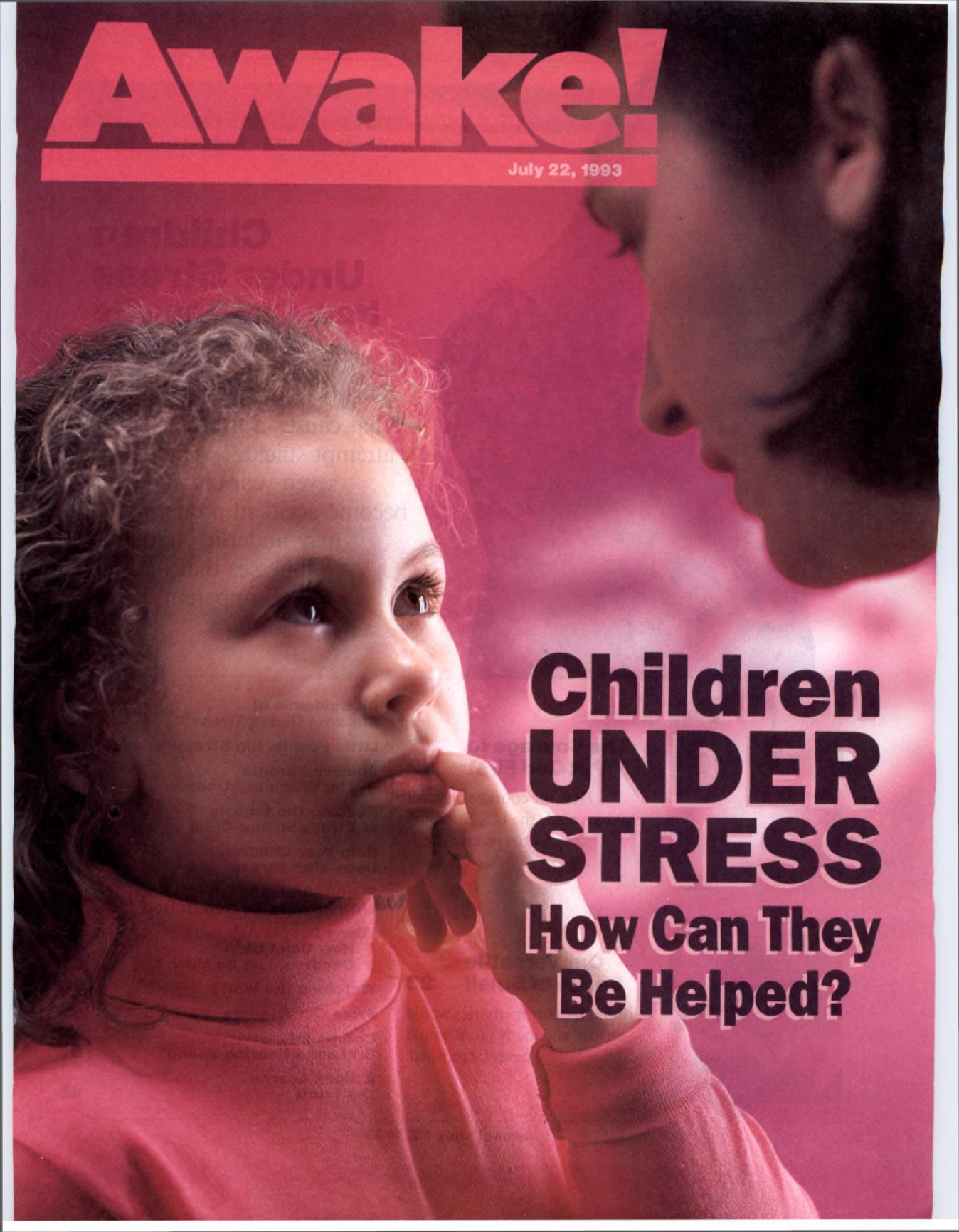


Awake!

July 22, 1993



Children UNDER STRESS

How Can They Be Helped?

Children Under Stress How Can They Be Helped?

3-11

What causes a five-year-old to attempt suicide? Why does a seven-year-old suddenly become accident-prone? What may underlie childhood illnesses that have no apparent cause?



The Courage to Put God First 12

How the courage of small children made the U.S. Supreme Court reverse itself.



Our Versatile Sense of Smell 23

Without it many memories would be lost, and many tastes would never be relished.

An Epidemic of Children Under Stress	3
Little People, Big Stresses	4
Abusive Parents—The Ultimate Stressors	6
Reading the Signals of Stress in Your Child	8
Help Your Children Cope With Stress	10
Fugu—A Small Fish With an Inflated Reputation	18
Young People Ask . . . How Can I Stop Daydreaming So Much?	20
Watching the World	28
From Our Readers	30
Cobras in Sri Lanka Hearing Sound	31
A Monk Learns the Truth	32

An Epidemic of Children Under Stress

"RANDY!" Rita shouted, horrified by what she saw from a distance as she approached her house. There was her son Randy, suspended halfway out of the top-floor bedroom window, 25 feet above the concrete patio. Inside the house, Larry heard his wife's hysterical cries and was jolted into action. Racing up the stairs, he leaped into the bedroom and grabbed Randy, pulling him safely inside. Randy's parents needed prompt answers. "Why did you do that? Why?" they asked in disbelief. "You could have been hurt; you could have been killed!"

"I wanted to die," Randy answered indifferently.

Randy was only five years old.

FROM all outward appearances, Randy was a normal, healthy boy. No one suspected that he secretly wanted to die. Yet, subsequent counseling revealed that Randy was a child under intense stress.

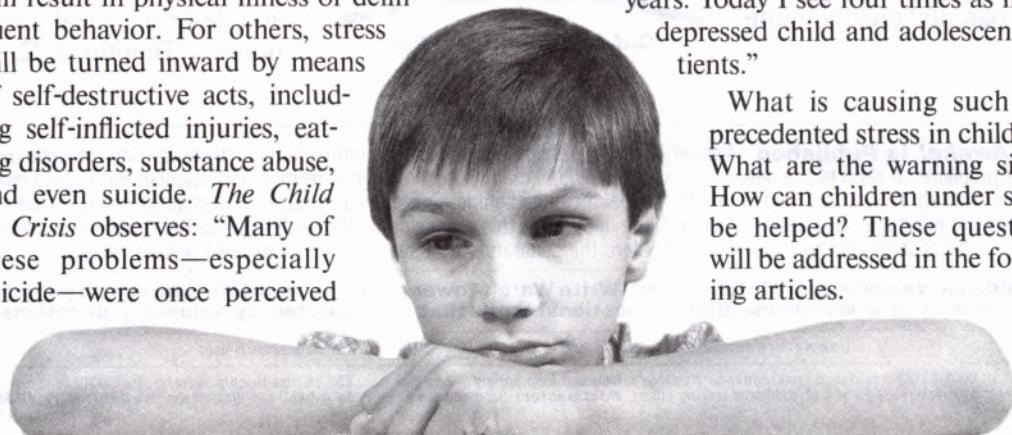
Like Randy countless children today are victims of enormous turmoil. Unable to find healthy ways of dealing with their distress, some vainly attempt to suppress their anxiety. But pent-up stress eventually finds an outlet. For some, anxiety that cannot be talked out will result in physical illness or delinquent behavior. For others, stress will be turned inward by means of self-destructive acts, including self-inflicted injuries, eating disorders, substance abuse, and even suicide. *The Child in Crisis* observes: "Many of these problems—especially suicide—were once perceived

as the exclusive province of adults and older adolescents. Now they seem to be seeping down to the very young."

'How can this happen?' bewildered adults ask. 'Isn't childhood a time of toys and play, a time of laughter and fun?' For many children the answer is no. "Childhood as a time of undiluted pleasures is a fiction concocted by adults," claims Dr. Julius Segal. This sad reality is confirmed by child therapist Joseph

Lupo: "I've been practicing for twenty-five years. Today I see four times as many depressed child and adolescent patients."

What is causing such unprecedented stress in children? What are the warning signs? How can children under stress be helped? These questions will be addressed in the following articles.



Little People, Big Stresses

"Children's griefs are little, certainly, but so is the child."

—Percy Bysshe Shelley.

LOOK at the drawing below of a top hat. At first glance the hat seems taller than the brim is wide. In reality, however, both height and width are equal. Dimensions can easily be misjudged.

It is just as easy for adults to misjudge the dimensions of a child's stress. 'Children's problems are so trivial,' some reason. But this thinking is illusory. "Adults should not judge troubles by their size," cautions the book *Childstress!*, "but by the size of the pain they produce."

In many cases the proportions of a child's pain are greater than adults realize. This was confirmed by a study in which parents were asked to rate their children's emotional state. Almost all replied that their children were "very happy." Yet, when questioned separate from their parents, most of the children described themselves as "unhappy" and even "miserable." Children face fears that parents greatly minimize.



Old-fashioned top hat

In another study, conducted by Dr. Kaoru Yamamoto, a group of children were asked to rate 20 life events on a seven-point stress scale. Then a group of adults rated those same events according to how they felt a child would rate them. The adults misjudged on 16 of the 20 items! "We all think we know our children," concludes Dr. Yamamoto, "but all too often we don't really see or hear, nor understand, what is really troubling them."

Parents must learn to view life's experiences from a new perspective: through the eyes of a child. (See box.) This is especially vital today. The Bible foretold that "in the last days there will set in perilous times of great stress . . . hard to deal with and hard to bear." (2 Timothy 3:1, *The Amplified Bible*) Children are not immune to such stress; often, they are its prime victims. While some of children's stresses are simply "incidental to youth," others are quite unusual and deserve special attention.—2 Timothy 2:22.

Awake!

Why Awake! Is Published *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 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 before the generation that saw the events of 1914 passes away.

Would you welcome more information? Write Watch Tower at the appropriate address on page 5. This is part of a worldwide Bible educational work that is supported by voluntary donations.

Unless otherwise indicated, *New World Translation of the Holy Scriptures—With References* is used.

Awake! (ISSN 0005-237X) is published semimonthly by Watchtower Bible and Tract Society of New York, Inc., 25 Columbia Heights, Brooklyn, N.Y. 11201. Second-class postage paid at Brooklyn, N.Y., and at additional mailing offices. **Postmaster:** Send address changes to *Awake!*, c/o Watchtower, Wallkill, N.Y. 12589. Printed in U.S.A.



Through the Eyes of a Child

Parental Death = Guilt. Recalling momentary angry thoughts toward a parent, a child may harbor concealed feelings of responsibility.

Divorce = Abandonment. A child's logic says that if parents can stop loving each other, they may also stop loving him.

