem."

Particularly at risk are new arrivals from rural areas who find it hard to adapt to the urban environment—namely, single mothers, junior civil servants who are paid late because of government cash-flow problems, the disabled, the elderly, and the sick. Such at-risk groups often live in outlying neighborhoods lacking basic amenities—electricity, piped water, sewers, roads, and solid-waste disposal—where large numbers of people inhabit temporary or precarious dwellings. The millions who struggle to make ends meet under conditions like these are acutely vulnerable to any shortcomings in the food-supply system. Such ones often live far away from the nearest markets and have little choice but to pay high prices for inferior-quality foods. Their plight is sad indeed.

SOME CAUSES AND EFFECTS OF UNRELIABLE FOOD SUPPLY

■ "Urban political unrest and social instability are already well-documented throughout the world whenever food prices have suffered sharp increases."
—Jacques Diouf, director

general of the UN Food and Agriculture Organization.

■ In 1999, hurricanes Georges and Mitch hit the Caribbean area and Central America, causing widespread destruction, disruption to

normal activities, and food shortages.

■ Protests against high fuel prices in Ecuador in 1999 and in Britain in 2000 caused serious disruptions to food supply.

■ Among the miseries brought by war are food shortages.



ONE AMONG MILLIONS

CONSUELLO and her 13 children live in a squatter village (shown above) on the outskirts of Lima, Peru. Three of her children have tuberculosis. "We used to live in the mountains," she states, "but one night hundreds from our village moved to the city. We thought, 'in Lima, our children will get an education and wear shoes. Life will be better for them.'" So the villagers made straw mats, and one night they all moved to the city and put up straw

houses. In the morning, there were too many squatters for the authorities to evict.

Consuelo's house has a big hole in the roof and a mud floor. "I am raising these chickens to sell to rich people," she says, referring to the animals running around her home. "I wanted money for shoes for my daughter. But now I must use it to pay for the hospital and medicine."

The only food Consuelo has are a few onions. Work is hard to find, and she does not

have enough money even to buy water regularly. There is no running water in her flimsy home and no toilet. "We use this pot. Then at night I send the children to dump it somewhere," she explains. "It is what we have to do."

Consuelo receives no support from her husband, whom she rarely sees. She is only in her 30's but looks much older. "Her small dark eyes stare blankly from her puffy face," says a writer who interviewed her. "They are without hope."

Source: *In Context*

Uncertain and Unhealthful Conditions

In many areas it is not unusual for rapid urban growth to take place haphazardly and illegally. The results are an unhealthful and insecure environment with high crime. "Frequently," says *Feeding the Cities*, an FAO publication, "city administrators in the developing world find themselves struggling to cope with burgeoning populations in a physical environment that is really only adequate for a fraction of the inhabitants."

In most of Africa, markets are often not planned but spontaneous. Traders begin selling their goods wherever there is demand.

The markets that develop thus lack even the most basic facilities.

In Colombo, Sri Lanka, existing wholesale and retail markets are poorly located and severely congested. Truck drivers lament that it takes them hours to reach and to leave the central market. Areas for parking, loading, and unloading are inadequate.

Elsewhere, markets are poorly maintained and badly managed. Unhygienic conditions resulting from increasing amounts of organic and inorganic waste create health risks. "These problems," says the mayor of one city in South Asia, "contribute to a progressive deterioration of the quality of life."



Cities struggle with unsanitary conditions and heavy traffic

The seriousness of problems connected with hygiene and environmental issues are exemplified by the findings of a survey of animal products on sale in one city in Southeast Asia. There it is normal for meat to be "displayed on the bare ground in contact with dust and dirty water." Salmonella was present in 40 percent of pork samples and 60 percent of beef samples, while 100 percent of beef samples contained E. coli. Contamination from heavy metals, such as lead and mercury, was also found.

As a response to inadequate, unreliable, or irregular access to food supplies, city dwellers, like many in Kano, Nigeria, attempt to cultivate any vacant land that might be available. Yet, most of these people have no formal rights to that land. They thus risk eviction and the destruction of the produce they toil to cultivate.

Olivio Argenti, an FAO urban food-security specialist, describes what he found when visiting an urban agricultural area in Mexico, close to a river into which sewage from a nearby village is discharged. Local farmers used that river to water their vegetables and its mud to prepare their seedbeds. "I

asked the authorities if they were aware of the danger," writes Argenti, "and they said that they were not in a position to do anything because they didn't have the financial or technical means." Such problems are seen repeatedly throughout the developing world.

Cities Struggling to Cope

The list of issues faced by rapidly growing cities seems endless. International organizations, planners, and administrators are doing what they can to resolve them. Their strategies include promoting rural food production and providing adequate access, as well as building new roads, markets, and slaughterhouses. They see the need to promote private investment in warehouse facilities, improve access to credit for farmers, traders, and transporters, and enforce appropriate trade



Niger

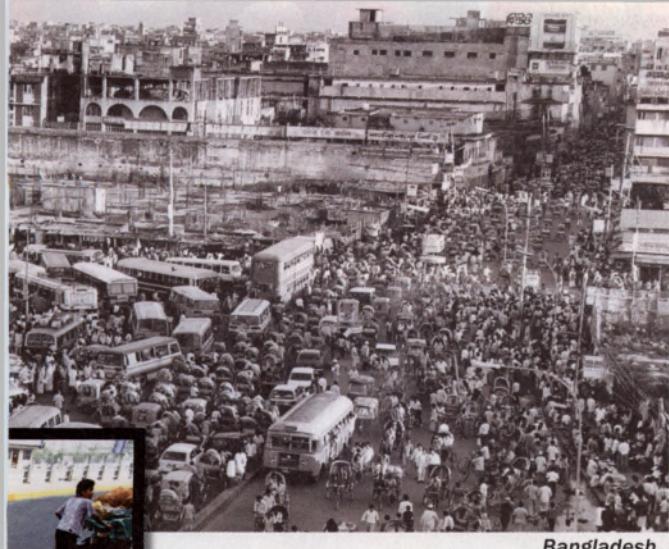


Mexico



In many poor urban families, even the children must work

India: © Mark Henley/Panos Pictures; Niger: © Olivio Argenti; Mexico: © Aubrey Wade/Panos Pictures; Bangladesh: © Helmut Netocny/Panos Pictures; bottom photo: © Jean-Luc Dugast/Panos Pictures



Bangladesh

and hygiene regulations. Yet, analysts observe that despite all the efforts that have been made, many local authorities fail to recognize and respond appropriately to the issues involved. Even when they do, available resources are insufficient to address the problems.

The enormity of challenges facing cities, particularly in the developing world, has led to urgent warnings. According to the International Food Policy Research Institute, Washington, D.C., "urban populations will continue to grow, and these problems [hunger, malnutrition, and poverty] will only grow with them—unless we take action now." Regarding the future of cities in poorer countries, Janice Perlman, president of the Megacities Project, an international network of organizations committed to finding solutions to urban problems, notes: "No precedent exists for feeding, sheltering, employing or transporting so many people in so dense an area, under such severe financial and environmental constraints. Cities are reaching the limits of their carrying capacity to support human life."

There are, however, good reasons to believe that the problems of food supply and distribution will soon be solved.

"SHOULD I MOVE TO THE CITY?"



ANY who are considering the possibility of moving to a city would do well to consider a number of factors. "One of the main attractions is the expectation of an improved life compared with the opportunities offered in rural areas," says the UN Food and Agriculture Organization publication *Feeding the Cities*. However, "the improvement may not come immediately, perhaps not even for a generation or more."

The fact is, many who move from rural areas to the city find themselves facing homelessness, unemployment, and worse poverty than before, all in an unfamiliar environment. So if you are considering such a step, are you sure that it would permit you to support your family? Work in the cities, if there is any available, is often low paying. Might the pressures of having to work long hours just to get by make you or your family neglect activities that you consider important?—Matthew 28:19, 20; Hebrews 10:24, 25.

Some parents have chosen to make such a move while leaving their families at home. Is this wise? Christian parents have an obligation to provide for their families materially, but what would separation mean for the family emotionally and spiritually? (1 Timothy 5:8) Would fathers effectively be able to go on bringing up their children "in the discipline and mental-regulating of Jehovah?" (Ephesians 6:4) Could separation of husband and wife expose them to moral temptations?—1 Corinthians 7:5.

Any move is, of course, a personal decision. Before making such a decision, Christians should weigh all the factors involved and prayerfully seek Jehovah's direction.—Luke 14:28.



A WORLD WITHOUT HUNGER?

IMAGINE how a caring father feels when seeing his children suffer from malnutrition. It pains him to his very heart. If that is how a human parent reacts, think of how our loving heavenly Father must feel. He is fully aware of the suffering of hundreds of millions who find themselves in this situation.

Despite mankind's good intentions to provide food for the hungry of the world, at the beginning of the 21st century, hunger is on the increase. However, our heavenly Father, Jehovah, can and will do something to eradicate hunger forever. How do we know?

