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Mervyn G. Hardinge, M.D., Dr. P.H., Ph.D. Editor

Don Hawley Managing Editor

Harold W. Munson Art Editor

Don Fiol

Layout and Design

Lorene Forquer **Editorial Secretary**

Richard Kaiser

Braille Life and Health Editor

Edmund M. Peterson Circulation Manager

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letters

Readers may address their correspondence to The Editor, LIFE AND HEALTH, 6856 Eastern Avenue NW., Washington, D.C. 20012

Super

Your magazine is always superb, but the September issue is "super."

Milford O. Rouse, M.D.
Past President
American Medical Association
Dallas, Texas

Cover to cover

I would like to compliment you on the new format of Life and Health. It is refreshing, readable, relevant, and especially good looking. I am a 20-year-old communications student at Pacific Union College. When I saw the first new format issue I was surprised and immediately read the magazine from cover to cover. It has been the same with the last two issues.

Warren Nelson Vancouver, Washington

Can't begin to tell

I just can't begin to tell you all the good I've gained for myself and others in the six years I've subscribed to Life and Health.

Ruth Jesse Crandon, Wisconsin

Ten children

The articles in Life and Health have helped me raise ten children.

Mrs. Thomas Dossey

Alvaredo, Texas

Stress on prevention

Just a word to say Thanks for the very fine Life and Health magazines that are now coming from the press. Everyone has noticed the wonderful change. I appreciate the new stress on preventive therapeutics rather than acute medical information.

John Luppens Putnam Valley, New York

Eggless recipes

We enjoy all of the magazines a lot. Several of my friends and I wonder why so many of the recipes in Life and Health have eggs in them. We would like to see recipes with no eggs, and what to use in the place of eggs.

Mrs. D. A. Graybill Moberly, Missouri

Blank paper

Subscribers are paying for much blank paper, which should have something constructive written on it.

> Mrs. Lottie Fragge Denver, Colorado

Documented

What a WONDERFUL journal you are producing! This is the new documented health magazine we have long waited for.

Mrs. Oscar Lund Martin Luther Hospital Anaheim, California

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Life and Health/December 1972

"For Whom the Bell Tolls"

You have entirely ignored the old folks. . . .

Do you remember that piece during wartime, "For Whom the Bell Tolls"? I hope it isn't going to be for Life and Health.

Mrs. E. Palmer Kelowna, B.C., Canada

We certainly don't want any bells tolling for Life and Health. Please be assured that we appreciate our elderly readers and desire to continue providing them with stimulating and valuable health information.

In addition, we are happy that today's young people have an unprecedented interest in matters pertaining to health. We hope also to encourage them in the early establishment of good health principles leading to longer and happier lives.

Editors.

Worth waiting for

I just wanted to express a word of appreciation for the new look in the Life and Health journal. Personally, I think the change is long overdue, but is well worth waiting for. I believe the format and the thrust of the articles will make the journal more effective among younger people. Of course this will enhance the aim of the journal as a means of preventing disease.

I think the August issue is especially good. Congratulations!

D. E. Leamon Reno, Nevada

Source material

The new format of Life and Health is just great! It is my feeling that a more scientific and documented journal is certainly warranted in this age. I particularly enjoy seeing the sources from which the material in the various articles is taken.

Clyde Brenner Decorah, Iowa

Young people

It seems to me the pictures and coloring are meant to impress young people and not adults, which will mostly be reading it.

> Mrs. Wendell Schlup Pine Bluff, Wyoming

Seventeen-year-old opinion

Upon looking through my newest issue of Life and Health I noticed a lot of letters for and against the new format. Well—I decided I'd add my opinion. I might add that I am a 17-year-old reader.

This is a wonderful improvement! It is more up to date now. Sure, the colored pictures on the cover were beautiful. But I believe this new cover will attract more readers, especially when it is placed in medical offices. Thanks for making a change! This new format will also attract many young people too.

Patricia Taylor Northridge, California

P.S. I especially like the new "Youth Corner."

Cover to cover

We have been subscribers to Life and Health for years and have always enjoyed it. Now with the new improvements it is even more enjoyable and informative. We read it from cover to cover

Hazel and Alva Ragsdale Riverside, California

Fantastic

Absolutely fantastic—a long-needed, refreshing change. I usually read it in one sitting.

Mrs. Margaret H. McKelvey

Denver, Colorado

Great paper

You are putting out a great paper. Keep up the good work.

J. N. Blackney Idyllwild, California

Health High Lights

Be prepared!

At this time of year when many of us are heading for the ski trails, and probably higher altitudes than we are used to, let's do a bit of conditioning before we take off down the hill. There are a number of exercises that will help to limber up and strengthen the muscles not normally used in our daily living. A day or so of acclimatization may be a good idea when going to a higher altitude.

If you have not had much activity during the preceding months and you have not had a physical checkup recently, better get an O.K. (clearance) from your physician before undertaking a skiing jaunt. Particular attention should be given to the condition of your heart. Two physicians died of heart attacks in a single day during a recent convention in Colorado. The high altitude, the overexercise, and the fact that they were overdressed (became overheated), and both of them previously had heart disease were possibly factors in their deaths.

Don't take any chances—get yourself in shape for winter!

John A. Joyce. Skiing and heart attacks. Hosp. Trib. 6:15, April 17, 1972.

Watch how you fasten your seat belt!

M any studies have shown that seat belts are protectors for users involved in serious traffic accidents. However, a seat belt worn loose and high produces problems in itself. The belt acts as a fulcrum around which the body pivots and in a head-on impact may cause fracture of the lumbar spine. So fasten your seat belt, but keep it low and tight.

Edward Greenbaum, Lee Harris, and W. X. Halloran. Flexion fracture of the lumbar spine due to lap-type seat belts. *Calif. Med.* 113:74-76. 1970.

notes Bite-sized bits of news concerning health.



Pharaoh's ants carry disease

A tropical insect that relies on artificial heating to survive, Pharaoh's ants (Monomorium pharaonis) live in nest colonies of queens, males, workers, and pre-adults. The translucent brownorange workers, only about 1/12 of an inch in length, act as carriers of diseasecausing bacteria during their foodforaging expeditions in hospitals. Their trails have been known to run a distance of 72 feet, not counting the extent of the trail inside the wall. Ants sampled in nine hospitals were found to carry different kinds of Salmonella, which cause diarrhea, typhoid, and paratyphoid; of Staphyloccus and Streptococcus, which cause wound infections and diseases of the sinuses, lungs, spinal cord, joints, and blood; of Clostridium, which cause botulism (food poisoning), gas gangrene (a fatal disease), and tetanus (often referred to as lockjaw); and of Klebsiella, which cause pneumonia.

The ants make their nests behind tiles, in light fittings, in fuse boxes, in heated food trolleys, in heated automatic drink-vending machines, and often travel to other hospitals by getting into the folds of sheets and towels coming from laundries. They sometimes ruin sterile packs. In intensive-care units the ants have been known to get into drip tubes and resuscitation equipment, and, in baby units, to bite infants around the eyelids.

The normal condition inside the ant colony, a relative humidity of 80+ per cent and temperatures of 27 to 38°C, suit bacteria growth, keeping the bacteria alive and setting up a reservoir to reinfect workers.

Causing contamination because the workers visit bedpans, toilets, drains, and sinks to obtain moisture, Pharaoh's ants eat both animal and vegetable food but prefer a menu of raw and cooked meats, coffee cake, custards, and milk, which are also ideal breeding grounds

for bacteria. Much to the distress of the poor patients, the ants will even feed on the discharge inside their surgical dressings.

In a veterinary institution Pharaoh's ants carried pneumonia from one group of animals to a noninfected group in isolation, proving the ants' ability to get into highly sophisticated isolation units. It is not too difficult to exterminate the ants, but the procedure is costly.

Susan H. Beatson. Pharaoh's ants as pathogen vectors in hospitals. *The Lancet* 1(7747):425-427, Feb. 19, 1972.

The milk of human kindness?

Some infants and children lack a digestive enzyme called lactase, cannot digest lactose (a sugar naturally present in milk), and often develop diarrhea. However, in five school-aged children who were having abdominal pain, colicky pain, cramps, bloating, gas pains, or "funny feeling," milk was not suspected as the cause. All the children were drinking from one to four glasses of milk each day. Later it was found that they lacked the ability to digest lactose, and the pains were reduced when they cut down their intake of milk.