Alcoholism = Tension. Claudia Black writes: "The daily environment of fear, abandonment, denial, inconsistency, and real or potential violence fostered in the alcoholic home is hardly a functional, healthy environment."

Parental Fighting = Fear. A study of 24 students revealed parental fights to be so stressful that bouts of vomiting, nervous facial tics, loss of hair, weight loss or gain, and even an ulcer were the consequences.

Overachievement = Frustration. "Wherever children turn," writes Mary Susan Miller, "they seem to be running for their lives in races lined up for them by adults." Pressured to be the best at school, at home, and even at play, the child never wins, and the race never ends.

Newborn = Loss. Now having to share parental attention and affection, a child may feel that he has lost a parent rather than gained a sibling.

School = Separation Anxiety. For Amy, leaving her mother and going to school was like suffering a little death each day.

Mistakes = Humiliation. With their shaky self-image, children "tend to blow some things up out of all proportion," says Dr. Ann Epstein. Humiliation, she found, was one of the most common triggers of child suicide.

Disabilities = Frustration. Besides the ridicule of uncompassionate peers, the physically or mentally disabled child may have to bear the impatience of teachers and family members who express disappointment over what is simply beyond his ability.

Semimonthly Languages Available by Mail:

Afrikaans, Arabic, Cebuano, Czech, Danish, Dutch, English (also cassettes), Finnish, French, German, Greek, Hungarian, Iloko, Italian, Japanese, Korean, Norwegian, Portuguese, Slovak, Spanish, Swahili, Swedish, Tagalog, Yoruba, Zulu

Monthly Languages Available by Mail:

Chichewa, Chinese, Cibemba, Croatian, Ewe, Gujarati, Hiligaynon, Igbo, Indonesian, Kannada, Malayalam, Myanmar, New Guinea Pidgin, Polish, Romanian, Russian, Sepedi, Serbian, Sesotho, Shona, Sinhalese, Slovenian, Tahitian, Tamil, Thai, Tsonga, Tswana, Turkish, Twi, Ukrainian, Xhosa

© 1993 Watch Tower Bible and Tract Society
of Pennsylvania. All rights reserved.

Subscription requests should be sent to Watch Tower at the appropriate address below.

America, United States of, Wallkill, N.Y. 12589	New Zealand, P.O. Box 142, Manurewa
Australia, Box 280, Ingleburn, N.S.W. 2565	Nigeria, P.M.B. 1090, Benin City, Edo State
Canada L7G 4Y4, Box 4100, Halton Hills (Georgetown), Ontario	South Africa, Private Bag 2067, Krugersdorp, 1740
England NW7 1RN, The Ridgeway, London	Zambia, P.O. Box 33459, Lusaka 10101
Ghana, Box 760, Accra	Zimbabwe, 35 Fife Avenue, Harare
Jamaica, Box 180, Kingston 10	

Changes of address should reach us 30 days before your moving date. Give us your old and new address (if possible, your old address label).

Abusive Parents

The Ultimate Stressors

"Because [children] have little frame of reference outside the family, the things they learn at home about themselves and others become universal truths engraved deeply in their minds."

—Dr. Susan Forward.

APOTTER can take a formless mass of clay, add water in the proper amounts, and shape it into a beautiful vessel. Similarly, parents shape a child's view both of himself and of the world. With love, guidance, and discipline, the child develops into a stable adult.

All too often, however, the impressions on a child's mind and heart are formed by abusive parents. Emotional, physical, and sexual abuse create distorted thinking patterns that become firmly set and difficult to reshape.

Emotional Abuse

Words can hit harder than fists. "I don't remember a day when [my mother] didn't tell me she wished I'd never been born," says Jason. Karen reflects: "I was always given the message that I was bad or not good enough."

Children will usually believe what is said against them. If a boy is constantly called stupid, then he may eventually feel stupid. Call a girl worthless, and she may believe just that. Children have a limited perspective and often cannot discern that which is accurate from that which is abusively exaggerated or false.

Physical Abuse

Joe recalls his physically abusive father: "He'd start punching me until he'd have me up against the wall. He'd keep pounding me so hard that I'd be dazed . . . The scariest part of it was not ever knowing what would provoke his outbursts!"

Jake was routinely beaten by his father. In one such beating, when Jake was just six years of age, his arm was broken. "I wouldn't let him or my sisters or Mom see me cry," Jake remembers. "It was the only pride I had left."

The book *Strong at the Broken Places* notes that childhood physical abuse is comparable to "being in a car accident every day, every week or every month." Such abuse teaches a child that the world is unsafe and that no one can be trusted. Additionally, violence often begets violence. "If children are not protected from their abusers," warns *Time* magazine, "then the public will one day have to be protected from the children."

Sexual Abuse

According to one estimate, 1 in 3 girls and 1 in 7 boys have been forced into a sexual experience by the time they are 18 years old. Most of these children suffer in silence. "Like soldiers missing in action," notes the book *The Child in Crisis*, "they remain lost for years in a private jungle of fear and guilt."

"How I hated my father for abusing me and how guilty I felt for hating him," says Louise. "I felt such shame because a child is supposed to love her parents and I didn't all the time." Such perplexing feelings are understandable when a child's primary protector turns into a perpetrator. Beverly Engel asks in *The Right to Innocence*: "How can we acknowledge that

our own parent, someone who was supposed to love and care for us, could care so little about us?"

Sexual abuse can warp a child's entire view of life. "Every adult who was molested as a child brings from his or her childhood pervasive feelings of being hopelessly inadequate, worthless, and genuinely bad," writes Dr. Susan Forward.

It Doesn't Go Away

"It is not just the child's body that is abused or neglected," writes researcher Linda T. Sanford. "Troubled families mess with a child's mind." When a child is abused, either emotionally, physically, or sexually, he or she may grow up feeling unlovable and worthless.

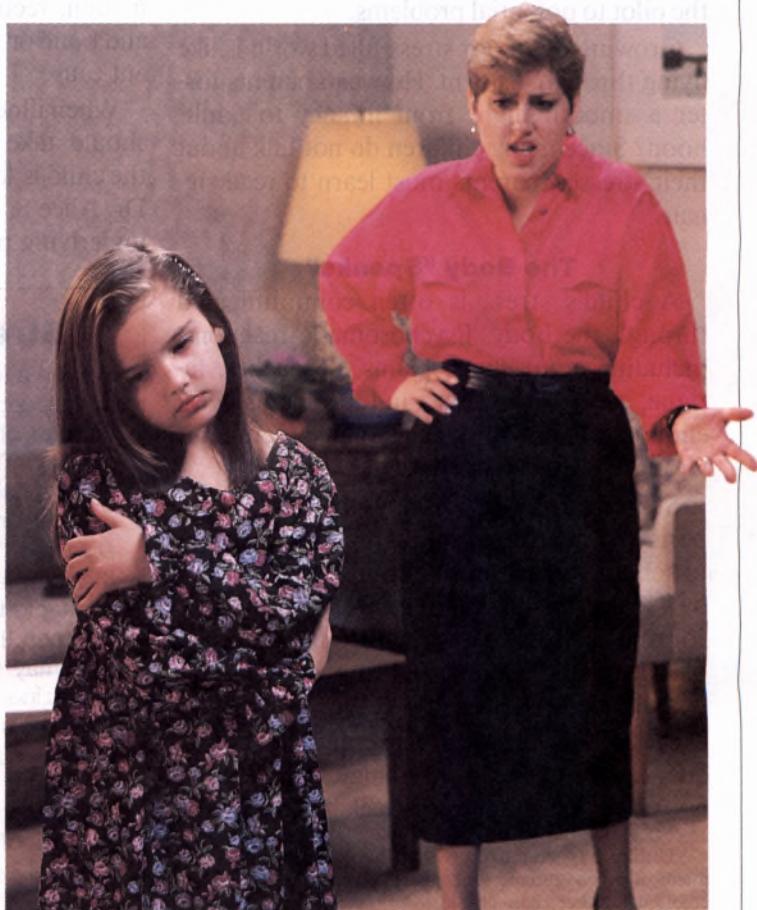
Jason, mentioned earlier, had such low self-esteem as an adult that he was declared a suicide risk. Needlessly putting himself in life-threatening situations, he assessed his life as his mother had taught him: 'You should never have been born.'

Reflecting on the effects of being physically abused as a child, Joe says: "It just doesn't go away because you move out or get married. I'm always afraid of something, and I hate myself for it." The tension of the physically abusive household causes many children to grow up with negative expectations and rigid defenses that imprison rather than protect.

Words can hit harder than fists

For Connie, incest created a distorted self-image that solidified in her adulthood: "I still think a lot of the time that people can look right inside me and see how disgusting I am."

All forms of abuse teach poisonous lessons that may become deeply entrenched by the time of adulthood. True, what is learned can be unlearned. Countless survivors who have recovered from childhood abuse testify to that fact. But how much better if parents realize that from the time of their child's birth, they are shaping much of his concept of himself and the world. A child's physical and emotional welfare is largely in his parents' hands.



Reading the Signals of Stress in Your Child

"Feelings of stress are rarely free-floating: They are usually reactions to particular events or circumstances."

—Dr. Lilian G. Katz.

FLying an airplane on a dark, foggy night, how can the pilot see where he is going? From takeoff to landing, he relies upon signals. Well over a hundred instruments occupy the panels on the flight deck of a large airplane, each conveying vital information and alerting the pilot to potential problems.

Growing up in our stress-filled world is like flying through a storm. How can parents foster a smooth flight from infancy to adulthood? Since many children do not talk about their stresses, parents must learn to read signals.

The Body "Speaks"

A child's stress is often communicated through the body. Psychosomatic reactions, including stomach problems, headaches, fatigue, sleep disorders, and problems with elimination, may be signals that something is wrong.*

Sharon's hearing loss was the climax of a period of intense loneliness. When Amy went to school, her stomach cramps were induced by a fear of being separated from her mother. John's constipation resulted from the tension of witnessing violent fighting between his parents.

Sexual molestation had physical consequences for ten-year-old Ashley. "I remember not going to school for a week [following the

* Unlike hypochondria, which involves imaginary ailments, a psychosomatic illness is real. Its cause, however, is emotional rather than physical.

rape] because I was sick," she recalls. The book *When Your Child Has Been Molested* explains: "The burden of carrying the molestation can stress the child into being unhealthy." Among the possible physical signals of such trauma are lesions, pain during elimination, recurring stomachaches, headaches, and bone or muscle pains that have no apparent cause.

When illness seems psychosomatic, parents should take the signal seriously. "Whether the child is faking or not doesn't matter," says Dr. Alice S. Honig. "What's important is the underlying problem."

Stress in the Womb?