The Bible explains that when God placed Adam and Eve in the garden of Eden, he provided them with everything they needed to be secure, content, and well fed. God told them: "I have given to you all vegetation bearing seed which is on the surface of the whole earth." Jehovah's purpose was for Adam and Eve's children to "fill the earth" and for all humankind to have an abundance of good things to eat.—Genesis 1: 28, 29.

Although the first human couple rebelled against their Creator and lost his blessing, God's original purpose for mankind has not changed. The Bible calls Jehovah "the One giving bread to the hungry ones," and it contains numerous prophecies indicating that he will eliminate all problems that have to do with access to food.—Psalm 146:7.

When Jesus' disciples asked him for a sign, or evidence, to identify when he was going to establish his Kingdom and intervene in earth's affairs, Jesus listed the conditions that would precede that intervention. One of them is "food shortages." Careful consider-

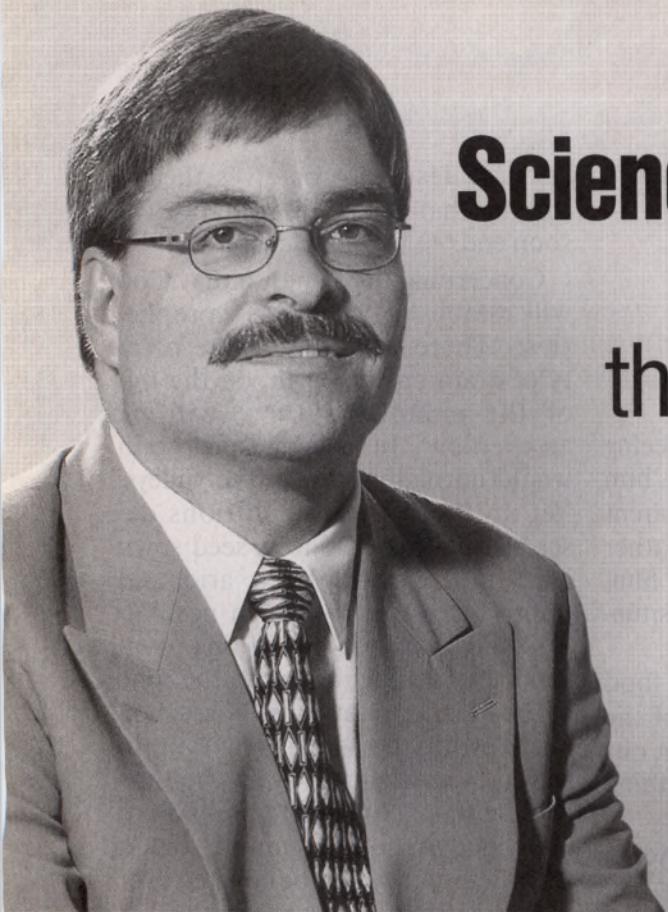
ation of Jesus' words gives the assurance that mankind's suffering will soon end.*—Matthew, chapter 24.

Concerning the Paradise that God will establish, Psalm 72:16 prophesies: "There will come to be plenty of grain on the earth; on the top of the mountains there will be an overflow." In ancient Israel grain would normally grow in the valleys. Yet, in the blessed conditions described by this prophecy, seed sown even on the most barren, arid, and unproductive land—which normally would not produce anything—will yield abundant fruitage. "In the time of the Messiah," says one Bible scholar, "it would be as if fields of grain waved everywhere, even on the tops of mountains, or as if the hills were cultivated to the very summit, so that the whole land would be covered over with waving, smiling harvests."

What a difference between the future that the Bible foretells and the lot of millions today! Yes, indeed, in the future that God promises, "the earth itself will certainly give its produce; God, our God, will bless us." —Psalm 67:6.

If you would like to know how you and your loved ones can enjoy these and many other blessings described in heartwarming Bible prophecies, do not hesitate to ask Jehovah's Witnesses in your area or to write to the appropriate address on page 5 of this magazine.

* For a discussion of how Jesus' prophecy has been fulfilled, see chapter 11 of the book *Knowledge That Leads to Everlasting Life*, published by Jehovah's Witnesses.



Science and the Bible Helped Me Find the Meaning of Life

AS TOLD BY BERND OELSCHLÄGEL

My search for the meaning of life took 20 years. Two things helped me find it: science and the Bible. My study of science confirmed that life must have meaning. But the Bible revealed that meaning to me and helped me understand it.

YOU may have heard some people claim that science contradicts the Bible. I have studied both, and I cannot agree with their claim. Perhaps you are interested in knowing why.

I was born in 1962 in Stuttgart, a city in southern Germany. Father worked as a machine designer, and he and Mother were active in church affairs. Karin, my sister, was born four years before me. A thrilling milestone in my childhood was when Father gave me a science experiment kit. I had great fun trying rudimentary experiments in chemistry and physics. Yes, learning was enjoyable.

Later I switched from experiment kit to computer. Even as a teenager, I could see that the best computer is the brain. But I wondered: 'Where does the brain come from? Who gave it to us? And what is the meaning of life?'

The Pursuit of Higher Education

I left school at 16 years of age and started an apprenticeship as an assistant in a photo laboratory. Since learning was the thing I enjoyed most, my goal was to study physics at a



When I was 12

university. But a university course was a long way off. It took me five years just to meet the entry qualifications. I started my university education in Stuttgart in 1983, and I continued my studies in Munich. Finally, I became a doctor of physics at the University of Augsburg in 1993.

My early days at the university were not easy. The lecture auditorium was commonly filled with about 250 students, many of whom gave up the course within a few months. I was determined not to give up but to follow through on what I had started. Living in a student residence building, I rubbed shoulders with many who seemed mostly interested in having a good time. Associating with such people was not always good. As a result, I took to partying and using drugs.

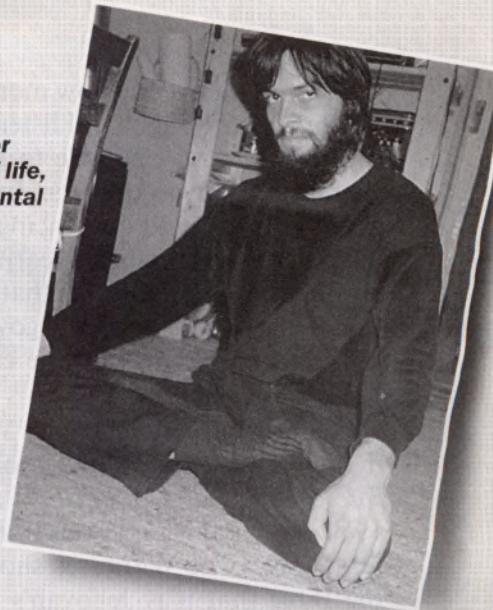
My Search Takes Me to India

My study of physics gave me a deeper grasp of the natural laws of the universe. I had hoped that science would ultimately reveal to me what life is all about. However, my search for the meaning of life went beyond physics. In 1991, I traveled with a group to India to learn Oriental meditation. What a wonderful experience to see the country and its people firsthand! But I was aghast at the contrast between rich and poor.

Near the city of Pune, for instance, we visited a guru who claimed that cultivating the correct meditation techniques could help someone to become rich. We meditated as a group each morning. The guru also sold medications at high prices. He clearly earned a handsome living; his lifestyle suggested as much. We also saw monks who appeared to be living in poverty, in contrast with the guru. I wondered, 'Why didn't meditation also make them rich?' My trip to India seemed to pose as many questions as it answered.

One of the souvenirs I brought back from India was a meditation bell. I was told that

*In my search for
the meaning of life,
I turned to Oriental
meditation*



when struck properly, the bell gave off a musical tone that would help me to meditate correctly. Back in Germany I purchased a horoscope drawn up by someone who claimed to be able to foresee my future. But practicing meditation did not reveal to me anything about life. I discovered to my disappointment that a horoscope is just a worthless piece of paper. So my questions about the meaning of life remained.

I Found Answers in the Bible

Life took an unexpected turn in 1993. I had completed my study and research and was in the process of writing my doctoral thesis on quantum physics. To meet the deadline, I worked almost day and night, to the neglect of everything else. Suddenly one afternoon there was a knock at the door. I opened to find two women.

"Did you know that the year 1914 was a very special year according to the Bible?" they asked. The question dumbfounded me. I had never heard of such a thing; neither did I have the time to investigate. Still, the question intrigued me. How could they claim that the Bible long ago pointed to 1914 as a marked year?