Recurrent abdominal pain due to milk and lactose intolerance in school-aged children. *Pediatrics* 47(6):1029-1032, 1971.

Prenatal gonorrhea infection

Prenatal gonorrhea infection has been reported at the University of Washington Hospital in Seattle. Infection can reach the unborn child if the membranes of the birth sac are ruptured 24 or more hours before birth or if there is inflammation of these membranes or of the umbilical cord, allowing bacteria to reach the unborn child through the fluid that fills the birth sac.

"Information File" reports on amniocentesis, gonorrhea. NF News [National Foundation March of Dimes] 24(4):2, May 1972.

It could knock you over

Halitosis, or bad breath, may be traced to a variety of causes, beginning in the lungs, breathing passages, nose, and mouth. Certain diseases may cause bad breath. Uncontrolled diabetics may have acetone on their breath, and advanced cancer of the lung may also cause halitosis. Since there are so many possible causes of this problem, it is wise to have a thorough medical and dental checkup.

In most cases bad breath originates in the mouth because of poor oral hygiene, decaying food particles between the teeth, or a coated tongue. Brushing the teeth, gums, and tongue-as often as three times a day-will reduce bad breath for two hours. The claims made by chlorophyll toothpastes have not been fully proved, and the Food and Drug Administration has warned that nine brands of mouthwashes lack substantial evidence for their claims that they effectively destroy bacteria that cause bad breath.

Frank G. Everett. Halitosis. The Journal of the Oregon Dental Association 41:13, 1971.

Sugar and blood cholesterol

The average American gets about 12 per cent of his total calories from ordinary household sugar (sucrose). Research shows that such a diet significantly increases blood cholesterol.

Sugar and cholesterol. Progress Report Human Nutrition Research Division. U.S. Department of Agriculture, p. 3, 1971.

Probing the protein molecule

A new application of a research technique called X-ray crystallography allows scientists to probe the secrets of the complex inner structures of amino acids, which are the chief components of proteins. According to Dr. Lyle H. Jensen, professor of Biological Structure at the University of Washington School of Medicine, proteins carry diseases as well as elements essential to life; knowing where each amino acid is located inside a protein molecule will aid in detecting and isolating a diseasecarrying amino acid.

News release by the University of Washington, health sciences center information services, Seattle, Washington 98195, June 6,

Mercury in the ocean

A study of the amount of mercury found in museum specimens of tuna and swordfish and fish caught recently shows, surprisingly, that there has been little change in the mercury concentration over the past 62 to 93 years. Interestingly enough, tuna pick up from the sea the nonmetallic element selenium, which resembles sulfur chemically, and selenium protects the fish from the poisonous effects of mercury. Mercury levels in the ocean now are there as a result of natural marine causes and not man-made pollution!

G. E. Miller, et al. Mercury concentration in museum specimens of tuna and swordfish. Science 175:1121, 1122, March 10, 1972. H. E. Ganther, et al. Selenium: relation to decreased toxicity of methylmercury added to diets containing tuna. Science 175:1122-1124, March 10, 1972.

Burns from burning clothing

According to the National Burn Information Exchange, people who are burned because their clothing catches fire are four times more likely to die than are those not burned by a clothing fire, and burns from ignited clothing cover nearly twice as much body surface; also, six times more skin is burned full thickness.

Are burn injuries with clothing ignition significantly more severe than comparable injuries without clothing ignition? Environmental & Public Health News 2(7): 2, July 1, 1972.



editorial viewpoint

No Short Cuts to Health

■ Drugs are chemical substances used for medicinal purposes. They may be derived from plants, animal tissues, or chemical sources. Morphine is obtained from opium, which is the dried juice from the immature head of a certain species of poppy. Digitalis, used in treating certain types of heart disease, is extracted from the leaves of the common foxglove. Insulin and adrenalin come from the pancreas or adrenal glands of food animals; penicillin and other antibiotics, from fungi and bacteria; whereas magnesium sulfate (Epsom salts) is a naturally occurring mineral; and aspirin (acetylsalicylic acid) is an organic substance synthesized, or manufactured, in a chemical laboratory. So are many others, such as the sulfonamides, the oral insulins, the antihistamines, and the antiepileptics.

Regardless of their source, most drugs follow a characteristic life history (Figure 1). When the drug is first introduced, there is general acceptance and wide usage, for it is a new, different, and of course "effective" agent. After some time the first reports of undesirable reactions begin to appear. Increased cautiousness in its use results. If the reactions prove serious, the drug may be withdrawn from the market. If, on the other hand, the problems are mild or can be controlled with wise dosage, its acceptance again increases. Later, carefully controlled and wellvalidated studies as to its benefits or adverse effects are published, and the drug either finds a place in therapeutics or is discontinued because of ineffectiveness or serious toxicity.

You may wonder why all the actions, both good and bad, of a drug are not known before it is made available for general use. The reason this is not possible is that research and evaluation procedures are of necessity limited because of time and expense. Most drugs are extensively tested on a wide variety of laboratory animals to determine responses under differing conditions. Finally every effort is made to evaluate the agent in representative samples of the human population. But the ways people respond differ widely, influenced by conditions that are difficult to control and all too often poorly understood, if understood at all.

Many conditions, singly or in combination, may modify the action of a drug, such as the kind of illness, the individual's age, whether infant, child, adult, or senior citizen; sex, weight, nutritional state, hereditary factors, size of dose, the way it is administered, and whether other drugs are also being taken at the same time. Because it is easier to assess the immediate rather than the long-term effects, the latter may not be known until the agent has been used for many years. Wide use, then, allows all types of reactions to come to the surface, and prolonged use reveals the long-term effects. If a drug has a mild reaction, is reasonably effective, and is helpful in a common complaint, the more popular will it become and the more widely will it be used.

Aspirin and its close relatives are classic examples of reasonably effective drugs used for relief from common everyday problems, with "no serious harmful" effects. But time has a habit of revealing what at first may have gone unnoticed. The body is a master organization whose life processes resist change. Every function and structure of every cell falters or surrenders only when the chemical assaults disrupt them—and this process

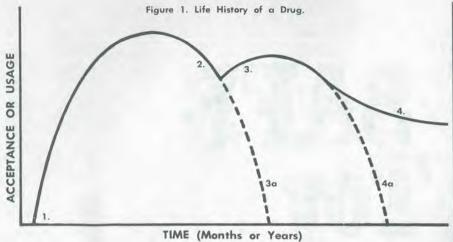
sometimes takes years to develop.

Aspirin and its compounds (acetyl-salicylic acid, phenacetin, caffeine) have been considered virtually innocuous, except for minor problems like upset stomach. These drugs have become household musts. Some 40 tons of aspirin are consumed by Americans every 24 hours! Today after fifty years and vast usage medical authorities in many countries are sounding an alarm because of serious harmful effects observed, not in rare instances, but in considerable numbers of people using these agents.

The article by Dr. Robert Mitchell in this issue is most timely. Dr. Mitchell is eminently qualified to discuss the problems caused by these common drugs. Here again, as has occurred all too frequently in the past, a drug long considered useful and relatively harmless is discovered to cause serious trouble.

The philosophy of LIFE AND HEALTH is not to take the stand of a drug nihilist, that is, one who condemns all use of drugs, but it is to warn against the unnecessary, free, and promiscuous use of any medicinal agent. But even more than this, we desire to promote a life-style which will maintain and enhance health, making illness and disease unfamiliar and medications unnecessary.

Every drug or chemical agent which affects function and is not a natural component of our bodies has the potential to do harm. Drugs are all two-edged swords, for although they kill disease they sometimes cut the user, and while cutting, they sometimes kill. There are no safe short cuts to health. \square



- 1. Rapid increase in use.
- 2. Decline in popularity as a result of early reports of toxicity.
- 3. Increase in use or rapid discontinuance because harmful effects prove serious
- 4. Established "successful" use or appearance of dangerous effects with abrupt withdrawal (4a).

Guest editorial

Disease in Hogs

As this issue goes to press, news media are currently reporting the mushrooming epidemic of hog cholera in Kentucky, with embargo on all hog movement into or out of that State. A quick telephone call to a veterinarian friend tells us that at one time this disease was rampant in Iowa, Illinois, and in fact, all of the cornbelt. Only the development of a live-virus vaccine was able to bring it under control. Then, because of the ever present possibility that the virus of the vaccine might become virulent, killed-virus vaccine was developed and it was made illegal in some States to sell live-virus vaccine. But apparently this has not been adequate, and now not only Kentucky hogs are threatened. If not brought under control, this disease threatens all hogs in the United States!