Even a fetus can detect the stress, fear, and anxiety that its mother communicates through chemical changes in the bloodstream. "The developing fetus feels every bit of tension the pregnant woman does," writes Linda Bird Francke in *Growing Up Divorced*. "Though the nervous systems of the fetus and the woman are not directly connected, there is a one-way relationship between the two that cannot be severed." This may explain why, according to *Time* magazine, an estimated 30 percent of infants 18 months and younger suffer from stress-related difficulties ranging from emotional withdrawal to anxiety attacks. "Babies born to unhappy, distressed women are often unhappy and distressed themselves," Francke concludes.

Actions Speak Louder Than Words

A sudden change in behavior is often a call for help. The book *Giving Sorrow Words* notes: "When a good student starts getting F's, that deserves attention, and the same is true when a child who was previously a troublemaker turns into an angel."

Seven-year-old Timmy's sudden pattern of lying began when his mother became totally consumed with her job. Six-year-old Adam's sudden rude behavior was rooted in feelings of inadequacy at school. Seven-year-old Carl's regression to bed-wetting displayed his craving for parental acceptance, which now seemed diverted toward his younger sister.

Self-destructive behavior is especially disturbing. Twelve-year-old Sara's frequent accidents could not be attributed to mere clumsiness. Since her parents' divorce, hurting herself was the way she unconsciously used to try to recapture her absent father's affection. Whether as simple as minor self-inflicted wounds or as serious as a suicide attempt, aggression turned inward through self-destructive behavior is a signal of intense stress.

Speaking From the Heart

"Out of the abundance of the heart the mouth speaks," said Jesus Christ. (Matthew 12:34) A heart that is dominated by negative feelings is usually revealed by what the child says.

"Children who come home saying 'Nobody likes me' really are telling you that they don't like themselves," says Dr. Loraine Stern. The same might be true of bragging. Though seemingly expressing the opposite of low self-esteem, boasting about real or imagined accomplishments may be an effort to overcome deep feelings of inadequacy.

True, all children get sick, occasionally misbehave, and experience periodic disappointment with themselves. But when such

problems form a pattern and no immediate cause is evident, parents should weigh the meaning of the signals.

After examining the patterns of childhood behavior of six teenagers who were the perpetrators of an extremely violent attack, Mary Susan Miller noted: "All the signs were there. The boys had been scrawling them across their lives for years, but no one paid any attention. Adults saw, but they shrugged their shoulders."

Now more than ever, parents must be alert to recognize the signs of childhood stress and act on them.

When a Child Tries to End It All

"What would happen if I slept for a hundred years?" Lettie asked her father. A childish question, he thought. But Lettie was not being frivolous. Several days later she was hospitalized because of swallowing a full bottle of sleeping pills.

What should you do if your child thinks about or actually attempts suicide? "Seek immediate professional help," urges the book *Depression—What Families Should Know*. "Treating potential suicides is not a job for amateurs, even those who care about the depressed person a great deal. You may think you've talked your family member out of suicide when all he or she is doing is clamping up and keeping all the feelings inside until they explode with horrifying results."

With proper treatment, there is hope for a child who tries to end it all. "Most people who attempt suicide really don't want to kill themselves," the above-quoted book states. "They simply want to stop hurting. Their attempts are a cry for help." In the Christian congregation, parents who are at a loss to handle suicidal tendencies may receive loving support and good Scriptural advice from the elders.

Help Your Children Cope With Stress

"Many children find no one home—physically or emotionally—when they need to talk."
—Depression—What Families Should Know.

THE family has well been called an emotional laboratory. It is a research center wherein a child tests his beliefs, observes the results, and begins to reach certain conclusions about life. How can parents ensure that their children are conducting such vital experimentation in a healthy rather than a stressful environment?

Listen

The book *The Child in Crisis* urges parents: "Keep the dialogue going." As a lifeline between parent and child, dialogue is especially vital when there has been some sort of traumatic event in the family. Never assume that because the child is silent, he is taking it well or adjusting. He may simply be bottling up anxiety and suffering in silence, as did one seven-year-old girl who gained 30 pounds in the six months following her parents' separation.

The word "dialogue" indicates that two or more speakers are involved. Thus, the parent should not do all the talking. Rick and Sue sought counseling when their six-year-old son developed uncontrollably rude behavior at home. After meeting with the entire family, the counselor observed something. "The parents intellectualized a lot, with long and often excessive explanations," he said. "Furthermore, the parents tended to monopolize the conversation, and I could see the children growing impatient." It is advantageous to let a child express himself. (Compare Job 32:20.)

If he cannot talk out his problems when they develop, he may act them out later.—Compare Proverbs 18:1.

Dialogue is important when discipline is needed. How does the child feel about the correction? Does he understand why it is being given? Rather than simply telling the child how he should feel, find out what is in his heart. Reason with him so that he can be guided to the proper conclusion. "Offer food for thought," writes Elaine Fantle Shimberg, "but let your child do the chewing."

Acknowledge Feelings

Some parents stifle dialogue with such statements as: "Stop your crying." "You



Wholesome communication relieves stress

shouldn't feel that way." "It isn't really that bad." It is far better to acknowledge the child's feelings. "I see that something has made you sad." "You look really upset." "I know you must be disappointed." This will keep the dialogue going.

The book *How to Talk so Kids Will Listen & Listen so Kids Will Talk* makes a valid observation in this regard: "The more you try to push a child's unhappy feelings away, the more he becomes stuck in them. The more comfortably you can accept the bad feelings, the easier it is for kids to let go of them. I guess you could say that if you want to have a happy family, you'd better be prepared to permit the expression of a lot of unhappiness."—Compare Ecclesiastes 7:3.

Empathize

"Since most adults view a child's world from their own frame of reference," writes Mary Susan Miller, "it is difficult for them to imagine any life but their own as stressful."

Yes, parents easily forget the pains and anxieties they themselves experienced while growing up. Therefore, they often minimize the stresses their children feel.

Parents must remember what it was like to face the loss of a pet, the death of a friend, the move to a new neighborhood. They should recall their own childhood fears, even the irrational ones. Remembering is a key to empathy.

Set the Right Example

How your child handles stress depends to a great extent upon how you as a parent handle it. Do

you try to reduce stress by resorting to violence? Then do not be surprised when your child acts out his anxiety in a similar way. Do you suffer in silence when deeply disturbed? Then how can you demand that your child be open and trusting? Are stressful feelings so hidden in your household that they are denied rather than acknowledged and worked out? Then do not be startled by the physical and emotional toll it may take on your child, for any attempt to bury anxiety will normally only increase the severity of its expression.

Raising children in a stress-filled world presents special challenges to parents. Study of the Bible has helped many to meet these challenges. This is what we would expect, for the Author of the Bible is also the Originator of family life. "God's wisdom is proved right by its results," said Jesus Christ. (Matthew 11:19, *The New English Bible*) Through their putting Bible principles into practice, parents will find that the Scriptures are "beneficial for teaching, for reproofing, for setting things straight, for disciplining in righteousness." —2 Timothy 3:16.



Boy spills milk, brother jeers at him, but father understandingly comforts him

The Courage to Put God First



THREE was a chilling sound to the ring of our telephone at three in the morning. It was a business associate of Dad's who had just attended an American Legion meeting. He was frantic. "Wally," he shouted at my dad, "if you don't phone the *Philadelphia Inquirer* right away in time for the morning edition and say you'll salute the flag, a mob will attack your grocery store and your family today, and I won't be responsible for what happens!" Dad and Mom had tasted mob violence before. Wide awake now, they started to pray.

At dawn they woke up the six of us kids. Dad told my brother Bill to take the younger ones to our grandparents' home. Then Bill and I helped with the housework and the store as usual. Dad went to the Minersville chief of police and told him of the threat. In short order a Pennsylvania State Police car drove up and parked in front of our store and stayed there all day. We went about our duties in the store and waited on customers, but our eyes were riveted on the sidewalk. Our hearts pounded whenever a group of people paused.

But the mob never came. Perhaps they cooled down in the light of day—and at the sight of a police car!

We Find the Truth

But what had led up to this volatile situation? It had to do with our religion. You see, back in 1931, when I was seven years old, Grammy and Grampop came to stay with us for a while. They were Bible Students, as Jehovah's Witnesses were then known.

Grampop didn't witness to Dad, but when Grammy and Grampop were out, Dad would go into their room to see what this literature of theirs was all about. He devoured it! I can still hear his jubilant voice: "Look what the Bible says!" The truth was a pure delight to him. Mom read the literature too, and by 1932 she had resigned from the Methodist Church, and we were having a home Bible study. I was just as overjoyed as they were to hear about the wonderful Paradise earth to come. I made the truth my own from the start.

Late in 1932, Mom asked if I was ready to go out in the door-to-door preaching work. In those days, young or old, we went to the

doors alone. And we used a testimony card. I would simply say: "Good morning, I have an important message. Would you please read this?" At first if the householder was even slightly unreceptive, I did little more than say, "OK, good-bye," when he finished reading.

Before long, opposition came. In the spring of 1935, we witnessed in the town of New Philadelphia. I remember standing on one doorstep and talking with a man when the police came to take me and the rest away. The householder looked aghast that they would arrest this 11-year-old girl. They took us to a two-story firehouse. Outside swarmed a howling mob about a thousand strong. Evidently the churches had let out early that Sunday to encourage everyone to participate. As we were led through the crowd, one girl punched my arm. But we got safely inside, and armed guards kept the mob from breaking down the door.

There were 44 of us packed into the firehouse, and we had to sit on the stairs. Our mood was far from grim; we were happy to meet some of the Witnesses from the Shenandoah Congregation who were helping us work the town. I met Eleanor Walaitis there, and we became fast friends. After a few hours, the police let us go.

The Flag-Salute Issue Comes to the Fore

At the momentous 1935 Washington, D.C., convention of Jehovah's Witnesses, someone asked Brother Rutherford, the Watch Tower Society's president, about whether schoolchildren should salute the flag. He answered that it was unfaithfulness to God to ascribe salvation by saluting an earthly emblem; he said he wouldn't do it. This impressed Bill and me. We talked about it with our parents and looked up Exodus 20:4-6, 1 John 5:21, and Matthew 22:21. Mom and Dad never

pressured us or made us feel guilty. When school opened in September, we were very much aware of what we ought to do. But every time our teachers looked our way, we sheepishly raised our arms and moved our lips. One of my problems was that I was afraid that my worldly school friends would drop me if I took my stand.

But when some pioneers visited us, I told them what we were doing. I'll never forget what one sister said: "Lillian, Jehovah hates a hypocrite." Then, on October 6, Brother Rutherford made a coast-to-coast radio broadcast entitled "Saluting a Flag." He explained that we respect the flag but that going through rituals before an image or emblem was actually idolatry. Our relationship with Jehovah would strictly forbid this.