"Would you like to know more?" they went on. 'Surely,' I thought, 'if I listen to what they have to say, I will be able to find a contradiction in their arguments.' Instead of contradictions, I found convincing proof of the Bible's trustworthiness. I learned that Bible prophecy clearly indicates that God's Messianic Kingdom—a heavenly government that will in time rule over all the earth—was installed in 1914.*

The women were Jehovah's Witnesses, and they gave me a copy of the book *You Can Live Forever in Paradise on Earth*.[#] I read it within a few days and found everything logical and reasonable. The Witnesses showed me from the Bible that it is Jehovah's will for mankind to live forever in a paradise on earth. According to Bible prophecy, this promise will soon be realized. What a wonderful hope for the future! This hope touched my heart and brought tears to my eyes. Could this be what I had been searching for these last 20 years?

I quickly recognized my purpose in life: to get to know Jehovah God and to serve him wholeheartedly. I continued my study of the Bible with Jehovah's Witnesses, sensing that what I was learning was the truth. My thirst for spiritual matters could hardly be quenched. While completing my doctoral thesis, I read the Bible halfway through within three months.

Finding More Than Answers

In May 1993, I attended my first meeting at the local congregation of Jehovah's Witnesses at a Kingdom Hall in Augsburg. The teachings I heard had the ring of truth. Furthermore, I felt comfortable with the Witnesses. They greeted me warmly and made me feel welcome, even though I was a stranger. An elderly woman sat near me and went

* For a detailed discussion, see chapter 10, "God's Kingdom Rules," in the book *Knowledge That Leads to Everlasting Life*, published by Jehovah's Witnesses, pages 90-7.

[#] Published by Jehovah's Witnesses. Now out of print.

to the trouble of getting a songbook for me. In the following weeks, a Witness man and his young son gave me a lift to the Kingdom Hall in their car. These newfound friends soon began to invite me to their homes. In time I felt the desire to share with others what I was learning about the meaning of life.

Taking to heart what I had learned from the Bible was already moving me to make changes in my life. For instance, I no longer wished to keep items connected with occultism. So I got rid of my horoscopes as well as the meditation bell and other religious souvenirs from India. My study of the Bible progressed, and I dedicated myself to

**As a physicist, I have studied
the laws governing life, and these laws
give evidence that they were designed
by a superhuman intelligence**

Jehovah God, getting baptized as one of Jehovah's Witnesses in Munich in June 1994. In so doing I embraced wholeheartedly the true meaning of life.

In September 1995, I became a regular pioneer, a full-time minister of Jehovah's Witnesses. This meant spending more time talking to people about God's purposes. To do this I relied upon the strength that Jehovah gives. Many times I arrived home in the evening after several hours in the ministry, sensing a joy and contentment that I had never experienced before I got to know Jehovah. In January 1997, I was invited to continue my full-time service in the Germany branch office of Jehovah's Witnesses in Selters, called Bethel, where I now live. My parents have

visited me several times, and although they do not share my religious beliefs, they have come to respect Bethel and are happy that I am here.

Science and the Bible

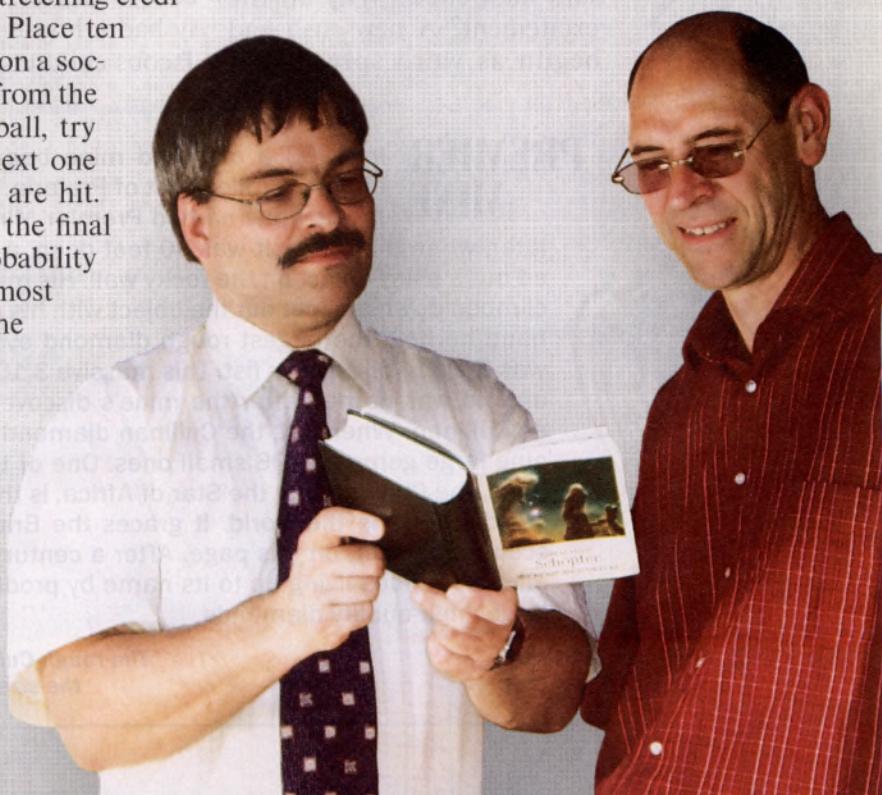
Some may wonder how a person who has spent years studying science can believe what the Bible says. Well, I find no contradiction between science and the Bible. As a physicist, I have studied the laws governing life, and these laws give evidence that they were designed by a superhuman intelligence.

For example, there are many theories in physics, chemistry, and biology. And although the theories may basically be simple, the mathematics associated with them can nevertheless be very demanding. Brilliant scientists suggest theories and are awarded the Nobel Prize for their work. How much more brilliant must be the intelligent Being who designed and brought into existence the universe, which scientists try so hard to understand!

To suggest, as many evolutionists do, that life developed by chance is stretching credibility too far. To illustrate: Place ten soccer balls in a straight line on a soccer field, each ball three feet from the other. By kicking the first ball, try to make each ball hit the next one in line, so that all ten balls are hit. Furthermore, try to predict the final position of each ball. The probability of success is so remote that most people would likely regard the feat as impossible.

That being the case, how can anyone claim that the development of the human cell—involved processes far more complex than kicking soccer balls—could ever be achieved simply by chance? The most reasonable explanation is that a superintelligent Being created humans and all other forms of life on earth. Would this Being, who is the Creator, do such a thing without having a purpose? Of course not. He must have had a purpose, and that purpose is revealed and made understandable in the Bible.

As you can see, both science and the Bible helped me find answers to my long-standing questions about life. Can you imagine the huge sense of relief and pleasure you would experience upon finding something that you had sought over a period of 20 years? It is my heart's desire to help as many others as possible to find what I finally found—not only answers to my questions but, more important, the proper way to worship the only true God, Jehovah!



Preaching to others gives me true joy and contentment



The Birth of the Modern DIAMOND INDUSTRY

BY AWAKE! WRITER IN SOUTH AFRICA

IT HAPPENED in January 1871. Adrian van Wyk, a Bible-loving farmer, was living with his family in a semidesert region of South Africa known as Griqualand West. But his peaceful existence came to an end when a stream of strangers arrived on his farm and set up camp there. Watching them from his porch chair, Van Wyk could not believe what was happening!

Within a few days, his land swarmed with thousands of men—as far as his eye could see! Why, some were even in his front gar-

den staking out claims without his permission and without even greeting him! What had happened? Why all the excitement? A new rush had begun as word spread that

there were diamonds aplenty on Van Wyk's farm.

What Led to That Diamond Rush?

Some 12 years earlier, a five-carat diamond had been found near the Vaal River, about 40 miles north of Van Wyk's farm. The man who found the diamond sold it to the priest in charge of the Berlin Mission Society for five pounds. No further record has been found of that first diamond discovery. But as word about it spread, people started investigating.

Our story moves ahead nine years, to the farm of Schalk van Niekerk alongside the Orange River, a few miles south of its confluence with the Vaal River. The Jacobs family had a house on Van Niekerk's farm. The Jacobs children enjoyed playing a game they

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PREMIER MINE

In 1903 a diamond mine began to function about 20 miles east of Pretoria, South Africa. It was aptly named Premier Mine. Two years later, when the mine pit was 30 feet deep, a laborer pointed out a shiny object on the rocky wall. His manager carefully climbed down and cut out the object with his penknife. In his hand he held the largest rough diamond ever mined; it was the size of a man's fist. This massive 3,106-carat diamond was named after the mine's discoverer, Thomas Cullinan. When cut, the Cullinan diamond produced nine large gems and 96 small ones. One of these portions, the Cullinan I, or the Star of Africa, is the largest cut diamond in the world. It graces the British royal scepter, as seen on this page. After a century Premier Mine continues living up to its name by producing many large, high-quality diamonds.