According to our radio informant, if one animal of a herd is infected the entire herd must be destroyed because of the extreme infectiveness of this virus. It doesn't make the animals just sickit kills them. Fortunately, hog cholera does not cause disease in human beings.

This follows closely the Asiatic Newcastle disease of poultry from which southern California is still reeling. Hundreds of thousands of poultry were destroyed at great economic loss to the poultry growers. Although Newcastle disease is claimed not to cause illness in people, an increased number of coldlike upper-respiratory infections have been noted among poultry handlers.

Incidence of cancer in food animals is increasing in the United States and other countries. And these increases of disease among animals, which may or may not affect man, come at a time when the world food shortage is already critical.

MARJORIE BALDWIN, M.D.



The "new" LIFE AND HEALTH is six months old! We know that some of you at first disliked the changes we made in your magazine, whereas most of you were pleased with what you saw and read. We trust that as the months have gone by all our readers are pleased with our sincere efforts to pack your monthly journal with up-to-date, interest-filled, helpful information.

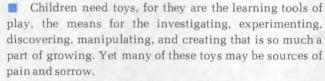
As another year draws to a close, we the staff of LIFE AND HEALTH would like personally to visit each one of you our readers and express our warm and sincere Yuletide greetings. But since this is not possible, we want to take this opportunity of wishing you a happy Christmas. May 1973 bring to you a year filled with LIFE AND HEALTH.

M. G. H.

Shopping for toys?
This article can help
you spend your money wisely.

PLAY SAFE Don't Toy With

Danger



The U.S. Public Health Service estimates that each year 700,000 children suffer injuries from toys, one million children are injured in bicycle accidents, 500,000 are hurt on swings, 200,000 on slides, 100,000 on tricycles, and 58,000 on seesaws. Toys are so dangerous they have been ranked fifth among items that cause accidents. Forty per cent of the injuries caused by toys are to the head and face, 25 per cent to arms and legs, 17 per cent to hands, and 4 per cent each to eyes and feet.¹

Parents do not knowingly give their children dangerous, unsafe playthings, yet the very toy sitting harmlessly and temptingly on the store shelf may become dangerous in the hands of a child. A small child can't be expected to know what is hot or cold, sharp or dull, up or down, or even chewable. Edward Swartz, a lawyer who has actively investigated the danger of toys, suggests that "toys with sharp cutting edges, easily shatterable parts, high explosive potential, lethal electrical hazard, dangerous flammability, unnecessary psychological risks, suffocation or strangulation capabilities, or fatally poisonous potential can be found by the dozen." Some toys are

By KAY J. KUZMA, Ed.D.

A native of Nebraska, Dr. Kay Kuzma has concentrated her studies in the area of child development and early childhood education. She serves on several professional committees dealing with preschoolers, and has presented papers on the same subject before numerous professional meetings. She is director of the Loma Linda Children's Center at Loma Linda, California.

"early belief in violence as an acceptable means of relieving frustrations and tensions breeds an unspoken and unexamined later conviction that violent behavior is acceptable for adults as well."

poorly designed or constructed; others are made with improper materials or packaged with insufficient labeling or instructions.

Government action

With all the consumer protection laws and seals of approval, why can't parents be assured safe toys? In 1966 the Child Protection Act banned from interstate commerce toys and other articles intended for use by children that bear or contain a hazardous substance. But unfortunately there were glaring loopholes in the law and inadequate funds for enforcement. For example, chemistry sets were exempted; and more significant still, toys that cut, burn, puncture, maim, deafen, shock, asphyxiate electrically, do not come under the definition of hazardous substances. Finally, in 1969 the Child Protection and Toy Safety Act was passed, which gives the Food and Drug Administration of the Department of Health, Education, and Welfare authority to recall unsafe toys. But even this agency has been slow to act against unsafe toys, and cannot do a complete job because only about 1,200 types of toys are inspected per year, whereas during the Christmas season a single store may offer 12,000 different toys for sale.

This governmental action has, however, helped to remove extremely dangerous toys from the market, but



there is little control over the \$3.5-billion-a-year toy industry. Toys with unsuspected dangers continue to be made and sold. They are recalled only when proved to be unsafe. But because toys do not carry serial numbers, it is impossible to recall undesirable toys once sold.

Can parents rely on seals of approval stamped on the package, such as the Good Housekeeping seal, Parents' Magazine seal, or even the Underwriter Laboratories seal (UL) on electrical toys? These seals do not guarantee safety. Both the Good Housekeeping and the Parents' Magazine seals are given to toys advertised in their magazine if they hold to their advertising claims.

The UL seal is given to products whose electrical wires and plugs pass their approval for fire safety, but it does not regulate the heat production of toys, which may be hot enough to inflict severe burns on unsuspecting chil-

Testing agencies

The best testing agencies are the two independent testing laboratories which publish Consumers Report and Consumers Bulletin. Because they do not have vested interests they report all unsafe toys brought to their attention. Parents interested in their child's safety will find these magazines two of the best sources of preventive information.

Doesn't the toy industry itself set standards for toys? Yes, but the Toy Manufacturers of America have only a minimum set of standards, and compliance with the code is voluntary for the 1,000-plus toy manufacturing companies who make more than 150,000 different toys each year. They are in the business to make money. Many of the changes in design that would make the toys safer would require additional expense. The price of the toys would then be increased, leading to a decrease in sales.

Even reputable manufacturers of toys may run into problems. Creative Playthings put out squeaking hedgehogs with easily removed squeakers that infants could swallow or inhale 2,3 and two-piece maracas that easily came apart revealing dangerous lead pellets, which, too, could be swallowed or inhaled. These mistakes in design were soon corrected, but not until after faulty toys had already been sold.

Danger check list

Until there is strong governmental control, which will inspect every toy before it is put on the production line, the best insurance against unsafe or faulty toys is awareness of the potential dangers. Here are some points you should check before purchasing a toy:

1. Avoid toys that break easily. It is best to spend more money on a few quality toys than to buy many inexpensive ones that may be poorly made. Parents should visualize how the toy would look if it were broken, because many injuries occur when wire, springs, or sharp pieces of plastic are exposed. An example is a mechanical sketching board that is perfectly safe when used correctly; however, when it was first produced the screen was made of glass, which shattered easily and cut the user. Furthermore, the silvery filling remaining in the cut left a tattooed effect.

If the toy is prepackaged, the store should provide unpackaged samples for parents to examine. Always flex plastic toys and check for thin, stiff sections that might break off or shatter. Even an innocent musical crib mobile was found to be hazardous when, with only 2 1/2 pounds of force

(easily applied by an eight-month-old), the plastic bracket bent, then snapped, leaving jagged points on both ends of the bracket, while the top of the mobile fell onto the baby.⁵

2. Avoid toys that burn. A good guideline is to avoid all electrical toys for young children. Good toys should spark a child's imagination and creativity. This imagination can supply heat, electricity, and anything else. Adding the electrical component to a toy increases its hazards. Toys such as



A filmsy balloon can pose a special danger to a young child.

play stoves have been known to heat up to 600° inside and 200° outside—hotter than real ovens on the outside, yet they are advertised as safe. A stove heated by a light bulb turned into a dangerous toy when children plugged the stove in, unscrewed the bulb, and stuck a finger into the socket. Toy irons that barely get warm may not cause burns, but they are not effective in removing any wrinkles, either, which may be frustrating to a child.

Some metal-casting sets sold as toys for children five years old and up reach 800° on the surface plate and 600° on the sides. Yet there are no safety devices to protect someone from touching the plate and receiving a severe burn.

No toy or part of toy should burn easily or, if ignited, cause noxious smoke or drip molten material. Crawlthrough tunnels have been made with cotton that will burn in a matter of minutes. The Nerf ball that can be harmlessly tossed around indoors is made of flammable plastic which can easily be set on fire if it lights on a gas range or an electric burner set at medium. It not only ignites easily but, worse still, also smokes heavily and sheds drops of burning goo. 6

3. Avoid toys that cut and puncture. All edges of a toy, interior and exterior, should be smooth with rounded corners. Dollhouses and other toy buildings often come with removable roofs. All exposed metal edges and tabs should be properly finished and folded over. Even some magnetic puzzles have a razor-sharp metallic insert that is easily reached when the cardboard back is removed.