On October 22, Bill, just ten years old, came home from school all smiles. "I stopped saluting the flag!" he said triumphantly. "The teacher tried to put up my arm, but I held on to my pocket."

The next morning, heart pounding, I went to my teacher before class so that I wouldn't weaken. "Miss Shofstal," I stammered, "I can't salute the flag anymore. The Bible says at Exodus chapter 20 that we can't have any other gods before Jehovah God." To my surprise she just hugged me and said what a dear girl I was. Well, when the flag ceremony time came, I did not join in the salute.* Soon everyone was staring at me. But I felt elated. It was Jehovah who gave me the courage not to salute!

The girls I liked were horrified. One or two approached me to ask why, and good conversations ensued. But most of the kids began to ignore me. When I got to school each morning, a few boys would shout, "Here comes

* In general, Jehovah's Witnesses are willing to show respect for oaths and anthems in ways that do not indicate participation in acts of religious worship.

Jehovah!" and shower me with pebbles. The school watched for two weeks. Then they decided to act. On November 6 the school board met with Dad and Mom and the parents of another Witness boy. The superintendent, Professor Charles Roudabush, insisted that our stand amounted to insubordination; the others on the board soon followed suit. They expelled us.

Home Schooling Begins

They let us keep our schoolbooks, so we immediately set up a home school in our attic, supervised by a young girl who helped Mom in the home. But a letter soon arrived saying that if we didn't have a qualified teacher, we would be sent to a reform school.

Paul and Verna Jones, who had a farm 30 miles away, called us within a few days. "We read that your children were expelled," Paul told Dad. They had knocked out a wall between their living and dining rooms to make a schoolroom. They invited us to come. A young teacher from Allentown who was interested in the truth eagerly accepted this job, even though it meant making far less money than the public schools offered. Similar Witness schools began to spring up from coast to coast.

The Joneses had four children of their own; yet they took in at least ten others. We slept three to a bed and turned over by signal

and mutual agreement! Another Witness family nearby took in nearly as many, and soon school attendance grew to over 40. There was a lot of fun and giggling, but there were chores too. We were up at 6:00 a.m. The boys helped outside, and the girls had kitchen duty. Our parents came Friday after school to take us home for the weekend. One day the Walaitis children arrived, along with my friend Eleanor.

Schooling problems kept coming up. Dear Brother Jones died, so Dad turned our pick-up truck into a school bus to transport us the 30 miles to school. Then some of us reached high school age and needed a teacher who was qualified for that age group. For every obstacle, it seemed that Jehovah provided a solution.

Going to Court

In the meantime the Society wanted to bring the abuses in connection with the flag-salute issue to the courts. The hundreds of us who had taken a stand had now become thousands. One family after another was chosen, but the state courts refused to accept their cases for trial. Our family was approached, and the Society's lawyer and the American Civil Liberties Union lawyer filed suit in the Federal District Court in Philadelphia in May 1937. A trial date was set for February 1938.

Bill and I would have to take the stand. I can still remember the cold, clammy feeling I got over that prospect! The Society's lawyer briefed us over and over with possible questions. At the courthouse, Bill took the stand first. They asked him why he wouldn't salute the flag, and he replied quoting Exodus 20: 4-6. Then my turn came. Same question. When I replied, "1 John 5:21," the opposing lawyer barked: "I object!" He felt that one scripture was enough! Then Professor Roudabush took the stand, claiming that we had

In Our Next Issue

Where Are Morals Heading?

Is the "New Testament" Anti-Semitic?

Should My Family Be Immunized?

been indoctrinated and were spreading "disregard for . . . flag and country." But Judge Albert Maris decided in our favor.

'Don't even try to come back to school!' was the message from the school board. 'We are going to appeal the case.' So it was back to Philadelphia, this time to the U.S. Court of Appeals. In November 1939 the three-man court decided favorably for us. The school board was incensed. On to the U.S. Supreme Court!

The Supreme Court

We were thrilled to hear that Brother Rutherford himself would argue our case! A group of us met him at Union Station in Washington, D.C., the night before the trial. What a moment! It was April 1940 and still a little cool. The next day the courtroom was absolutely packed with Jehovah's Witnesses. Finally it was our turn, and Brother Rutherford rose to speak. I'll never forget how he compared us Witness children with the faithful prophet Daniel, Daniel's three Hebrew companions, and other Bible characters. It was electrifying, and the audience listened with rapt attention.

It never really occurred to us that the court's decision would be anything but favorable. After all, we had won the previous two cases. But on the morning of June 3, 1940, Mom and I were working in the kitchen with the radio playing in the background. Suddenly a newscast came on. The judges had decided against us—and not by a mere margin, but by 8 to 1! Mom and I just stood there, frozen in disbelief. Then we ran downstairs to tell Dad and Bill.

This decision unleashed an almost unimaginable wave of terror. Across the country, it was open season on Jehovah's Witnesses. People thought they were doing their patriotic duty by attacking us. Within days the King-

dom Hall at Kennebunk, Maine, was torched. In Illinois a mob attacked 60 Witnesses as they were preaching, turning over their cars and destroying their literature. In the Shenandoah, Pennsylvania, area, the coal mine, the clothing factories, and the schools all held flag-salute ceremonies in quick succession. Thus, Witness children were expelled from school, and their parents lost their jobs all within one day.

Coping With Persecution

It was at this time that my family received the threat of mob violence I described at the outset. Shortly after that failed, a Minersville church announced a boycott on our store. Business fell off drastically. It was our whole livelihood, and by now there were six children in the family. Dad had to borrow money to get by. But in time the boycott waned; people started coming back. Some even sniffed that it was "a bit much" for their priest to tell them where to buy groceries. More than a few Witness families, though, lost businesses and homes during those years.

One night I was driving our family home from some Bible studies. Just after Mom and Dad hopped in, a gang of teenagers came out of hiding and surrounded the car. They started letting the air out of the tires. Suddenly I saw an opening in front of us. I stepped on the gas, and away we went! "Lillian, don't ever do that again," Dad counseled. "You could have hurt someone." Still, we did get home safe and sound.

Throughout all this fanatical violence, the press was highly favorable to us. At least 171 leading newspapers condemned the 1940 flag-salute decision. Only a handful approved. In her newspaper column "My Day," Eleanor Roosevelt, the president's wife, pleaded our cause. Still, there seemed to be no letup in sight.

A Change at Last

By 1942, though, some of the Supreme Court justices felt that they had decided wrongly in our case. So the Society brought forward the case of Barnett, Stull, and McClure, a group of Witness children who had been expelled from school in West Virginia. The U.S. District Court of West Virginia decided unanimously in favor of Jehovah's Witnesses! Now, on appeal by the State Board of Education, the case went to the U.S. Supreme Court. Our family was there in Washington, D.C., when the Society's lawyer, Hayden C. Covington, argued powerfully before the Supreme Court. On Flag Day, June 14, 1943, came the decision. It was six to three in favor of Jehovah's Witnesses!

All over the country, things began to calm down after this. Of course, there were some diehards who still found ways to make life

difficult for our younger sisters when they returned to school, but Bill and I were now well past school age. Eight years had gone by since we had taken our stand.

A Career in Serving Jehovah

But that was only the beginning of our careers in serving Jehovah. Bill became a pioneer at 16. Eleanor Walaitis (now Miller) and I became pioneer partners and served in the Bronx, New York City. After a year, I was thrilled to begin serving at Brooklyn Bethel, the Watch Tower Society's world headquarters. There too I forged friendships that have lasted a lifetime.

In the summer of 1951, I was at the conventions in Europe when I met Erwin Klose. At a gathering in Germany, he and some other German brothers sang beautifully for our entertainment. I enthusiastically told him what a fine voice he had. He nodded kindly, and I kept talking. He didn't understand a word I was saying! Months later I saw Erwin at Brooklyn, New York, in Bethel, as he had been enrolled in the Watchtower Bible School of Gilead to be trained for missionary work. Again I spoke to him at length, welcoming him to Brooklyn, and again he smiled kindly. He still found it a little hard to understand me! Eventually we came to understand each other, though. It was not too long before we were engaged.

I became a missionary and joined Erwin in his work in Austria. But Erwin's health deteriorated because of the brutal treatment he had received at the hands of the Nazis for being one of Jehovah's Witnesses. While I was expelled from school, he was in prisons and concentration camps.* We returned to the United States late in 1954.

We have since had the joy of serving where the need was greater and raising two fine chil-



Erwin and Lillian in Vienna, Austria, 1954

* See *Awake!* of November 22, 1992, "The Nazis Couldn't Stop Us!"

dren in Jehovah's ways. As our children went to school, I saw that things have not entirely changed. Judith and Stephen were both attacked for their convictions, and Erwin and I felt our hearts swell as they too showed the courage to take their stand for what is right. And I always found that by the end of the school year, their teachers realized that Witnesses are not a bunch of fanatics, and we forged very cordial relationships.

Looking back over the years, I can now certainly see that Jehovah has blessed our family. We presently total 52 family members who serve Jehovah. There are eight who have received their heavenly reward or else await the earthly resurrection, including my own dear parents, who left such a wonderful legacy of putting Jehovah first in life. In recent years we have thought much of that example. After having lived such an active and productive life, Erwin has struggled with a neuromuscular disorder that severely limits him.



Lillian today

Despite such trials, we look forward to the future with real joy and confidence. Never once has either of us regretted our decision to worship Jehovah God exclusively.—*As told by Lillian Gobitas Klose.*

Why Don't Jehovah's Witnesses Salute the Flag?

THERE is a principle of worship that Jehovah's Witnesses emphasize more than other religious groups do: *exclusivity*. Jesus stated that principle at Luke 4:8: "It is Jehovah your God you must worship, and it is to him *alone* you must render sacred service." Witnesses thus choose to avoid directing worship to anyone or anything in the universe other than Jehovah. Participating in the flag salute of any nation is to them a worshipful act that would intrude on and violate their exclusive worship of Jehovah.

Both the Israelites and the early Christians were warned repeatedly against worshiping any man-made object. This practice was condemned as idolatry. (Exodus 20:4-6; Matthew 22:21; 1 John 5:21) Can the flag really be considered an idol? Few would seriously argue that it is a mere piece of cloth. It is widely treated as a sacred symbol, and more. Catholic his-

torian Carlton Hayes put it this way: "Nationalism's chief symbol of faith and central object of worship is the flag."

This does not mean that Jehovah's Witnesses disrespect the flag or those who salute it. Generally they will respectfully stand for such ceremonies as long as they are not required to participate. It is their belief that one shows true respect for the flag by obeying the laws of the land it represents.