The British royal scepter

The rough Cullinan diamond, the size of a man's fist



Photo by Fox Photos/Getty Images ▼

DIAMOND FACTS

- ◆ Diamonds are the hardest natural substance known to man.
- ◆ Diamonds are formed from carbon, as is pencil lead, or graphite. Why, though, are diamonds hard while graphite is soft? They differ because of the way in which the carbon atoms are arranged.
- ◆ Diamonds are weighed in carats. A carat is equal to a fifth of a gram or a 142nd of an ounce.
- ◆ Often, it is necessary to sift through some 400 tons of rock, gravel, and sand to mine one carat of diamond.



called five stones. In their collection they had a shiny stone that their older brother Erasmus had found.

One day early in 1867, Van Niekerk visited the Jacobs. Mrs. Jacobs knew that he was interested in precious stones, so she told him about the bright stone that her children played with. "At night, in the candle-light, it glitters wonderfully," she said. After examining it, an exciting thought struck Van

Niekerk. "I have a feeling this is a diamond!" he exclaimed. He recalled that he had read of a way to test a stone to see if it was a diamond. So he drew the stone across the window-pane at the rear of the humble dwelling. He was startled to see a deep impression left in the glass and apologized for having damaged it.* Mrs. Jacobs gladly gave Van Niekerk the stone, refusing to accept payment for it.

On his next trip to nearby Hopetown, Van Niekerk showed the stone to friends, but none could confirm that it was a diamond. The stone passed from one pair of trustwor-

* Over a century later, that same pane with its deep scratch mark can be viewed in South Africa's Colesberg Museum.



Dr. Atherstone



Schalk
van Niekerk

thy hands to another and then by post until it reached a physician, Dr. Atherstone, of Grahamstown. He enlisted the help of a schoolmaster. In the school's laboratory, tests were made to check the stone's specific gravity, and found that it corresponded to that of a diamond. Next, the stone was handed to a local jeweler, who tried in vain to mark it with his file. Others were consulted, and all came to the same positive conclusion that

Van Niekerk had. Dr. Atherstone then confirmed by letter that the stone was a diamond weighing 21.25 carats. Van Niekerk was given 350 pounds for the gem, and he promptly shared the money with Mrs. Jacobs. Appropriately, the stone is called Eureka, an expression indicating "triumph on a discovery."

A Shepherd and an Honest Farmer

Our story moves on another two years to an area below the merging point of the Orange and Vaal rivers. There an African shepherd named Booij was grazing his sheep when

he saw something shiny on the ground. He stooped down to pick up a bright walnut-shaped stone and then dropped it into his pocket. He had heard that there was interest in certain stones in that area, so in his wanderings to find work, he offered it first to a farmer and then to a trader. They,

The Eureka diamond

De Beers Consolidated Mines Ltd.



in turn, directed him to Van Niekerk's farm.

Finally, Booij arrived at Van Niekerk's farm and showed him the stone. Immediately, Van Niekerk saw the possibility that he was looking at a diamond larger and more valuable than the one Mrs. Jacobs had given him. He asked the humble shepherd what he wanted in exchange for the stone. "Master," Booij respectfully replied, "you can give me what you think is right." Without hesitation, Van Niekerk handed over nearly everything he had—500 fat-tailed sheep, 10 oxen, the wagon he used to carry his vegetables to town, and even the saddled horse he had been riding! As for Booij, he no doubt considered himself a wealthy man—all for a shiny walnut-shaped stone!

Van Niekerk immediately went to Hopetown to sell his diamond. There an astonished group of businessmen agreed to pay him 11,300 pounds for the 83.5-carat stone. Eventually, it became known as the Star

The Star of South Africa

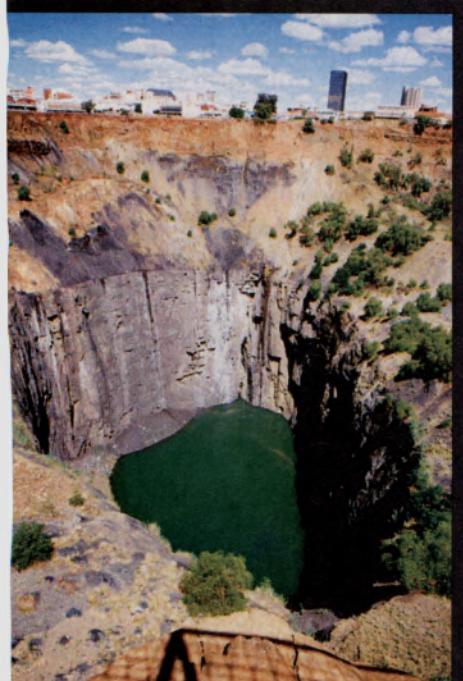


of South Africa.* The cut-and-polished stone became the main part of the beautiful necklace seen on this page. When word of this diamond reached the outside world, incredulity vanished, and thousands of men from places as diverse as North and South America, England, Europe, and Australia made a beeline to South Africa to make their fortune.

The Rush Gets Under Way

Initially, diamond digging took place along the Orange and Vaal rivers. Then, in 1870, word got out that impressive finds were being made on farms farther inland between the two rivers. Thus, the river diggers began their rush to the area where Adrian van Wyk's farm was located. Unknown to Van Wyk and his neighbors, their farms were located above extinct volcanoes. The

* The name of this diamond is sometimes confused with that of another called the Star of Africa.—See the box "Premier Mine," on page 16.



THE BIG HOLE AT KIMBERLEY

During the four-year period from 1869 to 1873, the population around the present-day city of Kimberley grew from a handful of farmers to about 50,000 people. Many of these were fortune hunters who came from all corners of the globe. Thousands walked 650 miles from the dock at Cape Town. Using picks and shovels, they turned a hill into the biggest hole ever dug with human hands. When digging finally stopped, the crater had a depth of 787 feet. Underground mining continued to a depth of 3,600 feet. By 1914, when all mining ceased here, "25 million tons of soil" had been removed, according to the *Standard Encyclopaedia of Southern Africa*. From all that rock and soil, the same source adds, three tons of diamonds were extracted at a value of more than 47,000,000 pounds.



diamonds were discovered in so-called blue ground found within ancient volcanic pipes.

Meanwhile, hastily constructed tent villages sprang up, which were soon followed by corrugated-iron structures. With insufficient water and no infrastructure, these villages were basic, to say the least. The new arrivals put up with clouds of dust, swarms of flies, summer days that reached over 106 degrees Fahrenheit, and winter nights that were sometimes below freezing. They endured all this discomfort in the hope of making a big fortune.

What happened to Adrian van Wyk after his farm was overrun by the diamond diggers? Initially, he gave the diggers permission to work a portion of his farm for a small fee payable monthly. But as more and more diggers invaded his farm, the situation became too unruly for Van Wyk to control. When a

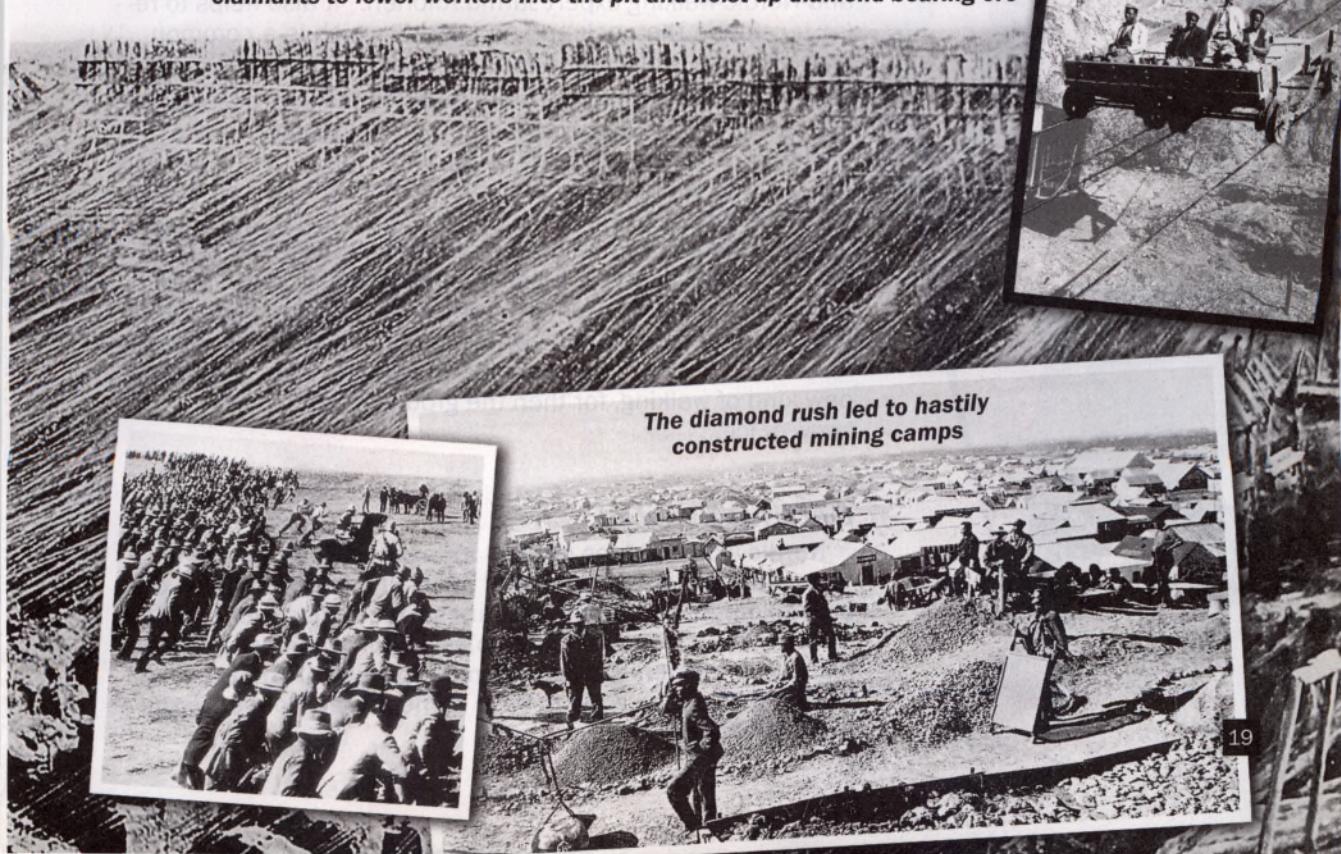
mining company offered him 2,000 pounds for his farm, he gladly accepted it, signed the papers, and left for more peaceful pastures.