Hidden spikes and points can cause puncture wounds. For example, a toy truck or car with flimsy wheels and metal axles can injure a child who falls on the vehicle when it is on its side. The wheel hub collapses and the wheel slides down the shaft leaving the axle pointed upward. Even a certain play xylophone is considered hazardous because the metal keys are attached with straight nails, which can easily come out, instead of screws, and when a wheel falls off, the sharp metal axle is exposed. This toy carries both the Good Housekeeping and Parents' Magazine seals.

Darts of any type—board, lawn, or blown—are not toys for children. Neither are archery sets or springloaded gun sets with removable suction cups.

4. Avoid toys that pinch. Many toys have places where small fingers can be pinched, such as slots, holes, or the underside of fenders of wheeled toys. Windup mechanisms should be enclosed to avoid catching fingers or hair. Unwinding keys should not revolve, especially if a child's finger can be inserted into a hole or loop in the key.

Toys involving hinges should not have any scissor-type device for holding lids open. Rocking horses and folding furniture may also pose a pinching hazard.

5. Avoid toys that choke. Very small objects (less than 3/8 inch-diameter) are seldom a problem if swallowed but may have to be removed surgically

if inhaled into the lungs. Larger objects (3/8-to-1 1/4 inch) may be more serious and can even cause death when caught in the windpipe. Parents should be aware of the possible danger from pins, needles, nails, bolts, nuts, marbles, or squeaker mechanisms that may become detached from a toy. Avoid small flimsy balloons, which can be inhaled by a little child as he draws a deep breath for the next blow.

6. Avoid toys that cause eye and ear injuries. Toy headgear such as space helmets or goggles sometimes are made of plastic that shatters easily. If the see-through component of such headgear is curved it can cause eyestrain; it may also cause an accident by limiting or distorting a child's vision. Even magnifying glasses or telescopes become hazardous if a small child happens to look at the sun through them. Clackers are also considered dangerous because of flying chips of plastic or the possibility of the cords breaking.⁷

Hot Wheels cars may seem innocent enough, but the Supercharger, a structure that looks like a roadside restaurant and service station, makes the cars really hazardous. As the Hot Wheels car enters the unit, two battery-powered cylinders with foam disks grab it and whisk it out the other side. The car comes out so fast that its sharp edges may injure a child's eye if he bends over to look down the track and watch.⁸

Some cap and sound guns make more noise than jackhammers. One, the WASP cap gun, if fired in succession indoors, has a continuous noise level 16 times louder than that considered dangerous to hearing for continuous sound. There are noise standards for cap pistols (under 138 decibels are considered safe, but over 158 decibels are dangerous). However, many consider these standards as still unsafe, and feel it is unreasonable to expect children to follow the caution given to keep exploding caps at least one foot away from the ears. 10

7. Avoid toys that cause bumps and bruises. Although bumps and bruises can be caused by any toy, they are most often associated with wheeled or riding toys.

Look for large, sturdy, widely spaced wheels and axles near the extreme ends of the vehicle so that it will not

rear up or pitch forward easily. Wheeled toys with small knobs or other decorations or uncovered handles can cause bruises when fallen on. The bar running from seat to steering shaft on boys' bicycles can also be an added hazard, especially when a boy is learning to ride.

Perhaps one of the most dangerous innovations is the minibike, a twowheeled miniature motorbike often



Some play ovens heat up to 600° inside and 200° outside!

operated by eight-year-olds. It is difficult to handle because of short wheel base, small tires, and often inadequate brakes. Furthermore, because minibikes are required to stay off streets and sidewalks, they must operate on lawns and fields that are often unsuitable for safe riding. The *Consumers Bulletin* presented a survey of 86 minibikes, and concluded they are not safe for children and probably not safe for adults.¹¹

8. Avoid toys that are toxic or unclean. Materials and finishes used for any toy should not cause skin irritation or other allergic reactions or inhalation toxicity from a powdery surface. All toy surfaces should be free from lead.

Toys that can come in contact with a child's mouth should be free from

contamination by rodents or insects, dirt, or glass particles. Prepackaging can help ensure this sort of cleanliness. Stuffed toys, especially some imported ones, have been found to contain cotton stuffing. Even teething rings have been found to contain coliform bacteria, which is an indication of unsanitary handling. Parents should be aware that even toys which are labeled nontoxic (according to the definition of the Federal Hazardous Substances Labeling Act) may contain poisonous substances.

9. Avoid psychologically harmful toys. Imitation hypodermic needles may be considered psychologically harmful. One even comes with a button that reads, "I'll try anything." Play cigarettes come in tempting packages with toy lighters. These items are considered toys. Yet we feel the need to educate our children to the health dangers of both drugs and cigarettes.

Another group of questionable toys are those that make light of mental illness. The names of some puzzles and skill games may cause psychological harm to those who do not succeed.

Monster toys and toys that suggest mutilation of the human body may be psychologically damaging. Examples are balls to bounce that look like human eyeballs, or replicas of human organs to trade, collect, or transplant.

Perhaps the toys that have the most potential for psychological harm are those that glorify war and violence. Even though it may be impossible to say that children who play with guns will grow up into men and women of violence, Edward Swartz suggests that "early belief in violence as an acceptable means of relieving frustrations and tensions breeds an unspoken and unexamined later conviction that violent behavior is acceptable for adults as well." 12

10. Avoid toys that aren't necessary. Parents enjoy giving their children toys. However, the important thing for them to remember is that the giving of toys should never be a substitute for the giving of love and attention. Parents should not spend too much money on a toy. It is easy for parents to become irritated if the child treats an expensive toy roughly. The child may also feel bad if the toy gets

broken and actually may not play very much with it in his attempt to preserve it.

Too many toys may lead to disrespect and carelessness with toys, and when misplaced or lost may not even be missed.

Imagination

Too many of the toys today are designed to do specific things, many times forcing the child from active participation to passive observation. It is no wonder a child soon loses interest. When parents select a toy, they should remember that the more a toy does—a doll that cries, wets its pants, talks, and walks—the higher the chance it can be broken. Furthermore, after all the extras have ceased functioning, it may be a very expensive toy that just sits.

Edward Swartz suggests that "the best toy is one that continually gives the child room to interact with it, to engage his imagination, to develop his skills, to enlarge his own mental and creative horizons." It should be simple enough to involve the child actively in his own play, should not bore or overwhelm him, and should let him develop his personality without twisting it. 13

Parents often select toys that their children pester them to buy because of the high-pressure advertising the children are exposed to by television. Many of these toys are misrepresented and seldom live up to the high expectation the advertisements promise. Parents should be cautious and examine the toy carefully to determine what benefit it will be to their child.

At the opposite extreme are parents who tend to purchase toys that they themselves want or like rather than thinking about what their child needs. An example of this is the father who

wishes his studious son were more athletic and buys him a baseball mitt, This can be interpreted by the son to mean, "Father doesn't accept me as I am and wishes I were different." Parents also tend to purchase toys that are too old for their children, which not only may cause frustration but also may increase the chance of injury. The younger and more adventurous a child is, the more attention must be devoted to a toy's safety. It is virtually impossible to make all toys safe for all children of all ages in all situations. However, prevention of many accidents is a matter of parental supervision in the use and care of toys.

Remember, toys should be fun, but they should also be safe. It is up to you to ensure that your child receives safe toys—toys that will not break easily, burn, cut, puncture, pinch, choke, cause eye or ear injuries, bumps and bruises, are not toxic or unclean, do no psychological harm, and are necessary. Help your child to play safe—not toy with danger.