Most people will agree that saluting a flag does not guarantee respect for it. That this is true was illustrated by a case in Canada. A teacher and principal ordered a little girl who salutes the flag to spit on it; she did so. They then ordered a young Witness girl in the class to do the same, but she steadfastly refused. To Jehovah's Witnesses, it is a matter of deeply held principle to respect the flag. Their worship, however, goes to Jehovah alone.



FUGU

A Small Fish With an Inflated Reputation

By Awake! correspondent in Japan

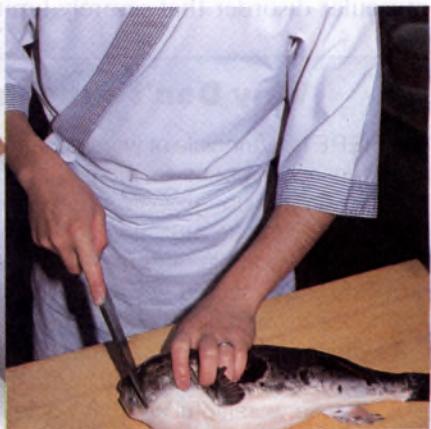
"MY HOOK was taken by a feisty little fish. When I pulled it in, a friendly villager assured me that my catch was indeed a delicious one. Nevertheless, the fish was too small, so I threw it back into the sea. Only later did I find out that had I cooked and eaten that prickly little fish, it could have been my last meal."



This newcomer to Japan had caught a fugu, a local delicacy. Connoisseurs pay anywhere from \$50 to \$160 per person for a full-course fugu meal. However, fuges contain a poison called tetrodotoxin, concentrated in the liver, ovaries, kidneys, and sometimes the skin of

the fish. Ten thousand mouse units, perhaps as much as could fit on the head of a pin, will kill an average-size person.*

* Tetrodotoxin is measured in mouse units. A mouse unit is the amount necessary to kill a 20-gram mouse in 30 minutes.



While there are some 100 kinds of fugu around the world, all of them employ the puffing tactic. Inhaling water into a special sac located in the esophagus, this homely looking fish expands into a formidable globe, covered with sharp spines that discourage any predator thinking of swallowing it. Its changed appearance may startle an enemy, or it may exhale the water in order to force an elusive "meal" out of hiding in the sandy seabed. Hence, very appropriate its English names: puffer, globefish, and blowfish.

In modern times, the fugu has claimed some lives each year. Fugu preparers point out, however, that most of the cases involved amateurs who attempted to prepare the fish themselves.

Fugu got international attention when the Japanese tried to introduce the delicacy into the United States. Permission to import was denied, and the news media labeled it "killer fish," claiming that eating fugu is "death-defying dining." Was the claim valid?

Edible in Spite of Ill Repute

"It is perfectly safe to eat fugu," says Shinichiro Nagashima, a third-generation fugu chef. "We know which parts of the fish are poisonous, and they are disposed of by the proper authorities. In over 30 years of fugu preparation in the Tokyo area, no one has ever died of fugu poisoning from fish prepared at a licensed shop."

"Laws are strict," continues Shinichiro. "For example, if the organs are not disposed of in the proper way, the shop may be penalized by being closed down for a month. Or if a shop, even on demand, serves an illegal portion that causes a death, it will be forced to shut its doors for good."

"The rules governing fugu preparation and testing and licensing of the cooks in this area were initially developed by my grandfather. He pioneered fugu cuisine in the Greater To-

kyo area during the 1950's when it was already popular in western Japan."

Shinichiro's father, Yutaka, serves as a judge of aspiring fugu chefs. He looks right at home as he talks in his shop, amid dried fugu lanterns dangling from the rafters.

"Training to be a fugu chef means getting a thorough knowledge of fugu anatomy and passing a stringent test that includes cleaning a fugu and identifying all of its parts in just 20 minutes."

As Shinichiro takes up his knife to demonstrate how to clean a fugu, he suddenly turns into the very image of a man concentrating on his task at hand. His father looks on and explains the parts of the fish. Two stainless pans stand at the side of the cutting board. Into one pan go the liver, kidneys, and other poisonous portions. Into the other pan go the edible parts of the fish. In a matter of minutes, thin white fillets are carved still thinner and arranged like transparent petals of a flower. Grated radish with red pepper add to the color. The elegant dish pleases both the eye and the palate.

The elder Mr. Nagashima smiles as he reminisces about the days when fugu was plentiful. "When I was a boy, fugu was not nearly as expensive as it is today. Since my father was a fugu chef, I carried it to school in my lunch box. Other children were eager to trade for my delicious lunch."

An Inflated Reputation?

In 1988 the U. S. Food and Drug Administration recognized that fugu prepared by licensed chefs is safe for consumption and permitted its importation into the United States.

Fugu preparation, however, is definitely not do-it-yourself cuisine for a vacation fisherman. If fugu puffs its way into your menu, it should be prepared by a licensed chef. That is the only safe way to enjoy this small fish with the inflated reputation.



How Can I Stop Daydreaming So Much?

HAVE a serious problem," admitted a youth named Jonathan. "I daydream at work, when walking, before going to bed, and even at the Kingdom Hall. It's usually something about girls, sex, or being some popular star or hero."

Daydreaming is common among people young and old. Done in moderation, it can be a normal, healthy activity.* However, too much of even a good thing can be harmful. (Compare Proverbs 25:16.) Especially is this so if the daydreams are of the wrong sort.

Suppose, for example, that you sometimes imagine you are your favorite singer. At first

* See the article "Young People Ask . . . Is it Wrong to Daydream?" in our July 8, 1993, issue.

you might spend just a few moments each day imagining yourself on stage receiving the adulation of a crowd. But as the weeks pass, you begin to spend more and more time in your fantasy world of concerts, interviews, recording sessions. The fantasy brings you such pleasure, and you can't make it stop.

"So, what's the harm in pretending?" you ask. For one thing, experts say that compulsive daydreamers often "cannot . . . function well in the real world." (*The Parents' Guide to Teenagers*) Living in a dreamworld hinders the growing-up process; you cling to, rather than put away, childish traits. (1 Corinthians 13:11) You develop romantic, rather than realistic, views of life. Instead of developing your "perceptive powers" by solving a problem, you stifle them by retreating into a world of fantasy. (Hebrews 5:14) The daydream thus takes over your life, to the detriment of real-life relationships and priorities.

The book *Daydreaming*, by Dr. Eric Klinger, points to what may be the greatest danger, namely that "dwelling on something you want but shouldn't have may make it harder for you to resist pursuing it." The Bible put it this way: "Each one is tried by being drawn out and enticed by his own desire." (James 1:14) Action is preceded by thought. And while you will not likely become a drug-addicted rock star just because you sometimes dream about being a famous musician, you might cultivate an unhealthy appetite for "the desire of the flesh and the desire of the eyes."—1 John 2:16.

Breaking the Bubble

How, then, can you break the hold of this fantasy? First of all, it might help to ask yourself why this fantasy so appeals to you.* Is it

* Sometimes a retreat into fantasy indicates that serious problems exist. Studies of fantasy-prone adults indicate that a substantial number have been physically or sexually abused as children. Fantasy served as a coping device. A youth in an abusive situation needs to confide in a trusted adult and get help.

because you want others to like you? Do you get pleasure out of imagining that you possess the beauty or talent that made this celebrity popular? Or perhaps you simply envy the individual's seemingly carefree life-style. Observed one mental-health professional regarding the popular singer Madonna: "In the fans' minds she is free from cares about mon-

Instead of simply dreaming about being liked, work at making yourself likable



ey, schoolwork, loneliness." Some may therefore dream of being like her.

A dose of reality, though, can do much to break the bubble of such a fantasy. Apply the principle at Philippians 4:8, where we are told to dwell on things that are true and praiseworthy. Is it really true that celebrities enjoy carefree lives? Are their morals usually praiseworthy? Actually, life in the fast lane has left many of them physically and emotionally wrecked. In spite of wealth, many celebrities suffer financial woes. Few enjoy stable marriages. Do you want to set your heart upon living such a life?

Of course, it's only natural to want to be loved and admired. Sixteen-year-old Olivia has a recurring daydream in which she imagines herself to be "someone special whom everyone likes." But a daydream—no matter how vivid or realistic—cannot really satisfy those desires any more than dreaming about eating can fill your stomach. (Isaiah 29:8) Furthermore, the Bible warns: "He that is watching the wind will not sow seed." (Ecclesiastes 11:4) So instead of dreaming about being liked, work at making yourself likable. —See the article "Young People Ask . . . How Can I Make People Like Me?" in our November 22, 1988, issue.

Sexual Fantasies

During his teen years, Alan (not his real name) had daydreams of another sort. He "learned to conjure up erotic thoughts" and would spend much of his time doing so. Later on, he dedicated his life to God as a Christian. "That did not change anything," Alan admits. "Sexual daydreaming continued to be a way of life for me."

Are you likewise plagued with sexually arousing daydreams?* This may not be

* Studies indicate that sexual fantasies generally form only a small percentage of the average person's waking thoughts. But the book *Daydreaming*, by Dr. Eric Klinger notes: "We tend to remember most vividly the things that arouse us emotionally. Because sexual daydreams are generally so arousing, we probably remember them more often than other daydreams."

abnormal if you are in "the bloom of youth," when sexual desires run strong. (1 Corinthians 7:36) Nevertheless, you do yourself harm if you deliberately nurture sexual thoughts. The Bible says at Colossians 3:5: "Deaden, therefore, your body members that are upon the earth as respects fornication, uncleanness, sexual appetite." Dwelling on sexual fantasies increases wrong desires. It can lead to masturbation—or to actual sexual immorality.

How can you 'pull the plug' on immoral fantasies? Recalls Alan: "I decided to take an either-or approach. I couldn't concentrate on sex as long as I was concentrating on something else." Alan thus learned self-discipline. (1 Corinthians 9:27) He meditated on wholesome things and learned to dismiss *immediately* any immoral thoughts. (Psalm 77:12) "It worked!" recalls Alan.

Interestingly, researchers have found that we daydream the most when we have little to do. So having plenty to do, especially "in the work of the Lord," is yet another way to keep bad thoughts from taking root.—1 Corinthians 15:58.

Keep Your Mind From Drifting

For many youths the problem is, not so much the content of their daydreams, but the way these intrude on schoolwork and study. "I can't concentrate," complains 16-year-old Karine. "I can never keep my mind on one thing." How can you pay attention to what you are hearing? (Compare Mark 4:24.) Some researchers believe it may help if you simply make yourself aware of how much you daydream. Perhaps you could just make a mark on a piece of paper every time you find yourself drifting off in class. When students in one study did this, daydreaming decreased significantly.