Not far from Van Wyk's was another farm, owned by two brothers surnamed De Beer. Their name was used to register the De Beers Consolidated Mines, still functioning as the world's largest diamond producer. The city of Kimberley embraces the area on which those humble farms once stood. Activity on the De Beer brothers' farm became very intense, and men dug a pit so deep and wide that it became known as the Big Hole.

Prior to South Africa's early diamond discoveries, these precious gems were being mined in India and Brazil. But not enough could be found to satisfy the world market. With the discovery of great quantities of diamonds in South Africa, the modern diamond industry was born.

Photos: De Beers Consolidated Mines Ltd.

The Big Hole in 1875. The ropes were used by hundreds of different mine claimants to lower workers into the pit and hoist up diamond-bearing ore



The diamond rush led to hastily constructed mining camps

A Different Kind of Walking!

BY AWAKE! WRITER
IN FINLAND



Have you heard of Nordic walking? In Finland this kind of walking has become one of the most popular exercises. It involves the use of poles similar to those used in skiing. How did it develop, and what are its benefits?

WHEN you see a Nordic walker, you may think of a cross-country skier without skis. Actually, it was ski racers who gave birth to Nordic walking when they began to intensify their summer training by walking with their ski poles. In the 1980's, pole walking was introduced to other athletes as an effective exercise. By the late 1990's, Nordic walking was adopted by the general population. A 2004 Gallup survey showed that 760,000 Finns—19 percent of the population—engage in Nordic walking at least once a week. "Nordic walking has now become the second most popular exercise in Finland, with walking the first," says Tuomo Jantunen, executive director of Suomen Latu, the organization that commissioned the survey. Nordic walking has not proved to be a passing fad. In recent years it has gradually been introduced into other countries as well.

Many are familiar with the benefits of walking, but what are the advantages of walking with poles? "One great benefit is that Nordic walking exercises the upper body, including muscles in the arms, back, and abdomen," says physical therapist and Nordic-walking expert Jarmo Ahonen. "It also helps to relax tension in the neck and shoulders, which is a common problem among office workers," he adds.

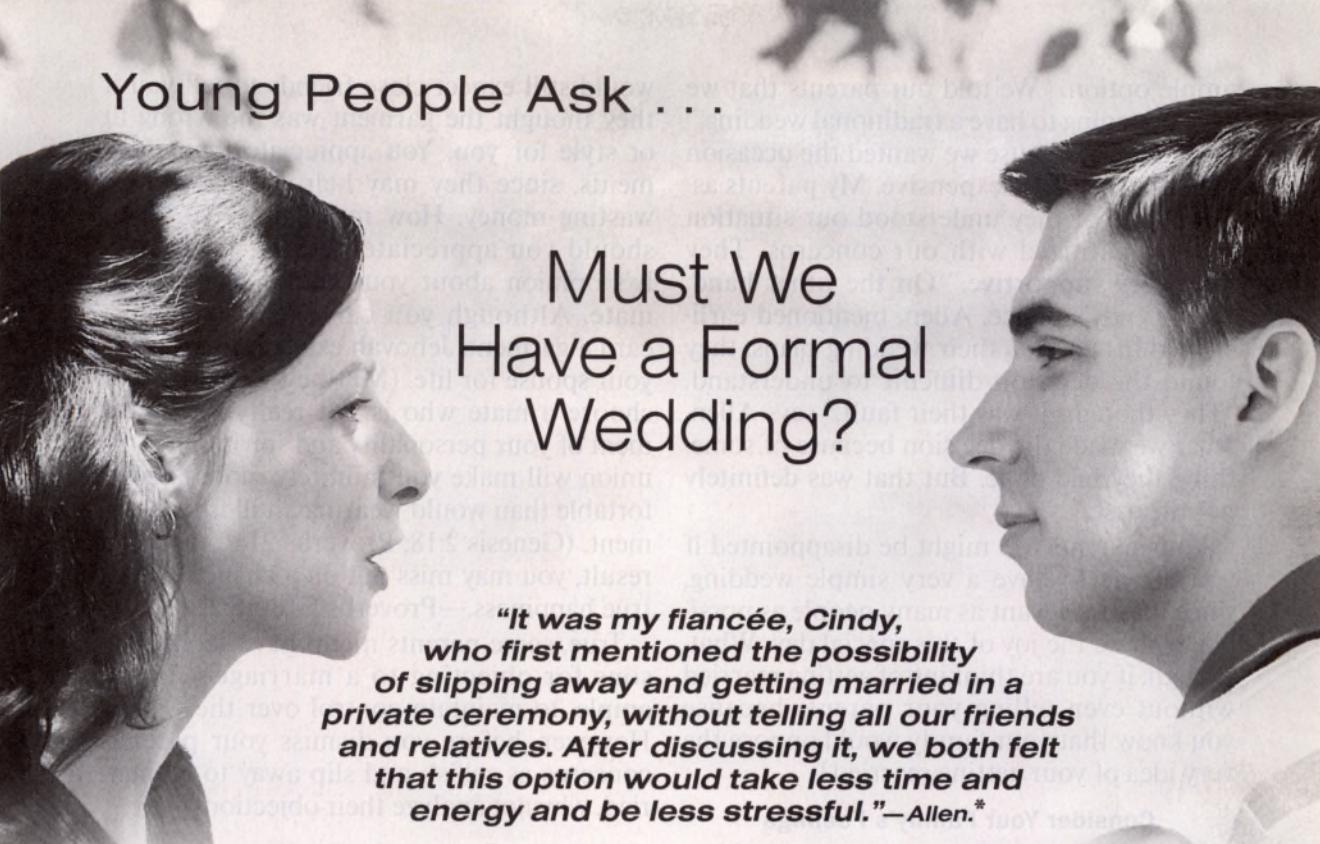
As Nordic walking works more muscles than normal walking, it also increases calorie consumption. Using poles makes it easier for a person to speed up the walk and get the pulse rate up. But that is not all. Proponents claim that when poles are used correctly, they help one to walk tall, improving posture. "Nordic walking also relieves strain on the joints, as part of the body weight can be directed to the walking poles," claims Ahonen. One Nordic walker explains that the pointed poles help him maintain balance when walking on slippery surfaces. As a result, during the winter elderly walkers have adopted this new kind of walking, for then the ground is often covered with snow or ice.

Getting Started

Nordic walking does not call for expensive equipment. You need only good shoes and specially designed poles of proper length. If you walk on hard surfaces, use rubber plugs to cover the sharp tips of the poles. Nordic walking is not too difficult to master. You can learn it. However, if you are a beginner, it would be good to have some advice from a Nordic-walking expert.

Young People Ask . . .

Must We Have a Formal Wedding?



*"It was my fiancée, Cindy, who first mentioned the possibility of slipping away and getting married in a private ceremony, without telling all our friends and relatives. After discussing it, we both felt that this option would take less time and energy and be less stressful."—Allen.**

If you are old enough to marry and are romantically involved with someone, the option of quietly slipping away to get married might seem attractive. In some circumstances a couple may be tempted to run away and get married without even telling their parents.* What principles can help you to decide what to do?

Is Tradition Paramount?

While marriage is common to most cultures, the customs surrounding the ceremony vary greatly. For a Christian couple, the primary concern is not whether their wedding will fulfill all the expectations of local custom. (Romans 12:2) Rather, their paramount desire is to conduct their courtship and marriage in a way that brings honor to Jehovah God.—1 Corinthians 10:31.