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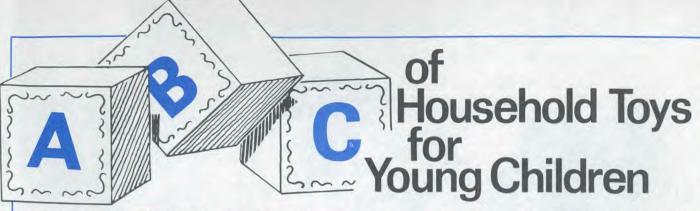
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- A is for Acoustic Tile: Use colored golf tees for a peg board. Put two or three acoustic tiles together and use back side for child to pound small nails into. Use for bulletin board or cover with flannel for small felt board.
- B is for Bottles and Boxes: Empty plastic bottles are wonderful bathtub and squirt toys. Clear plastic bottles can be used to mix different colors of water together. Empty boxes of all sizes are fun. Small ones can be glued together on a cardboard frame and painted. Boxes of different sizes can be fitted inside one another. Large packing boxes can become trains and playhouses.
- C is for Catalogs: Give a child a pretend \$10 and let him take a shopping trip through the toy department section of a mail-order catalog. Cut out different pictures, mix, and then match by categories.
- D is for *Dough:* Mix half flour, half salt with enough water kneaded in to make a dough the children can roll and cut, decorate, and "bake."
- E is for *Egg Cartons:* Are excellent to store small rock or seed collections. Glue into each indentation one item—have children match items and drop appropriate one into the proper hole. Write a numeral in each indentation; let children put appropriate number of beans in each hole. Cut, paste, and paint. Make centipedes and bugs with pipe-cleaner antennas.
- F is for *Findings:* Buttons, beads, rickrack, bias tape, feathers, glitter—anything and everything from your sewing basket—to string, sort, arrange, or paste onto collage creations.
- G is for *Greeting Cards*: Arrange, stand up in rows, color, cut, paste, and sort.
- H is for Hats: For dress up and pretend. Ask community workers (fireman, baker, etc.) for discarded headgear.
- I is for *Inner Tubes*: Three or four inner tubes laid flat on the lawn or the playroom floor become rooms, ponds, boats, or baskets for games of beanbag pitch—or one to roll, tug, and stretch.
- J is for Jell-O: Children can "cook" as soon as they can stand on a stool set up to the kitchen counter. Limit your own interference to providing accurately measured ingredients.
- K is for Keys: Old keys from the house you used to live in or the car you used to drive can make a young child's world more real as he uses them for his tricycle or tries them out in the house doors.
- L is for Ladder: A small aluminum stepladder can be carried around by young children to make their climbing easier. A long-rung ladder in the yard may make into a ramp, a seesaw, or, horizontally, an acrobatic frame.
- M is for *Macaroni*: The shells, stars, wagon wheels, bow ties, alphabets, and other fascinating shapes of modern

- macaroni are fun to paint with a brush or to dye in a bowl of vegetable coloring and paste onto cardboard.
- N is for Newspapers: Cut, paint, paste, tear. Great for papier-mâché—tear in strips and glue on balloons or other objects. Cut out letters or words and paste on paper to make special messages.
- O is for *Old Clothes:* Shoes, dresses, jackets, purses, ties, aprons—all help little boys and girls find a new world as big people.
- P is for Paper, Pens, and Pencils: Colored pens and pencils with scraps of paper can provide hours of drawing pleasure.
- Q is for Quilt: An old quilt supplied along with a card table or a big clothes basket can make a hiding place or tent. Doors and windows can be cut into the quilt to make a realistic playhouse.
- R is for *Rubber Bands:* Pound nails one or two inches apart halfway into a square board. Stretch colored rubber bands around nails to make different shapes. Draw shapes on paper and have child match shapes on the board with rubber bands.
- S is for *Spools:* Save thread spools or reels from used typewriter ribbons. Children can paint, decorate, string and hammer them. Typewriter spools make good wheels for milk-carton trains. Dip end of spool into paint and print its design on paper.
- T is for *Tools:* Real ones! A good hammer, pair of pliers, blunt-pointed screwdriver, a light wrench, and a small saw can be the making of a young carpenter. Make a rope belt to hold tools around his waist, and he is a telephone lineman. Garden tools, especially various trowels, are good sand and dirt toys.
- V is for Visits: Check out your town and neighborhood for new places to visit. The fire station, grocery loading dock, bakery, service station, or even a vacant lot can add to your child's understanding of his world.
- W is for Wallpaper: Ask for free obsolete wallpaper sample books. Books become scrapbooks in which to paste samples of child's artwork. Papered boxes can be made into dollhouses.
- X is for Xmas Wrappings: Fancy paper and ribbons make art projects and also provide wrapping for gifts.
- Y is for Yardage and Yarn: Scraps of yardage and yarn can be used for sewing and collage. Pieces of fabric may be sorted as to texture and color similarities. Make sewing cards by punching holes in cardboard. Sew in designs with yarn.
- Z is for Zoo Animals: Cut out animal pictures from magazines and put on cardboard. Children can build their own zoo with blocks. Animals can be sorted into categories or pasted into an animal scrapbook.



BERNELL E. BALDWIN, Ph.D. and ROBERT E. ROMANELLI, M.A.

The "bears" you meet at work may be more dangerous than the ones you meet in the woods.

■ It was midnight in the most distant camp under the redwoods at Sequoia National Park. My wife and I were in a sleeping bag on the ground, when all of a sudden she struck me in the ribs and said, "Psst, Bernell! What's that?"

A quick upward aim of the flashlight revealed two large eyes staring down at us. There were the mouth and big body of a black bear. I jumped out of the sleeping bag with a yell and the bear took off for the woods.

In a stress situation like this, what happens inside the brain? In the body?

First, the brain recognizes the emergency, because streams of electrical messages rush into it from the eyes, ears, nose, and other parts of the body.

These emergency signals set off an alarm system in the brain advising it to get ready for action. The degree of response in a healthy person matches the seriousness of the emergency.

In other words, the message that came to my thinking centers in the top of my brain was "On your feet, this is a bear!" Amazingly, electrical commands like this get across in a fraction of a second.

Now that the brain is ready for action, it turns up the sympathetic nervous system. This is the system for dealing with emergencies. A reaction such as that to our black bear is known as situational stress.

Sympathetic nervous system

The sympathetic nervous system has its own job to do. It triggers the release by the adrenal glands of two chemical messengers, hormones called norepinephrine and epinephrine, which tell the millions of cells in the body the intensity of the stress. They tune the chemistry of the cells to the level of the emergency, and thus help sustain the blood pressure.

The norepinephrine released from the sympathetic nerve endings does other important things. It makes the lids and pupils of the eyes open rapidly and widely. The blood vessels narrow (vasoconstriction), which tones them up for maximum efficiency. Needless to say, all these reactions helped me greatly in seeing the bear-especially since it was the middle of the night.

There is also an effect on the heart, The beat is quickened, and the amount of blood put out with each contraction is increased from five quarts per minute when one is calm to even ten or more when really excited. This extra blood helps the muscles to work more vigorously. At the same time, the diameter of the arteries that supply blood to the heart itself (the coronary arteries) increases (provided this increase is not prevented by arteriosclerosis, hardening of the arteries) to accommodate the extra flow of blood needed by the heart.

The lungs, too, are called into action. The little air pipes, or bronchioles, open more widely. The rate and depth of breathing are increased so that much more oxygen is delivered to the blood.

The blood vessels inside the muscles open to supply the muscles with more oxygen and fuel. The sympathetic nervous system under moderate stress reduces fatigue in the muscles and increases their efficiency, power, and endurance, especially in the healthy rested person.

Types of stress

Coming down to camp after climbing Alta Peak in Sequoia late one night my wife and I walked along a trail through the redwood trees in the dark. Soon we came near a famous bear tree, where in the night the bears come to scratch the bark and compare their signs.

Suppose we suddenly imagined that behind the next tree, hiding in the darkness, was a big bear. What effect would this have on the body? We would discover that the imagination is able to create its own bears! And the sympathetic nervous system can turn these imaginary bears into serious emotional disease. This is imaginary stress.

There are other significant kinds of stress. What about working with a bear? Or living with a bear?

Let us consider the former case. If you have ever worked for a bear you will remember that you had some of the same symptoms and reactions to the problem that we had with the black bear at midnight. This is occupational stress.

If you live with a bear you probably are suffering from one of the most serious kinds of stress. Serious because it is a bear that does not run readily and is difficult to run away from. This is known as home stress.

What are the complications of stress? Stress can cause stomach ulcers. Stress can be involved in advanced inflammation of the colon (ulcerative colitis). Or a nervous tightening of blood vessels (blood-vessel constriction) which may produce high blood pressure (hypertension). Other things may carry on this high blood pressure so that its original cause is hidden, but the final effect can still be serious.

Because stress can produce narrowing of the blood vessels in joints, it can easily aggravate arthritis. It can change the function of the brain so dramatically that it contributes to fatigue, insomnia, and headache and thus to many diseases of the body.