Also try cultivating an interest in what you are learning. If you have made up your

mind that math is boring or that history is dull, you'll have a hard time concentrating. Your studies will be a lot more interesting, though, if you remind yourself of how you can benefit from the information. At the very least, studying may help you develop "thinking ability." (Proverbs 1:4) You can also learn important skills. Math, for example, will serve you well on a secular job, in the managing of a household, and in handling certain Christian responsibilities. A knowledge of history can help you understand people and current events. Fourteen-year-old Daniel, one of Jehovah's Witnesses, says: "I always try to see how my homework relates to the Bible and how I can use the information in the preaching work. That keeps my mind off playing ball, and I'm not in such a hurry to finish the assignment." Yes, the higher the value you place on what you are learning, the more you will be motivated to search actively for knowledge.—Compare Proverbs 2:4.

It's particularly tough to concentrate when you are doing something routine, such as cooking, cleaning, or filing. How easy it is to lapse into a reverie! Nevertheless, the Bible shows that great satisfaction comes from doing a job well. (Ecclesiastes 2:24) It further encourages us to 'do all things as to Jehovah.' (Colossians 3:23) Such a positive attitude can help you to concentrate. "When I keep my mind on what I'm doing," says 12-year-old Samuel, "the job gets done faster."

Daydreams may be pleasurable, but they are no substitute for reality. Don't allow them to take over your life. Discipline your mind. Keep it focused on things that are worthwhile. In this way, not only will you stop daydreaming too much but you will "get a firm hold on the real life."—1 Timothy 6:19.

Our Versatile Sense of Smell

STIRS UP MEMORIES, ENHANCES TASTES

WHAT is your favorite aroma? When this question was asked of several people, their answers were fascinating. Bacon frying. Salt air off the ocean. Clean laundry blowing in the wind. Freshly mowed hay. Hot spices. Puppy breath. When probed further as to why these were their favorite smells, all had a specific, vivid memory that they recalled with the first whiff of the odor. Very often the memories were from childhood.

A young woman remembers lying in her bed in the morning, the tantalizing aroma of frying bacon drifting into the room, beckoning her to breakfast with her family.

Louise, 58, said that the fragrance of sea air brings back her childhood summers on the coast of Maine in the United States. "The freedom we had," she says, "running and playing in the sand, digging for clams and cooking them over an open fire!"

Michele, 72, remembers the times as a child when she helped her mother gather the laundry off the clothesline, burying her face in armloads of it as she carried it into the house, breathing deeply to take in the fresh, clean fragrance.

Freshly mowed hay spreads the scent that takes Jeremy back 55 years, to his days as a child on an Iowa farm, riding on a wagonload of freshly cut hay being taken into the barn to escape the rain he and his father could smell coming.

"Hot spices" was the response of 76-year-old Jessie, who closed her eyes and told of



How the Sense of Smell Works

First, the Odor Is Detected

ODORS enter the nasal passages when you breathe in. Also, when you swallow food, molecules are forced up the back of the mouth and into the nasal cavity. First, though, odorous air has to make it past the "guards." Lining the nostrils are the trigeminal nerves (1), which trigger sneezing when they sense stinging or irritating chemicals. These nerves also give pleasure by reacting to the pungency of some flavors.

Next, odorous molecules are pushed upward by eddies that form when air currents swirl around three bony, scroll-like protrusions called turbinates (2). The airstream, moistened and warmed along the way, carries the molecules to the epithelium (3), the primary reception area. Situated in a narrow channel high up in the nose, this thumbnail-size patch of tissue is packed with some ten million sensory neurons (4), each tipped with numerous hairlike projections, called cilia, bathed in a thin layer of mucus. So sensitive is the epithelium that it can detect 1/1,300,000,000 ounce of certain odorants in a single whiff of air.

But exactly how odors are detected is still shrouded in mystery. After all, humans can distinguish as many as 10,000 odors. And there are more than 400,000 odorous substances in our environment, with chemists constantly creating new ones. So how does our nose make sense of all this olfactory hubbub? Well over 20 different theories attempt to explain the mystery.

Just recently scientists have made progress toward solving part of this puzzle. Some evidence was found in 1991 that there are tiny proteins, called olfactory receptors, woven through the cell membranes in the cilia. Apparently such receptors bind differently to differing types of odorous molecules, thus giving each odor a distinctive "fingerprint."

Second, the Odor Is Transmitted

To pass this information along to the brain, coded electrochemical messages are fired along

the olfactory neurons (4). Dr. Lewis Thomas, a science essayist, calls these neurons the 'Fifth wonder of the modern world.' They are the only primary nerve cells that replicate every several weeks. Also, they have no protective barrier between them and the surrounding stimuli, as do the sensory nerve cells that lurk protected within the eye and the ear. Instead, the olfactory nerves reach out from the brain itself and come into direct contact with the outside world. Thus, the nose is a meeting place of brain and environment.

These neurons all lead to the same destination: the twin olfactory bulbs (5) on the underside of the brain. These bulbs are the main relay station to other parts of the brain. First, though, they edit the flood of olfactory information, eliminate all but the essential, and then send it on.

Third, the Odor Is Perceived

The olfactory bulbs are intricately "wired" into the brain's limbic system (6), an elegantly looping set of structures that plays a key role in storing memories and in triggering emotional reactions. This is where "the cold world of reality is transformed into a bubbling caldron of human feelings," according to the book *The Human Body*. The limbic system is so extensively tied in with the sense of smell that it was long referred to as the rhinencephalon, meaning "nose brain." This close link between nose and limbic system may explain why we react so emotionally and nostalgically to odors. Aha! The frying bacon! The clean laundry! The freshly mowed hay! The puppy breath!

Depending on the odor sensed, the limbic system may activate the hypothalamus (7), which in turn may direct the brain's master gland, the pituitary (8), to produce various hormones—for instance, those hormones that control appetite or sexual function. No wonder, then, that the odor of food can suddenly make us feel hungry or that a perfume can be seen as an important factor in sexual attraction.

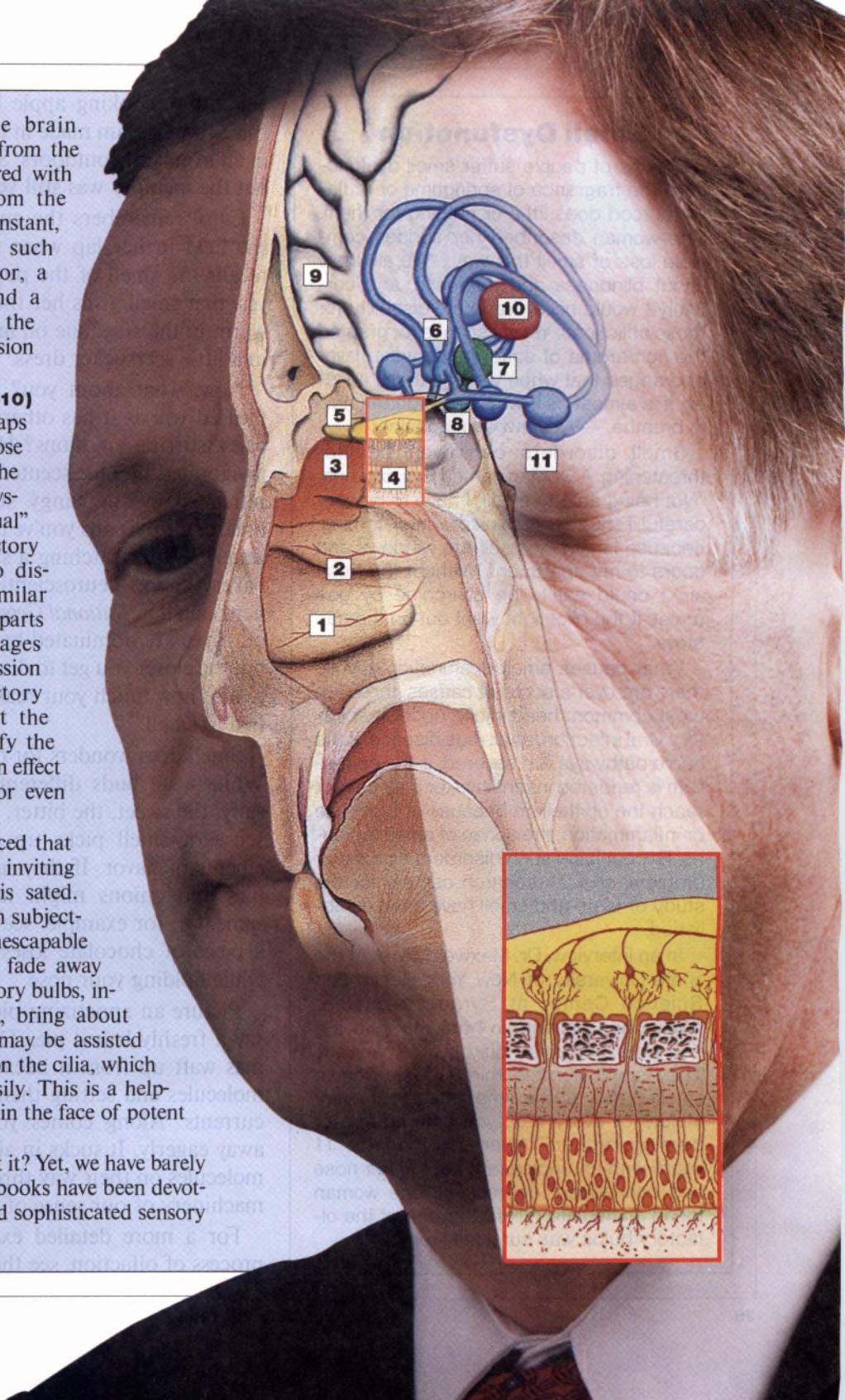
The limbic system also reaches into the neocortex (9), a rather intellectual, analytical neigh-

borhood within the brain. Here is where news from the nose may be compared with input coming in from the other senses. In an instant, you might combine such data as an acrid odor, a crackling sound, and a faint haze hanging in the air to form a conclusion—fire!

The thalamus (10) plays a role too, perhaps mediating between those very different parts, the “emotional” limbic system and the “intellectual” neocortex. The olfactory cortex (11) helps to distinguish between similar odors. Various brain parts can also send messages back to the transmission stations, the olfactory bulbs. Why? So that the bulbs can then modify the perception of odors, in effect turning them down or even turning them off.

You may have noticed that food doesn't smell as inviting when your appetite is sated. Or have you ever been subjected to a pervasive, inescapable odor that seemed to fade away with time? The olfactory bulbs, informed by the brain, bring about these changes. They may be assisted by the receptor cells on the cilia, which are said to fatigue easily. This is a helpful feature, especially in the face of potent foul odors.

Quite a system, isn't it? Yet, we have barely touched on it! Entire books have been devoted to this intricate and sophisticated sensory system.