Since marriage is an honorable arrangement, it is not something most couples would want to keep secret. In many Western lands, couples among Jehovah's Witnesses commonly arrange to be married in a ceremony at their local Kingdom Hall.* Afterward, they may choose to hold a reception where they share a meal and possibly some entertainment with family and friends. Such occasions need not be elaborate. It must be admitted, though, that organizing a wedding and a reception is stressful and may entail considerable expense. For example, in the United States, wedding receptions often cost thousands of dollars.

In an attempt to minimize stress and expense, some couples have chosen a more

* These places of worship make an ideal setting for weddings of Jehovah's Witnesses. The ceremony is simple and features a brief discussion of the Bible principles that serve as the foundation of a good marriage. Of course, there is no charge for their use of a Kingdom Hall.

* Names have been changed.

This practice is sometimes referred to as eloping.

simple option. "We told our parents that we were not going to have a traditional wedding," says Cindy, "because we wanted the occasion to be simple and inexpensive. My parents assured us that they understood our situation and sympathized with our concerns. They were very supportive." On the other hand, when Cindy's fiancé, Allen, mentioned earlier, told his parents their wedding plans, they found the decision difficult to understand. "They thought it was their fault," says Allen, "that we made the decision because of something they had done. But that was definitely not the case."

Your parents too might be disappointed if you decide to have a very simple wedding, since they may want as many people as possible to share the joy of this special day. What, though, if you are thinking of getting married without even telling your parents because you know that your family would oppose the very idea of your getting married?

Consider Your Family's Feelings

It may be that your parents would object because they feel that you are too young to make such an important decision. They may fear that your tastes will change as you mature and that you will soon regret your choice of marriage mate. Alternatively, they might consider you old enough to marry, but they see what they perceive as flaws in your loved one's character. Or they may even forbid you to marry because your chosen partner does not share the same religious convictions as you.

If your parents are true Christians, they likely have Bible-based reasons for their concerns. It is only right that they would express any misgivings they might have. Indeed, Jehovah would view them as negligent and unloving if they failed to do so. And it is in your interest to hear their point of view.—Proverbs 13:1, 24.

To illustrate: When you buy an article of clothing, you likely seek someone else's opinion as to whether the item suits you. You may not always agree with their opinion, but you

would still expect close friends to tell you if they thought the garment was the wrong fit or style for you. You appreciate their comments, since they may help save you from wasting money. How much more so, then, should you appreciate hearing your family's opinion about your choice of marriage mate. Although you can exchange or discard a garment, Jehovah expects you to keep your spouse for life. (Matthew 19:5, 6) If you choose a mate who is not really a complement of your personality and spirituality, the union will make you infinitely more uncomfortable than would wearing an ill-fitting garment. (Genesis 2:18; Proverbs 21:9) And as a result, you may miss out on a chance to find true happiness.—Proverbs 5:18; 18:22.

True, some parents might have selfish reasons for objecting to a marriage—for example, to maintain control over their child. However, before you dismiss your parents' concerns as selfish and slip away to be married, why not analyze their objections?

Reasons for Caution

It is a fact that your tastes will change as you mature. "When I was a babe," writes the apostle Paul, "I used to speak as a babe, to think as a babe, to reason as a babe; but now that I have become a man, I have done away with the traits of a babe." (1 Corinthians 13:11) Likewise, the traits in another person that appeal to you as a teenager will likely be quite different from those that will appeal to you when you are older. Thus, the Bible recommends that you wait until you are "past the bloom of youth"—the years when your sexual desire is at its peak—before you take the serious step of choosing a marriage mate.—1 Corinthians 7:36.

What if your parents find fault with your companion? Because of their experience in life, your parents' perceptive powers may be better trained to discern right from wrong. (Hebrews 5:14) So they may see serious flaws in your intended mate's personality, whereas

you do not. Consider in principle what the wise man Solomon wrote: "The one first in his legal case is righteous; his fellow comes in and certainly searches him through." (Proverbs 18:17) Similarly, your loved one may have convinced you that he or she is the right person for you. However, after your parents have 'searched him through,' they may highlight certain facts that are worth considering.

For instance, they may firmly remind you that the Bible directs true Christians to marry "only in the Lord." (1 Corinthians 7:39) You may object that you know of others who married someone who did not share their Christian faith, yet now they are both happily serving Jehovah. Granted, this does happen. However, such instances are by far in the minority. If you marry someone who does not share your faith, you not only disregard Jehovah's standards but also put yourself in grave spiritual danger.—2 Corinthians 6:14.*

An Unwise Reason to Marry

Some youths have run away and married because they engaged in immoral conduct and felt that marrying their partner would ease their conscience. Or they may have hoped to cover the consequences of their sin, such as an unintended pregnancy.

* For a more detailed discussion of this subject, see the *Watchtower* issues of July 1, 2004, pages 30-1, and November 1, 1989, pages 18-22.

When making any decisions about getting married, communicate with your family

If you were to marry to cover a sin, you could well be compounding one mistake with another. "He that is covering over his transgressions will not succeed," warned Solomon, "but he that is confessing and leaving [them] will be shown mercy." (Proverbs 28:13) Solomon's father and mother, David and Bath-sheba, learned the folly of trying to hide their immoral conduct. (2 Samuel 11:2-12:25) Rather than hide your sin, talk to your parents and to the congregation elders. This will require courage on your part, but you can be certain Jehovah will forgive you if you are repentant. (Isaiah 1:18) Once you have regained a clean conscience, you will be in a better position to make a balanced decision about marriage.

Avoiding Regrets

Looking back on his wedding, Allen says: "Our decision to have a simple wedding did result in the occasion being relatively stress free. My only regret is that I did not help my family understand better the reasons for our decision."

Really, whether a mature couple has a traditional wedding or not is a personal decision. However, when making any decisions about marriage, take your time, communicate with your family, and 'consider your steps.' You will minimize your reasons for regret.—Proverbs 14:15.





WHAT CAN YOU DO ABOUT Traffic?

BY AWAKE! WRITER IN THE PHILIPPINES

WARNING: Many large cities suffer from a plague. It is not an infectious disease, nor is it a destructive swarm of voracious insects. Still, it threatens the well-being of millions of people. What is it? It is the plague of automobile traffic congestion!

According to researchers, frequent exposure to traffic congestion can prove detrimental to your health. One recent study even suggests that there is an increase in the risk of heart attack for at least an hour after a person is stuck in traffic. *The New Zealand Herald* reports that "emissions from car exhausts, noise and stress are likely to be the main causes of the sudden increase in risk."

Poisons in the Air

Most motor vehicles emit nitrogen oxides and some carcinogenic substances. Many vehicles, particularly those with diesel engines, spew out large amounts of minute particles. These pose serious dangers to public health. It has been estimated that up to three million people die each year as a result of air pollution, much of it coming from motor vehicles. One report says that 10 percent of respiratory infections in European children are a result of fine particulate pollution, with an even higher rate in traffic-congested cities.

Consider also the dangers to the earth's environment. Nitrogen oxides

and sulfur dioxide from vehicle exhaust contribute to acid rain, which contaminates bodies of water, harms aquatic life, and damages a wide variety of vegetation. To make matters worse, vehicles emit huge quantities of carbon dioxide. This is the principal gas blamed for global warming, which is said to pose other dangers for planet Earth.

More Accidents

As traffic increases, so does the danger to human life. Over a million people die in traffic accidents each year, and the figure has been growing steadily. In some areas the danger is particularly high. For example, European Commission researchers found that "for every million inhabitants, 690 die on the roads in Greece, as opposed to 120 in Sweden."

An ugly factor that has received much attention in recent years is road rage. Reports of drivers' venting their anger on other drivers are becoming more commonplace. According to a survey conducted by the National Highway Traffic Safety Administration in the United States, drivers felt that one of the reasons for increased driver aggressiveness was "increased traffic or congestion."

An Economic Scourge

Traffic congestion also costs money. One study showed that in Los Angeles,



California, alone, over 1.1 billion gallons of fuel are wasted in a year as a result of traffic delays. There are indirect losses too, including lost business opportunities, additional expenses for health care because of pollution, and the toll taken by an increase in traffic accidents.

Added up, these losses put a dent in national economies. One study showed that traffic jams are costing Americans about 68 billion dollars per year in wasted time and fuel alone. In the Far East, a report in the *Philippine Star* said: "Like a taxi meter continuously ticking, the country loses billions of pesos each year due to traffic jams." In Europe the costs have been estimated at about a quarter of a trillion euros.

What Is the Traffic Forecast?

Despite many efforts to come up with traffic solutions, things have become worse. A national survey by the Texas Transportation Institute of 75 urban areas in the United States showed that time spent delayed in traffic rose from an average of 16 hours per year in 1982 to 62 hours in 2000. The length of time during the day when travelers are likely to experience road congestion rose from 4.5 to 7 hours. The report states that "traffic congestion levels have increased in every area over the history of the study. The congested time is length-

ening and now incorporates more road and more travel than in the past."