Controlling stress

What can be done to control the bears of stress? First, there is distance. A bear that is far away or is imaginary is not so frightening as one close by. Remember that the Great Physician once said, "Come ye yourselves apart into a desert place, and rest a while." 1 Millions of people need to rediscover several times a year the calm refreshment, the family happiness and peace, of an unhurried minivacation in nature.

Second, we need wisdom to control stress. It is foolish to tease bear cubs in front of their mother. In other words, do not aggravate people and circumstances. Much modern stress could be reduced by wisdom in dealing with people.

Stress physiologists might well agree that the Golden Rule is still a functional prescription for health. Many a stress monster has been tamed by peanuts served with a little love. If people treated one another according to the Golden Rule, more people would act like human beings instead of like bears.

Using the weapons of stress control constitutes a third approach. Obedience to the laws of health helps build resistance. Occasionally some of the wounds of stress need the attention of a surgeon, but stress diseases more often can be treated by a wise family physician who understands the background and context of the problem.

As the bears of stress grow bigger and more vicious, as the problems that cause stress-both in the family and in society-develop ferociously beyond man's power to control and harness them, ordinary weapons prove insufficient for the conflict. We need super weapons. A man cannot win the great controversy alone. He must turn to the Great Deliverer, who promises him, "I will never leave thee, nor forsake thee."2 Assure yourself that there is One who longs to help you control the stresses of life. "Cast every worry you have upon Him." "He takes care of you."3

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In the Laurentians, everyone knows "Jack Rabbit" Johannsen, He taught a generation to ski and put Quebec's winter sports on the tourist maps

He Blazed a Irail on Skis

By W. J. LEDERER

Two winters ago, while at a cross-country skiing resort in Vermont, I skidded on an icy patch, hurtled over an embankment and spilled, almost upside down, into the deep snow. As I struggled to get upright, I heard a voice shouting from up the trail, "Lie still. Relax."

Down the treacherous path a man was skiing toward me as nimbly as a

Down the treacherous path a man was skiing toward me as nimbly as a jack rabbit. He stopped and looked me over. "You're okay," he said, with a slight Norwegian accent. And as his strong hands helped me up, I took a better look at him. He had a tanned, weather-beaten face, twinkling blue



eyes. He wore no gloves despite the cold. His cross-country skis were oldfashioned, made from hickory, with ancient bindings.

Back at the ski lodge I described my middle-aged rescuer and asked who he was. "Middle-aged!" said the owner of the lodge in astonishment. "That's Herman Smith-Johannsen. He's 94!"

Now, more than ever, I wanted to meet Johannsen to thank him but he'd already checked out, traveling lightcarrying his skis and knapsack-on his way to a hundred-mile ski tour in the Laurentian Mountains. A week later I telephoned his home in Piedmont. Quebec. He was away for a weekcutting a new cross-country trail north of Mont-Tremblant in 20-below-zero weather. Could I telephone him at night? "You can't reach him," said the friend who had answered the telephone. "He's camping in the bush." Not until January 1971 did I meet this remarkable nonagenarian again and energy and vitality.

He was born in Oslo in 1875. At 24, he had a degree in engineering from the University of Berlin, and by 1900 he was on trouble-shooting assignments around the world for a U.S. company. One trip brought him to Canada to sell machinery to the Grand Trunk Railway. He liked what he saw and, in 1907, quit his job, set up his own business in Montreal and began a vigorous outdoor life.

Take February 1919, for example, when Johannsen showed up on skis at a wild, northern logging outpost in temperatures averaging 25° below zero to show a Quebec lumber company how to haul out its logs. The loggers were aghast. "You can't go into the bush like that," they said, pointing to the skis. "You must use snowshoes." But Johannsen insisted. Every day, he was at a different rendezvous deep in the bush-two or three hours before the snowshoed loggers-with a fire going and a meal cooked. At the end of the week the loggers decided that their company should take full advantage of those "crazy long sticks."

Johannsen was to demonstrate time and again that an experienced crossmobiles. Frequently he was offered large sums to teach skiing techniques. His answer always was the same, "What little I know I'll teach you. But why should I be paid for doing something which is fun for me?"

On his ski trips Johannsen frequently went into the distant Indian country. The Cree tribe, admiring his nimbleness, his ability to slalom at high speeds down the sides of heavily wooded mountains, honored him with the title of Okumakun Wapoos-Chief Jack Rabbit. The name stuck, and most Canadians know him today as Jack Rabbit Johannsen.

The 1929 Depression wiped out the then 54-year-old Herman Johannsen as a well-to-do engineer-merchant, so he took his wife Alice and their three children from Montreal to an inexpensive cottage in Shawbridge, Quebec. They worked all summer getting ready for the cold. By fall the house was snug, and a six-month supply of firewood had been cut for the wood-burning stove which heated it. There were no jobs then, and no money. Members of the Johannsen family today recall a predominantly cabbage diet for months on end.

"But," says his daughter Peggy, "we had family spirit. We enjoyed working together. Daddy and Mother were so determined that this was an adventure, not a catastrophe, that we managed the whole thing with more fun than most families." In time, because of their father's instruction, Peggy and her brother Bob became Canadian national skiing champions.

"During the Depression," Jack Rabbit recalls. "I had time for the things which enriched my life-being with my family, cross-country skiing, exploring the wilderness, enjoying nature, and teaching these pleasures to others. The Depression had turned out to be a godsend for me. Our children were almost grown. My wife and I liked to ski together (they did so every winter until she died in 1963 at age 80), to canoe, hike, and climb. We knew we could always manage to eat somehow. I couldn't see any reason for going back into business and wasting my life trying to outsmart competitors in order to get rich. I knew I had to retire so that Alice and I could devote our energies to living. But here's the real secret. Alice and I did not consider solving this-problem or thatproblem as chores. No, quite the opposite. Surmounting difficulties is a game. It's fun. Being fully alive, that's the important thing."

Johannsen kept his word. He never did go back into business. Over the years he took occasional free-lance jobs—survey work for railways, trail cutting, inspecting new ski resorts. As recently as winter 1970, he was out cutting a new cross-country trail north of Mont-Tremblant—this after an energetic summer of mountain climbing in Iceland and Greenland to celebrate his 94th birthday!

In the villages of the Laurentian foothills near his home, everyone knows Jack Rabbit. Older people recall how he would ski into the towns in those Depression years saying, "We don't have jobs and we don't have much to eat. But we have lots of free time. Let's use it for our health and enjoyment."

He organized young people's ski clubs in 23 towns. Weekly ski meets became big events. Some competitors had no money to take trains and buses to the ski races. They skied 10 or 12

miles before competing-and the same distance home after dark. But they lacked downhill experience. The problem was how to get up the hills quickly so that more time could be spent practicing downhill slaloming, Johannsen batted the problem around with his friends. Out of the sessions, Alec Foster of Montreal conceived the idea of a ski lift. With Johannsen's encouragement, he built it in 1932 in Shawbridge-the first real ski lift in North America. It was a jury-rigged affair consisting of an old automobile motor, lines and tackles, and heavy concrete blocks, but it worked. The price to be towed up the hill was five

Father Hector Deslauriers, the priest of Mont-Tremblant Village, was one among many who noticed the cheering effect of Johannsen's ski meets. He decided he would build a ski trail and a ski jump for Mont-Tremblant. "We had no money, no equipment, no knowledge of ski jumping or how to construct things. So I wrote to Herman Johannsen for advice. Two days later he skied 40 miles and arrived in person.

"The ski jump and trail became village projects. Almost everyone gave volunteer labor. Every weekend was a fiesta. The village got its laughter and confidence back and was able to organize and start other community projects. Chief Jack Rabbit Johannsen had demonstrated how a village could be self-energizing. It was like a miracle."

The electrifying effect of Mont-Tremblant's success gave Johannsen another idea. The Laurentian Mountains form one of the best cross-country areas in the world. Tourists would flock there if there were skiing facilities, trails and resorts, he reasoned. Tourism would bring work and money to everyone.

So Johannsen laid out and cut the famous Maple Leaf Trail. This 80-mile loop went through some of the most beautiful wilderness known to man—its southern part only 40 miles from Montreal, then a city of more than a million people. Johannsen laid out the trail so that the gradings and turns allow safe, yet spectacular, cross-country skiing. For this feat, the highest peak in the Laurentians (3150 feet) was

named after him. The trail passed by all possible resort locations, was close to farmhouses and within easy skiing distance of railway stations (there were no highways in that area then).