Smell Dysfunction

Millions of people suffer smell dysfunction. The fragrance of springtime or of flavorful food does little or nothing for them. One woman described her sudden complete loss of smell this way: "We all know about blindness and deafness, and certainly I would never trade my disability for those afflictions. Yet we so take for granted the rich aroma of coffee and sweet flavor of oranges that when we lose these senses, it is almost as if we have forgotten how to breathe."—*Newsweek* magazine.

Smell disorders can even be life-threatening. A woman named Eva explains: "Not being able to smell, I have to be very careful. I shudder to think of winter coming, because I must close all the windows and doors to my apartment. Without the fresh air, I could easily be overcome by gas fumes if the pilot light went out on the gas stove."

What causes smell dysfunction? While there are over a score of causes, three are most common: head injury, upper respiratory viral infection, and sinus disease. If the nerve pathways are severed, if the epithelium is rendered insensitive, or if air cannot reach the epithelium because of blockage or inflammation, the sense of smell vanishes. Recognizing such disorders as a major problem, clinical research centers for the study of taste and smell have been established.

In an interview, Dr. Maxwell Mozell of the State University of New York Health and Science Center at Syracuse related: "We've had patients in here that [smell a bad odor perceived only by themselves]. They smell horrible things. One woman smelled fish all the time. Imagine if every minute of every day, you smelled fish or burning rubber." After suffering for 11 years with an unpleasant odor in her nose and consequent depression, one woman found immediate relief after one of the olfactory bulbs was surgically removed.

her family cooking apple butter (a heavily spiced sort of jam made in the United States) in an iron kettle outdoors. Seventy years ago, but the memory was still very much alive.

Carol remembers the cuddly little puppy she held in her lap when she was five and recalls the smell of the puppy's breath. Ah, yes, that smell gives her the feeling of being warm in the sunshine on an old front porch in a little seersucker dress.

Now, what about you? Has a smell ever pleased you as it has others—evoking memories, stirring emotions? Have you ever felt invigorated by pine-scented mountain air or refreshed by the tangy stimulus of a sea breeze? Or perhaps you've found your mouth watering after catching a stray whiff from a bakery shop. Neuroscientist Gordon Shepherd stated in *National Geographic*: "We think our lives are dominated by our visual sense, but the closer you get to dinner, the more you realize how much your real pleasure in life is tied to smell."

Smell does wonders for our sense of taste. While taste buds differentiate between the salty, the sweet, the bitter, and the sour, our sense of smell picks up other, subtler elements of flavor. If they lacked a smell, apples and onions might taste virtually the same. Or, for example, see how much flavor a piece of chocolate loses when you eat it while holding your nose.

Picture an appetizing piece of food—let's say a freshly baked pie. Those enticing aromas waft up from it because it is releasing molecules and setting them adrift in the air currents. Along comes your nose, sniffing away eagerly. It sucks in air and sends those molecules on their way through the amazing machinery of our sense of smell.

For a more detailed examination of the process of olfaction, see the box on pages 24

and 25. The intricacy and complexity of this sense is truly awe-inspiring.

Odors and Their Effects on You

Perfumers, master chefs, and vintners have for centuries recognized the power of aromas to captivate the mind and please the senses. Today, fragrance psychologists and biochemists are trying to tap the power of scent in new ways. Experimenting with fragrances ranging from lily of the valley to apple and spice, odor engineers have pumped scents into schools, office buildings, nursing homes, and even a subway train in order to study effects on the mind and human behavior. They claim that certain scents can affect moods, making people friendlier, improving their efficiency in the workplace, and even enhancing mental alertness.

According to *The Futurist* magazine, people line up at a fashionable health club in Tokyo, Japan, for a 30-minute “aroma cocktail” said to relieve the stress of city living. Japanese scientists have also studied the effects of forest air on humans and recommend walking through forests as a remedy for jangled nerves. The terpenes (pine scent) that trees exude have been found to relax not simply the body but especially the mind.

Not all odors are healthful; far from it. What delights one person might well make another miserable. Strong odors, even of perfumes, have long been known to aggravate asthma and trigger allergic reactions in some people. Then, too, there are the malodors that everyone agrees on—noxious fumes spewed from industrial smokestacks and motor vehicle exhaust pipes, rancid odors of garbage landfills and sewage basins, and vapors from volatile chemicals used in many industrial workplaces.

Of course, dangerous chemicals occur naturally in our environment but are usually so

diffuse as to be harmless. However, when such chemicals are highly concentrated, overexposure to them can cause even the resilient olfactory nerve cells to degenerate. For instance, solvents such as those used in paints, as well as many other industrial chemicals, have been listed by experts as hazardous to the olfactory system. There are also physical disorders that can impede or destroy the sense of smell.

Do You Value the Gift?

Surely the sense of smell is worth protecting from such threats wherever possible. So familiarize yourself with the hazards of any chemicals you must work with, and take whatever reasonable precautions are necessary to protect your sensitive olfactory system. (Compare 2 Corinthians 7:1.) On the other hand, it is good to be equally concerned about the sensitivities of others. A high standard of cleanliness, including our homes and our bodies, can do much in this regard. Some have also chosen to be extra cautious with the use of perfumes—especially when they plan to be in close proximity with many others for some time, as in a theater or an Assembly Hall.—Compare Matthew 7:12.

In general, though, the olfactory system is a low-maintenance gift. It asks little of us in the way of care and protection, yet it brings us a daily bounty of small pleasures in life. When you receive a gift that makes you happy, do you feel a desire to thank the giver? Millions of people today earnestly thank the Creator for the marvelous way in which the human body is made. (Compare Psalm 139:14.) We might well hope that more such thanks and praise ascend to him and, like the sacrifices of the ancient Israelites, be as “a restful odor” to our loving, generous Creator.—Numbers 15:3; Hebrews 13:15.

Watching the World

Enough Food, but Malnutrition Persists

Even though world population has increased dramatically, there are over 150 million fewer malnourished people in the poorer countries than there were 20 years ago. "The food supply and the farmers have actually kept up with growth and exceeded it," says John Lupien, director of the UN Food and Agriculture Organization. "Right now, there's enough food to feed everyone, if in fact it could get to the people who need it." Sadly, reports *The Economist*, "roughly 780 [million] people in poor countries, one in five of their population, do not get enough to eat. As many as 2 billion people who get enough to fill their bellies nevertheless lack the vitamins and minerals they need. . . . As many as 40,000 young children die every day, partly because malnutrition makes them susceptible to all kinds of disease." On the other hand, overnutrition is also taking its toll, inducing ailments such as heart disease and certain cancers among wealthier sectors of society.

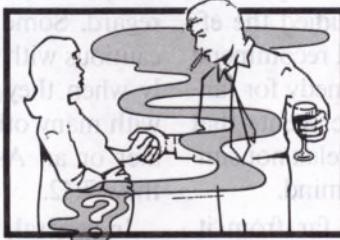
Somalian Relief Paradox

The influx of free food to famine-stricken Somalia has produced an interesting paradox. While the famine relief worked to stop starvation, it is also threatening to destroy the local farm economy. When food was so scarce that over 1.5 million people faced death by starvation, food prices became tremendously inflated. But after a steady stream of relief food, market prices plummeted. "The price of rice is said to be the lowest in the world, with the cost

of a 110-pound bag of rice dropping to \$5 over the past few months," says a *New York Times* report. "By comparison, the same amount of a comparable grade of rice would cost about \$11.70 in the United States and \$120 in Japan." As a result, local produce has been so devalued that the farmers cannot sell their crops. A program is now in effect to sell some relief food and to try to stabilize prices.

Fathers Also to Blame

For some time now, prospective mothers have been warned to steer clear of things that may cause birth defects, such as alcohol and smoking, and to eat a nourishing diet. "Now, similar precautions are being urged on fathers-to-be," says *U.S. News & World Report*. "New research suggests that a



man's exposure to chemicals influences not only his ability to father a child but also the future health of his children." Evidence shows that men "contribute far more than previously realized to both miscarriages in their wives and various malformations, cancers and developmental delays in their children." It appears now that drugs and other chemicals (including by-products of cigarette smoking), as well as diets lacking sufficient vegetables and fruits rich in vitamin C, harm the sperm.

Says toxicologist Devra Lee Davis: "For too long we've focused solely on mothers. The importance of the father in making healthy babies has been underappreciated."

Growing Interest in the Supernatural

The growing worldwide fascination with the supernatural is profoundly evident in South Africa. Traditional witch doctors, charismatic religion, astrology, and Satanism have been rapidly increasing in popularity since the mid-1980's. Why? "In times of trouble, people turn away from the rational, towards the mystic," states *The Weekly Mail* of Johannesburg. "At the end of the second millennium, there is increasing interest in psychic phenomena." Anthropologist Robert Thornton explains it this way: "I think these beliefs indicate the kinds of fears that people have. It's a resort to external powers from people who don't feel they're fully in control." Metaphysics lecturer Rod Suskind says: "One reason for the upswing is that the future seems so unpredictable, and people are looking beyond conventional sources to understand what is happening." And according to *The Weekly Mail*, anthropologist Isak Niehaus "puts it all down to the perceived failure of conventional science and religion to answer the big questions facing people."

Journalists Slain

At least 60 journalists were killed while covering conflicts around the world in 1992. This report, published by the International Federation of Journalists in

Brussels, Belgium, and carried in the *Manchester Guardian Weekly*, named Turkey and Bosnia as the most dangerous places. At least ten journalists were said to have been murdered in those two countries during the past year. Journalists have also been threatened while covering the clan warfare and famine in Somalia. The federation is asking the United Nations and the European Community governments to declare that censorship is a "gross violation of human rights."

Another Flu Pandemic?

"Pandemic influenza will be, almost without a doubt, a major plague when it emerges, probably in the next several years," states *The New York Times Magazine*. According to scientists, the time is ripe for a flu epidemic similar to the one of 1918 that killed from 20 million to 40 million people. "There's every expectation that if it occurred once, it can occur again," says John R. La Montagne, chief of infectious diseases at the National Institute of Allergy and Infectious Diseases in Bethesda, Maryland. However, the viral mutations that create pandemic strains of influenza are rare. They have occurred just three times in this century: the so-called Spanish flu of 1918, the Asian flu of 1957, and the Hong Kong flu of 1968; and the last two were relatively mild. Since the influenza virus changes so frequently and unpredictably, a lethal outbreak can occur before an accurate vaccine can be developed. The article concludes: "If history is any guide, we can probably expect a major alteration of those antigens—one big enough to lead to a worldwide outbreak of severe flu—before the century turns."