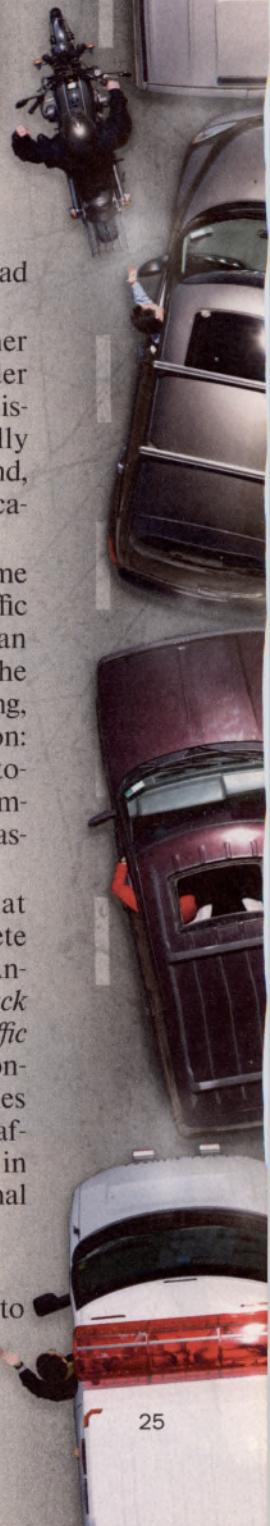
Similar reports have come from other countries. Researchers working under the direction of the European Commission concluded: "Unless we radically change the way in which we get around, traffic jams will lead to citywide suffocation in the next decade."

Asian countries have much the same problems. Tokyo is notorious for traffic jams, and other cities throughout Japan are seeing more and more traffic. In the Philippines, reports like the following, from the *Manila Bulletin*, are common: "Streets are jammed with bumper-to-bumper traffic, with thousands of commuters waiting for a ride during increasingly longer rush hours."

Realistically, it has to be said that right now there seem to be no complete solutions for the problem of traffic. Anthony Downs, author of the book *Stuck in Traffic—Coping With Peak-Hour Traffic Congestion*, reached the following conclusion: "No matter what public policies are adopted in response to future traffic congestion, it is likely to get worse in nearly all parts of the world. So my final advice is: Get accustomed to it."

What Can You Do?

In view of this, what can you do to cope with this annoying problem? If you are among the millions who





**Avoid traffic by
planning ahead**



**Before driving,
select an appropriate
cassette or CD**



**Don't get upset
with things you cannot
change**

frequently get stuck in traffic, there are things you can do to protect your physical and mental health.

■ **BE PREPARED.** Many are already stressed-out before they get stuck in traffic. They get out of bed too late. They shower, dress, and eat in a rush. The thought of being late for work makes them anxious. Traffic congestion only heightens their stress levels. If you expect to be stuck in traffic, allow extra time for your trip. By leaving earlier, you may even beat the rush. According to the book *Commuting Stress—Causes, Effects, and Methods of Coping*, "a less stressful commute begins the day or night before." The book adds: "Clothing, attache cases, lunches for the com-



**As a passenger,
find a way to be
productive**

muter or children in the family are prepared at night in order to avoid a morning rush." Of course, a good night's sleep is vital. To get an early start in the morning, you must go to bed at a reasonable hour.

There are other benefits of getting up earlier. For instance, sitting in traffic for long periods of time can stress your muscles and reduce their flexibility. If your circumstances allow it, why not exercise in the morning? A regular exercise program can improve your overall fitness and help you cope with the physical stress of being stuck in traffic. Getting up earlier may also allow you to have a nutritious breakfast. Being stuck in traffic with junk food or no food in your stomach can stress you even more.

You may avoid additional stress by making sure your vehicle is in good repair. Few things are more frustrating than breaking down in the middle of a traffic jam. This is especially so in inclement weather. Therefore, give proper maintenance to your brakes, tires, air conditioner, heater, windshield wipers, defrosters, and other vital systems. Even a minor accident in congested traffic can prove to be a major stressor. And, of course, always make sure you have enough fuel in your tank.

■ BE INFORMED. Before you start driving, it might help you to be informed about such special circumstances as bad weather, road construction, temporary road closures, accidents, and other traffic conditions of the day. You may obtain this information by listening to news broadcasts or reading the newspaper. Also, get a map of the area. By getting acquainted with alternate routes, you may be able to bypass trouble spots.

■ BE COMFORTABLE. Adjust the ventilation in your vehicle as well as your seat position so that you will be as comfortable as possible. If you have a radio or a cassette or CD player, you can listen to your favorite music. Some types of music have a calming effect and may reduce stress. These measures may

also shield you from some of the annoying noise of traffic congestion.*

■ BE PRODUCTIVE. One of the most productive things you can do while stopped in traffic is to engage in positive thinking. Instead of mulling over the bad traffic conditions, try to think about the day's activities. If you are alone, the time you spend in a traffic jam may give you a unique opportunity to process important thoughts and even make decisions without interruptions.

If you are a passenger, staring at the long line of automobiles in front of you may only add to your stress. So plan to use your traffic time productively. You may want to take along your favorite book or newspaper. Perhaps you can go through some of your mail from the previous day. Some may find it comfortable to write letters or do some work on a portable computer.

■ BE REALISTIC. If you live in an area where traffic congestion is a problem, expect to be stuck in traffic and plan accordingly. Traffic congestion is here to stay in most cities. The book *Stuck in Traffic—Coping With Peak-Hour Traffic Congestion* says: "A considerable degree of peak-hour congestion is almost sure to persist throughout the foreseeable future in all metropolitan areas already experiencing it." So learn to accept traffic as a normal part of your life, and do what you can to make the best of it!

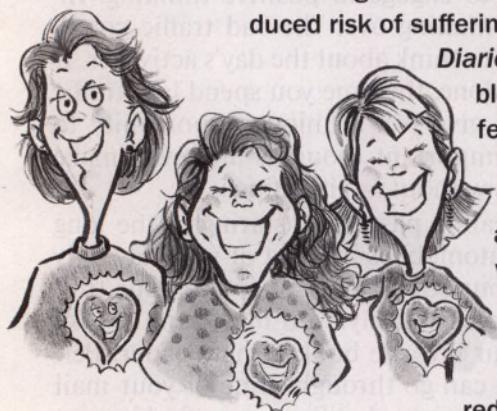
* Many *Awake!* readers enjoy listening to audio recordings of this journal as well as of its companion, *The Watchtower*. In some languages these are available in audiocassette, compact disc, and MP3 formats.

In Our Next Issue

- Homelessness—Will It Ever End?
- Determined Despite Disabilities
- Does God Favor Some Nations Above Others?

Watching the World

Friendships Affect Hearts



"Having friends and good relationships with the family is associated with a reduced risk of suffering a heart attack or stroke," states the Spanish newspaper

Diario Médico. Doctors have long considered cholesterol levels, blood pressure, and body weight to be significant factors affecting the condition of the heart. But according to a recent study of about 500 women who suffered chest pains, the scope and depth of the patient's network of family and friends should also be considered. The new study revealed that "those who had the worst social relationships had twice the risk of dying [prematurely] in comparison with more sociable women." Carl J. Pepine, a coauthor of the study, adds that even "with one or two close friends, a reduction in the risk [of stroke or heart attack] was detected."

Antarctic Krill Decline

Krill—tiny shrimplike crustaceans that are vital to the marine food chain—have suffered an 80 percent decline in Antarctica since the 1970's, notes David Adam, as reported in the *Guardian* newspaper of London. Krill feed on alga that shelter beneath the sea ice, but the average air temperature around the Antarctic Peninsula has risen 4.5 degrees Fahrenheit [2.5°C] since the 1950's, melting some of the ice. Angus Atkinson, of the British Antarctic Survey, says: "We don't fully understand how the loss of sea ice here is connected to the warming, but we believe it could be behind the decline in krill." The team examined the scientific fishing records of nine countries working in Antarctica from 1926 to 1939, and

from 1976 to 2003. They say there is now only about one fifth of the krill that existed three decades ago.

Speaking by Whistling

The shepherds of La Gomera in the Canary Islands use a language known as Silbo, which is based on whistles. Using a code made up of two vowels and four consonants, which are whistled in different tones, the shepherds are able to communicate great distances. Recently, researchers used magnetic resonance imaging to compare the brain activity of five Spanish-speaking subjects with that of five shepherds who spoke both Spanish and Silbo. The researchers found that when the shepherds communicate with whistles, "their brains emit the same signals as if they were speaking,"

states the Spanish newspaper *El País*. The report quotes one researcher as saying: "Our results provide more evidence about the flexibility of human capacity for language in a variety of forms."