Herman Johannsen's Maple Leaf Trail, begun in 1932 and completed in 1935, brought a new industry to the people of Quebec.* Says Stanley Ferguson, who as a boy helped build the trail, and today is general manager of Mont-Tremblant Lodge, "Herman Johannsen did much more than cut the Maple Leaf Trail-which was a tremendous undertaking. His sense of joy, his generosity, his zest for the outdoors spread to everyone in the Laurentians. Our people had such a good time skiing that they knew how to be hosts to visitors coming for the same pleasures. Today, more than a million tourists come to the Laurentians every year. They owe thanks that they can to Johannsen."

Because young people enjoyed helping Jack Rabbit build trails, they flocked to him for other education in nature. As a result, for 40 years, he freely gave instruction on how to enjoy the wilderness, how to be selfreliant, how to ski and canoe and how to survive with only flint and steel, a knife, a bit of wire for a rabbit snare. For those girls and boys who could not come to his home, Johannsen would ski from one village to the next to make certain everyone had an opportunity to learn. In his 65th year (1940) he skied a total of 1258 miles on his teaching rounds. Why did he keep track of the mileage? To demonstrate to the Canadian Army that he could still act as a ski instructor!

That same energy and persistence took Johannsen back to visit Norway when he was 93. He had no money. "But why should that stop me," he said to his daughter Alice. "There's always a ship which can use a good sailor." He went to Montreal, to a Norwegian ship, M.S. Topdalsfjord, and asked the boatswain for a job as a seaman.

^{*} Although there are trails bearing this name today, the main Maple Leaf Trail fell into disuse in the 1940's as the area became more developed. Route 11 and the new Laurentian Autoroute cross it and, in places, follow the path that Johannsen originally laid out.

"Bosun," said Johannsen as he tells it today, "I want to work my way to Norway. I've been to sea before, both on deck and in the engine room. I know about rigging. I can splice wire rope and secure deck cargo. Can I be of any help to you?"

After demonstrating his skill, Johannsen became the bosun's mate. Twelve days later when he disembarked in Oslo, the crew members lined up, shook his hand. One seaman said, "Just having him on board made it a happy and memorable trip. If he ever wants his job back, we would all welcome him."

When I went to Piedmont to see Jack Rabbit in February 1971, he was on crutches. Seeing my surprise, he explained, "I slipped on the ice at my daughter's on New Year's Eve and broke my leg. It's a nuisance. How can a fellow ski in this condition?" The doctor had told him he'd have to cope with a permanent limp. "You're almost 96. Your bones are brittle. Count yourself lucky to get around without a wheelchair."

"I didn't hear what he said," Johannsen said, winking. "I'm a little deaf and my hearing aid was turned off."

At noon we walked the mile to the post office—with Jack Rabbit using a cane instead of his crutches. I offered to drive, but he refused. Patting his leg, he said, "My friend here and I have to learn to walk again before we can ski. And I'm determined to be in shape to ski in Norway next year."

He smiled. "A fellow can do anything if he takes care of himself. Daily exercise is important. Even city people can manage it by walking to their offices, their schools, or stores. Never ride if it is possible to walk. Climb stairs, don't use elevators. Eat only if hungry, never from habit. If you look after your body, your body will look after you."

In April I drove north to visit Jack Rabbit again. The snow in Vermont where I live had melted. But as I turned off Route 11 from Montreal to reach Piedmont, I saw snow patches in the wooded hills behind Jack Rabbit's house. It was almost as if these few square miles had received special dispensation from Old Man Winter.

As I drove around the last bend,

Jack Rabbit was just coming out of his house. He had his knapsack on his back and he carried his skis. He walked carefully, feeling his way, making certain he did not slip on the thin, crusty snow.

Unnoticed, I stopped the car and watched,

Placing his skis parallel on the snow, he supported himself on his ski poles. He stepped on the skis and secured his boots to the bindings. Gradually he shifted his weight from the poles to his legs. First to his good leg and then to the other. Satisfied that his leg would hold him, Chief Jack Rabbit Johannsen, aged 95, began gliding slowly forward over the few inches of remaining snow. Eventually he climbed the slope to the woods, glided down to his front door and went inside.

I drove to the house but before I reached the front door, it banged open. There stood a happy vital man, "Welcome! Welcome!" he shouted—and led me to a large map of Norway on the wall next to his Doctor of Laws certificate and a plaque from the Skiing Hall of Fame. "Now here," he said, pointing to an area north of Oslo, "is where we will ski next Easter." Those plans haven't changed.



Some ideas on keeping the "happy" in happy holidays.

HAPPY



HOLIDAYS

By LUCILE JOY SMALL, R.N.

"Christmas is coming!" Magic words were those in our childhood. How we hoarded our money and pored over the mail-order catalogs—yes, dropped hints regarding our own wishes, tried to learn the wants of each member of the family, and thrilled at the evidence of secrets, secrets on every side.

My first memory of participation in this wonderful world of Christmas was when I had a new lead pencil to give to each member of my family-four of them! How I savored the secrecy. I had my own secrets now, and I had to let the family know that at last I, too, had attained the status of secret holder. My pride of status was almost more than a three-and-a-half-year-old could bear-until the day I was crossing the room where the family was assembled, the precious pencils carefully concealed in my apron, when right in the center of the floor with the whole family watching I dropped them all!

I never lived that down. Two brothers saw to that, and many were the times when I was reminded that secrets and I could not coexist.

There would be the day when every one of my dolls would mysteriously disappear. They would, of course, reappear in clean, mended, or new clothing, with all missing parts in place, on Christmas Eve.

Christmas shopping was all done by mail order. It was the fun way to shop. When that big package would come, excitement mounted to almost unbearable proportions, maintaining that level for weeks. There were Christmas cards, Christmas boxes to receive and to send, Christmas decorations, Christmas programs to practice for, and the Christmas goodies, especially the homemade candies. Christmas and candy were words that went together like snow and ice and thunder and lightning and potatoes and gravy. In

those carefree days I did not even see the shadow (though I experienced it often) of some other words that inevitably followed—colds, sore throats, headaches, tummy-aches, and later, dental problems. I had them all, severe and frequent, but the principle expressed by an ancient wise man, "The curse causeless shall not come," was unknown to us. We "caught" colds, we "got" sick, and holes "came" into our teeth.

I was well into my forties before I learned that it was possible for me to go for a year without a cold. I learned the art of ironing the formidable pile of family handkerchiefs (hankies made wonderful Christmas gifts!) that came out of the weekly wash. Paper handkerchiefs were unknown to us. Our flatirons were heated on the kitchen stove.

Now back to the Christmas candy—chocolate fudge, panocha, divinity, popcorn balls—we did not stint either in their preparation or their consumption. We purchased our sugar in one-hundred-pound bags, and Christmas really made a dent in the bag.

Fortunately for us, the Christmas goodies included an orange for each member of the family. I was a grown woman before I learned that oranges could be sold in any way but by the dozen; bananas likewise, but the bananas were eaten with sugar and cream or used in molded gelatin. Apples came in boxes or barrels and were a little more plentiful. The assorted nuts helped nutritionally, although many of them found their way into the candy, and many more were consumed at any and all hours outside of mealtime. Ice cream was easily available at Christmas time. No problem in finding ice in North Dakota in December!

Before Christmas week was over, the happiness would begin to blur for me.