Battered Husbands

"Almost 40 per cent of women polled in a federally funded survey said they had threatened or physically abused their spouse, considerably more than the percentage of men who made the same claim," states *The Toronto Star*. "The research turns the popular belief about family violence on its head . . . Even the researchers were surprised by the results of the study." The definition of abuse included threatening, throwing



something, or hitting with an object. In most instances the women said that the motive behind their violence was not self-defense. "These findings should cause people to rethink the whole nature of spousal abuse in terms of criminal justice," said Rena Summer, a doctoral student at the University of Manitoba's family studies department and one of the study's authors. However, since men are generally stronger than women, the women often suffer more serious injuries when abused by their husbands, she said.

Witch-Hunting Still Exists

Branded as witches, over a dozen women in the tribal hinterlands of India were killed by frenzied mobs in a two-month period, reports *India Today*. "Scores of other women have been beaten up, tortured, paraded naked, humiliated in the most bestial fashion and driven out of their villages." The outbreak began with religious pro-

cessions that went from village to village. This practice led to a social reform movement and a reduction in crime. But then some of the women in the processions became "possessed" and began identifying certain villagers as witches responsible for local problems. Failure to pass a "test" of innocence, such as resurrecting a dead person if accused of killing someone, meant instant retribution. Belief in witchcraft is said to be the root cause and, according to one anthropologist, "stems from an urge in tribal societies to harness the supernatural, to have power against the evil eye, power to achieve their desired goals and power to enforce their will on others."

Putting the Blame on Caffeine

Heavy coffee drinkers who abruptly quit their habit frequently complain of headaches, depression, fatigue, anxiety, and even muscle pain, nausea, and vomiting. Now, researchers at Johns Hopkins University have found that these symptoms also occur in individuals who consume just a cup or two of coffee or tea daily, or a couple of cans of soft drinks that contain caffeine, and who go without it for two days. Withdrawal effects may be so severe that they may feel they must see a doctor. Victims can be those away from the office coffee machine on weekends, people who switch to decaffeinated sodas, or patients who must fast before an operation. Doctors are advised to take a caffeine history of patients who complain of headaches and other symptoms that fit the caffeine-withdrawal profile. Those who wish to cut down on their caffeine intake are advised to do so gradually. The study also raised the question of whether caffeine, and therefore coffee, should be classified as a physically addictive drug.

From Our Readers

Criminal Injustice I want to share with you how I used an older issue of *Awake!* My daughter was held at gunpoint in a carjacking. The thief was convicted, but as to the charge of his having used a gun, evidence was disallowed. Disheartened, I was permitted to speak on my daughter's behalf at his sentencing. Earlier, I had come upon the article "Does Crime Pay?" (August 8, 1985) Using the material in the box entitled "The Criminal Injustice System," I told the court that "the criminal has a choice—to commit crime or not. The victim has no choice." The thief was sent to jail, receiving the maximum sentence.

D. M., United States

Neglectful Parents Thank you so much for the article "Young People Ask . . . Why Don't My Parents Show More Interest in Me?" (November 8, 1992) Tears ran down my face as I read it. A couple of months ago, I was feeling neglected, so I rebelled. I guess I had a lot of anger and hurt inside. The article really made me think about what happened. Thank you for caring enough about us young ones to give us this vital information.

N. C., United States

The article reached the heart of my ten-year-old daughter. As a single parent, I try so hard, but I don't always have the energy and patience to deal with the stress that I have to face daily. After my going over the information with her, she better understood what I feel at times. We both cried, and she was able to realize that I do love her.

C. L., United States

Top of Europe I want to thank you for the article "To the Top of Europe by Rail." (December 8, 1992) It encouraged me to visit

the Jungfraujoch, near Interlaken, Switzerland. At the altitude of 11,332 feet above sea level, I could better appreciate the beauty of God's handiwork and the immensity of the snowcapped mountains.

P. L., Italy

Music I am 12 years old. The article "Young People Ask . . . What's Wrong With My Music?" was very helpful. (February 8, 1993) I too have been unable to turn my music off, even listening to it while I study. I also have several compact discs that aren't too good, and I have clashed with my parents many times over them. When I read how listening to music influences me, I felt as though my heart was being stabbed with a knife. I am now considering getting rid of any disc that features bad things. Thank you very much.

M. H., Japan

I found the article extraordinarily topical. It is incredible how droves of youngsters let themselves get involved in rebellious songs and styles of clothing. These articles are truly a safeguard for us Christian youths.

M. M., Italy

The article presented rap music in a very unfavorable light. Now and again I get together with other youths, and we play rap. True, there are songs with bad lyrics. But to generalize about rap music is not correct.

B. R., Germany

The article did not make a blanket condemnation of rap as a musical form. Rather, it warned against getting involved with any form of music whose overall message and spirit does not meet Bible standards. The evidence clearly shows that rap music has woeful shortcomings in this regard.—ED.



Cobras in Sri Lanka Hearing Sound

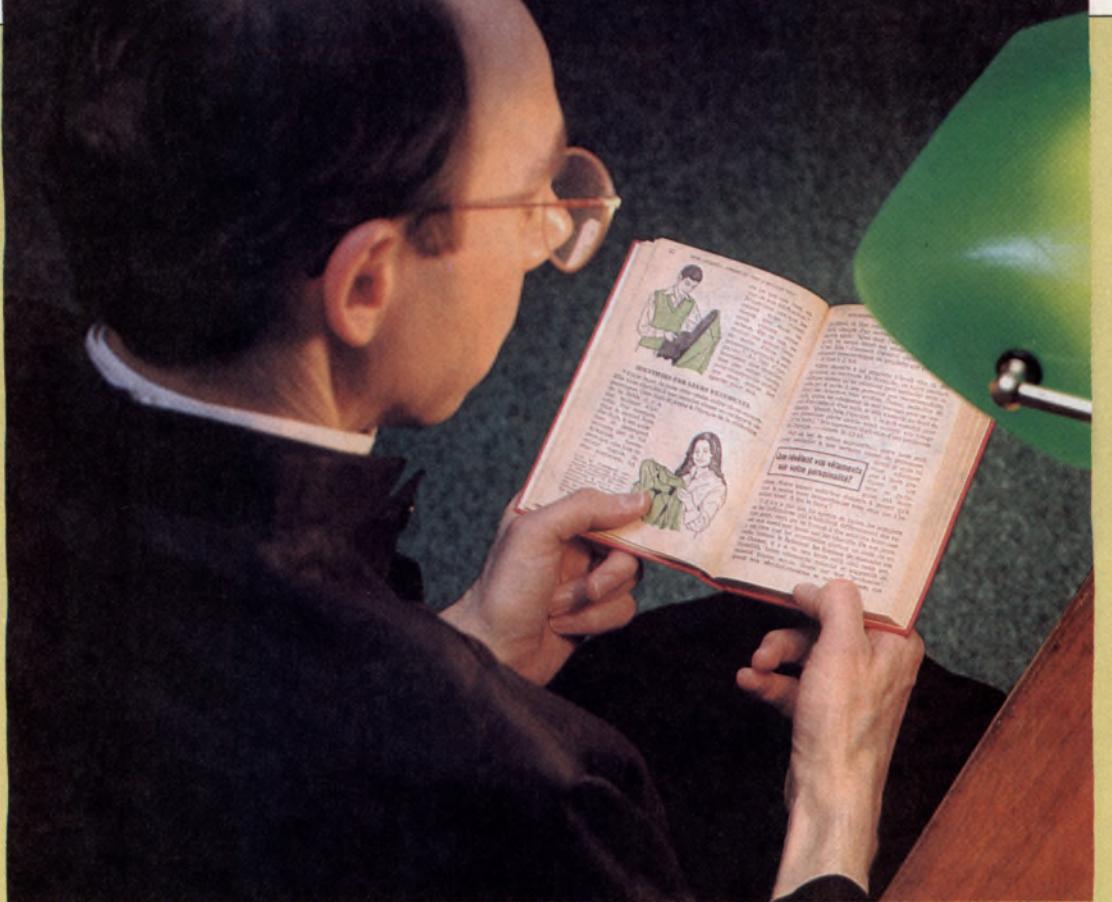
"Deaf like the cobra that stops up its ear,
that will not listen to the voice of charmers."—Psalm 58:4, 5.

In *The New York Times*, January 10, 1954, under the title "Are Snakes 'Charmed' by Music?" the following report on Psalm 58:4, 5 is found: "Dr. David I. Macht, research pharmacologist of the Mount Sinai Hospital in Baltimore [U.S.A.], is one of the world's leading authorities on cobra snake venom. (Cobra venom is an accepted medication, in blood disorders, for instance.) Dr. Macht reported that in working with cobras and cobra venom he became acquainted with a number of Hindu physicians, well educated, and from different parts of India. All agreed that cobras respond to some musical tones, from musical pipes or fifes. Some forms of music excite the animals more than other forms, the physicians reported. Indian children, playing in the dark in the countryside, are even warned not to sing lest their sounds attract cobras, he said. Dr. Macht commented that Shakespeare, who repeatedly referred to serpents as deaf . . . merely repeated a common misunderstanding. On the other hand Dr. Macht said, the psalmist was right who im-

plied conversely, in Psalm 58, Verse 5, that serpents can hear."

Similarly, in an article published in the German zoological magazine *Grzimeks Tier, Sielmanns Tierwelt* (Grzimek's Animal, Sielmann's Animal World), July 1981, pages 34 and 35, the author tells of a cobra that lived on his estate in Sri Lanka in a termite hill. He asked a snake charmer to catch the wild snake and get it to dance. The author reports: "After I had assured my guest that there really was a cobra living there, he sat down in front of the termite hill and began to play his pipe. After a long time—I no longer believed anything would happen—the cobra raised its head several centimeters out of a hole. Before the snake could open its mouth the charmer hurried over and grabbed its head between his thumb and two fingers." The Indian thereupon actually got the snake to dance.

Therefore, there is evidence that the cobra does "listen to the voice of charmers."—*New World Translation of the Holy Scriptures—With References*, Appendix 7A, page 1583.



A Monk Learns the Truth

In Djibouti, Africa, a Catholic monk named Louis Pernot obtained from one of Jehovah's Witnesses the book *Your Youth—Getting the Best Out Of It*. Louis, who was headmaster of a Catholic school, had often wondered why his religion presented no clear-cut information to help youngsters with their problems.

That very evening Louis began reading the *Youth* book. In fact, he was so interested in it that he could not put it down. He thought that the true religion should give sound guidance to people without compromising the teachings of the Bible, and now he had found such a book!

The next day Louis told the Witness who had given him the book that he had found the truth. During the same week, he resigned not only as a monk but also as a Catholic. He became one of Jehovah's Witnesses and began teaching the Bible truths he had learned.

Jehovah's Witnesses are an international organization of over four million Bible students who are devoted to helping people learn more about God's purposes.