The Rising Cost of Translation

In May 2004 the European Union expanded to include ten new member nations, bringing their total number to 25. Expansion, however, has brought linguistic challenges, resulting in increased costs. The 20 languages used by the 25 countries are considered official. Thus, documents must be translated into each language. "Prior to enlargement," reports the French newsmagazine *Valeurs Actuelles*, "the European Commission translated 1,416,817 pages [of text]

in 2003." However, the number of translated pages will now rapidly increase. With nine new languages, possible translation combinations (for example, Maltese to Finnish, or Estonian to Greek) have gone up from 110 to 380. Finding qualified translators and interpreters is proving difficult. The translation budget—currently 550 million euros—is set to explode and "could reach 808 million euros," says Robert Rowe of the European Commission's translation services.

Unholy Smoke

Smoke particles emitted by burning candles and incense could be endangering the health of priests and parishioners who spend long periods in poorly ventilated churches, reports *The Sydney Morning Herald*. A study

found that smoke particle levels in two churches were "up to 20 times higher than what is considered safe to breathe under European air pollution standards," says the paper. The report likened the levels of pollution to that "found in the air beside roads driven by 45,000 cars a day." Regular exposure to this indoor air pollution could result in an increased risk of contracting lung cancer or pulmonary diseases, warned one of the authors of the study.

Monument to Animals Used in War

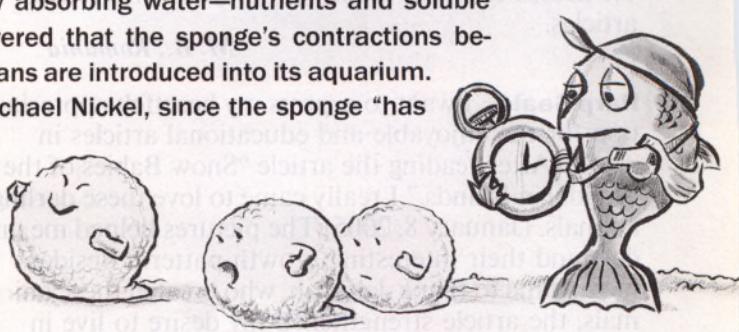
"A national monument to animals that served, suffered and died alongside the British and Allied forces in wars and conflicts through the centuries" has been unveiled in central London, reports *The Times*. The monument

consists of a bronze sculpture depicting a horse, a dog, and two laden mules, encircled by a stone wall carved with representations of other animals that served in various wars. In World War I, for example, an estimated eight million horses died, as well as countless mules and donkeys. The *Guardian* newspaper reports that glowworms were used by soldiers during World War I to read maps at night. A remarkable animal named Rob the "para-dog" made more than 20 parachute drops into North Africa and Italy. In addition, during World War I, a pigeon named Cher Ami "delivered no fewer than 12 messages and never failed," states *The Times*. However, according to one source, an estimated 20,000 pigeons were lost during that war.

A Surprising Sponge

Researchers at the University of Stuttgart, Germany, recently discovered a white, spherical sponge that displays some surprising talents, reports the German newspaper *Die Welt*. The sponge is very small but can propel itself at the rate of several centimeters a day, making it the fastest-moving sponge yet discovered. During rhythmic contractions the organism squeezes water from its body, reducing its body volume by up to 70 percent. When it inhales—by absorbing water—nutrients and soluble oxygen are ingested. Researchers discovered that the sponge's contractions become much stronger when small crustaceans are introduced into its aquarium.

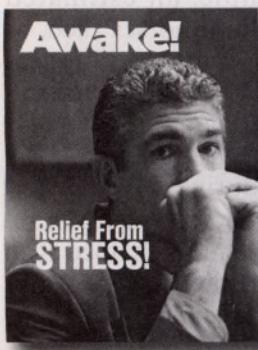
"This is very unusual," says researcher Michael Nickel, since the sponge "has no nervous system." How does the sponge control its movements or detect the presence of other creatures despite lacking a nervous system? Researchers are intensely studying the sponge, hoping to learn how it manages these tasks.



From Our Readers

Stress The series "Relief From Stress!" was so timely for me! (February 8, 2005) The articles came just when I thought I was about to go over the edge, all because I was not coping with stress properly.

The suggestions you provided have made a world of difference in my life.



*Name withheld,
United States*

Recently I was diagnosed with depression. So the statement, "It is fine to care for your own needs," was reassuring to me. The illustration involving filling our "personal-resource bank" was appreciated. I was emotionally bankrupt, but I will try to know my limits from now on.

Y. O., Japan

I have just returned from a seminar in which I gave a short presentation on coping with stress. I was able to touch on the causes of stress and its effects, as well as what can help—all based on this wonderful magazine!

J. L., Germany

Mobile Phones Thank you for the article "The Mobile Phone—Friend or Foe?" (February 8, 2005) I am 14 years of age, and I have been too dependent on my mobile phone. The article helped me to understand that the phone should not be the most important thing in my life, especially considering the possible health effects. Thank you for your interesting articles.

M. B., Romania

Harp Seals I want to express my heartfelt appreciation for the enjoyable and educational articles in *Awake!* After reading the article "Snow Babies of the Magdalen Islands," I really came to love these darling animals. (January 8, 2005) The pictures helped me understand their interesting growth pattern. Besides moving me to thank Jehovah, who created these animals, the article strengthened my desire to live in

Paradise. I have had some stressful problems, and I can't tell you how much this heartwarming article encouraged me. Please continue to publish articles like this.

N. S., Japan

Sea Horses I received your magazine from Jehovah's Witnesses, and I would like to express my gratitude for the article "Dancing Horses of the Sea." (December 22, 2004) Recently I received an excellent grade for my school assignment on sea horses after making use of the information in your article. As a result of *Awake!* magazine, I have learned more about science and technology—and especially about God. Thank you, Jehovah's Witnesses, for your excellent magazines!

T. P., Indonesia

It Is Written . . . I am so glad that I read the article "It Is Written That I Will See Him"! (December 22, 2004) I am 11 years of age, and until now I have lacked the courage to tell others about God's Kingdom. But after reading Rosalia Phillips' life story, I realize that Jehovah will support me. I want to become a courageous publisher of the good news like Rosalia.

P. P., Poland

I am 27 years old, and 24 years ago my mother fell asleep in death. Since becoming one of Jehovah's Witnesses, I have had a firm hold on the hope of seeing her again. I am thankful for articles such as this one—thankful to Jehovah, to *Awake!*, and to Rosalia for sharing her beautiful experience with us.

A. F., Venezuela

More Choices, Less Satisfaction?

PEOPLE in the United States today have "more options in more parts of life than has ever been possible before," says an article in the magazine *Scientific American*. This is true when it comes to choices of goods, services, employment, and even personal relationships. Logic might suggest that greater freedom of choice leads to greater satisfaction in life. Surprisingly, however, it often makes for misery. How so?

The article noted that attitudes toward choices affect happiness. For example, some put much time and effort into making the best possible choice of merchandise by poring over labels and examining new products, and then they compare what they buy with what others buy. Other consumers aim for

"good enough," even if better selections might exist. Such individuals stop looking when they find an item that meets their needs.

Clearly, for those who always want the best, decisions become increasingly difficult as the range of options increases. Then, when they do make a selection, says *Scientific American*, "they are nagged by the alternatives they have not had time to investigate." In the end, such ones "experienced less satisfaction with life and were less happy, less optimistic and more depressed." The conclusion? "There is good reason to believe," says the article, "that overwhelming choice at least contributes to the epidemic of unhappiness spreading through modern society."

The authors of the study noted, however, that choice-related stress can be reduced. How?

- We can decide to restrict our options when the decision is not crucial. For example, make a rule to visit no more than two stores when shopping for clothing.

- Settle for a choice that meets your core requirements rather than searching for the elusive 'best.' Then stop thinking about it.

- Consciously limit how much you ponder the seemingly attractive features of options you reject. Teach yourself to focus on the positive parts of the selection you make.

- "Don't expect too much, and you won't be disappointed" is a cliché. But that advice is sensible if you want to be more satisfied with life.

Source: *Scientific American*





HER CLASSMATES CHANGED THEIR OPINION

■ Victoria (shown above), an 11-year-old girl in Ukraine, was asked to prepare a report about her favorite book in such a way that all in the class would want to read it. She says: "I decided to introduce my classmates to the book *Questions Young People Ask—Answers That Work*. In my presentation I explained the content of the book and the principles on which it was based. At the end I mentioned that the book was available right after class."

What was the reaction of her classmates? "I placed 20 books that day," says Victoria. "My classmates had thought that Jehovah's Witnesses were a sect, but they changed their

opinion, and now I have two regular readers of our magazines!"

The *Young People Ask* book probes into thoughts and feelings of young ones, stirring wholesome discussions. It addresses such questions of youths as: "How Can I Get My Folks to Give Me More Freedom?", "How Can I Make Real Friends?", and "What About Sex Before Marriage?" In its 39 chapters, many other subjects are also addressed.