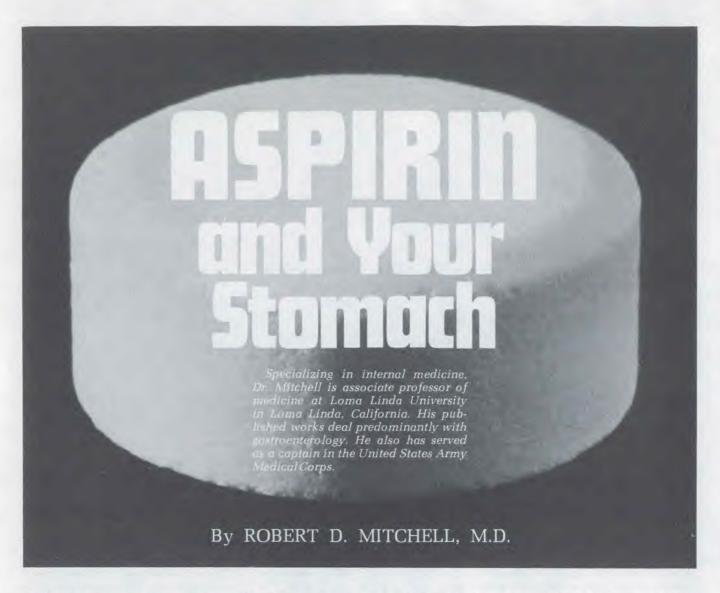
Probably the reason was that I used less restraint in consuming the goodies than other members of the family did. Sore throat, stuffy nose, headache, and upset tummy can kill a lot of joy, and a lot of joy got killed.

I would not be telling these morbid tales were it not for the fact that many people, perhaps the majority, even today, display more errors in diet and drink during the holiday season than they do at less-festive times. Could it be that the high number of sniffly babies found in clinics, the school absences, and the work absenteeism after the holidays are an indication of this erroneous diet? Must the traditions that take more joy from life than they contribute be maintained merely for tradition's sake? The doctors and dentists could survive without the additional business.

Holiday meals planned and prepared in advance as much as possible will take off some of the pressure that comes from the many extras to be done at this time of year. The special treats, usually abundant during the holidays, should be considered in planning the meals—not included as afterthoughts. With preplanning and forethought it is much easier to have regular meal-times and avoid between-meal snacking and overeating.

One of the happiest families I know, who get as much joy out of the holiday season as any, eat very few sweets and those at mealtimes only. They don't stuff themselves with the extras, all too common in these days of plenty.

Training a family of children in appetite control takes love and patience and thought and care—and a good example—but it prevents many of the problems that would develop later, long before their time. It saves nervous energy, doctor and dentist bills. It puts glow and sparkle into the HAPPY HOLIDAY SEASON.



Mark Connor, a 58-year-old successful real estate broker, was admitted to the hospital for the third time because of weakness and fatigue. Previous hospital admissions had found him to be anemic, and all evidence pointed to the loss of blood from the stomach and intestines as the reason, but extensive investigation failed to reveal the exact cause for this bleeding. He had had black stools occasionally but had never vomited blood or passed bright-red blood in the stool. However, each time Mark was admitted to the hospital, chemical tests showed that blood was present in his stools, but the blood disappeared by the time he went home. He had been treated with antacids and an ulcer-type diet in the hospital and sent home on this regimen. But as soon as he got home his troubles began again.

Finally his doctor sat down with him

and went over every detail of Mark's day-to-day life at home. Mark owned up to a little social drinking in the past, but he had stopped it since he began losing blood. He was taking a prescribed sedative occasionally, but no other medications.

"What about pain medications?" asked his physician.

"None," said Mark.

"Do you ever take anything for sleep?" the doctor continued.

"No sleeping pills," replied Mark, "but if I take two aspirins at bedtime I sleep much better." He considered this amount of aspirin so insignificant that he had failed to inform his physician that this was his regular routine. Mark never took aspirin while in the hospital.

His physician explained that even a small dose of aspirin could be very important in relation to his bleeding and advised him to discontinue all aspirin. For the next several years his blood count remained normal without further indication of bleeding or anemia.

Tons of tablets

Aspirin (acetylsalicylic acid) alone or in combination is present in almost all pain tablets, headache remedies, and some stomach preparations advertised to be taken for concurrent headache and stomach upset. Aspirin is widely used throughout the United States, and literally tons of aspirin tablets are consumed daily. Some aspirin is dispensed on prescription and some is used on medical advice for certain illnesses, but the drug is sold mainly over the counter for use by anyone. Although many people use aspirin apparently with no harm, it is not equally well tolerated by all people.

Some people avoid aspirin because they have learned by experience that it will cause "heartburn," "indigestion," "dyspepsia," or other distress in the upper abdomen. Some seem to tolerate aspirin better when combined with antacids or other alkaline compounds or even when taken with milk or food.

Research physicians studying the aspirin problem have confirmed some of the toxic effects of aspirin, one of which is illustrated by Mark's troubles. Although aspirin may cause many undesirable effects, this article deals primarily with its effect on the gastrointestinal tract. One study was made on patients in whom the stomach was observed through a gastroscope before and after aspirin was taken. The gastroscope is a special kind of stomach tube which transmits light into the stomach and contains a lens system which allows the physician to inspect visually the esophagus, stomach, and with newer instruments even the area beyond the stomach, which is the duodenum. Many but not all patients after taking aspirin are found to have in the stomach, reddened, bleeding, or shallow ulcerated areas, called acute erosive gastritis. At times it appears that the reddened areas surround particles of undissolved aspirin tablets adhering to the stomach lining.1 Other studies suggest that aspirin is more toxic in the acid environment of the stomach. but is much less injurious if taken with an alkaline solution.2

It is difficult to prove that aspirin actually produces chronic peptic ulcer, but on the basis of clinical observations most physicians believe this to be true. By no means are all ulcers due to aspirin, but in some cases at least through the use of this agent, ulcers occur for the first time or recur in people who are subject to peptic-ulcer disease.

The presence or absence of symptoms while a person is taking aspirin does not tell the whole story. Some people have disturbing symptoms but show no gastritis or ulcers. Others who are symptom free have abnormal changes in the stomach wall.

Bleeding

A more serious problem, which is

well documented, is the occurrence of heavy bleeding associated with the use of aspirin. A group at the Mayo Clinic reported that bleeding from puncture of the skin was prolonged by aspirin in all of fifteen patients studied before and after taking the drug. In twelve of the fifteen the blood loss was four times greater after using aspirin than it had been before.

Loss of blood from the gastrointestinal tract can be measured by attaching radioactive chromium to the patient's red blood cells, then collecting their stools and measuring the amount of radioactive material present. In another study using the chromium-labeling techniques healthy people without aspirin were found to lose from the stomach and intestines an average of six drops of blood per day. After eight aspirin tablets were used daily, the average blood loss increased sevenfold, to more than a half teaspoonful. The average blood loss was reduced by taking aspirin as a solution so that there were no particles of aspirin in the stomach.

Still another study showed that blood loss was due not entirely to the direct contact of aspirin on the stomach lining, but occurred when aspirin was given directly into a vein.³

From these and other studies it appears that regardless of how aspirin is taken, it may affect the clotting mechanism. In addition, aspirin in tablet form may irritate the stomach lining and cause additional blood loss from these irritated areas. Similar but less severe effects are produced by other salicylates as well as phenacetin, another common ingredient of pain tablets.

The problem of internal bleeding is even greater for someone who has a disease that is likely to cause bleeding, such as an active ulcer, active inflammation of the esophagus, stomach, duodenum, or other area in the gastrointestinal tract. The presence of a polyp, a tumor, or an abnormal blood vessel farther on down the intestinal tract may also be a source of bleeding. It has been shown that aspirin increases the tendency to bleed freely from these diseased areas and a person taking it may greatly endanger his life.

In a study of this problem published several years ago, 52 per cent of the

patients admitted to a hospital with massive bleeding from the gastrointestinal tract had taken aspirin within three days prior to onset of the bleeding. In comparison, in a group of patients similar in age and sex hospitalized for other reasons, only 14 per cent had taken aspirin within 72 hours before admission.

Stomach acid

The higher amounts of acid usually present in the stomach of ulcer patients appear to enhance the irritating effect of aspirin, or more properly stated, aspirin permits increased damage by the acid in the stomach. Studies by Dr. Davenport, a physiologist at the University of Michigan, suggest that aspirin breaks down the protective barrier in the stomach lining and allows acid to come directly in contact with the stomach lining cells, thus producing the damage.⁵

Although aspirin is a good medicine for certain conditions when used under a doctor's order, it is not a medication that should be used indiscriminately. If you have no stomach or bowel disorder or bleeding tendency, the occasional use of aspirin for relief of pain is permissible, but you should not use it regularly unless prescribed by your physician, who knows your medical history. If you do have a stomach disorder or stomach symptoms, you should never use aspirin, but should discuss this problem with your physician to ask whether he can prescribe a medication to be used in place of aspirin or aspirin compounds for occasional relief of pain. In no case should a person use aspirin for relief of abdominal pain without the advice of his physician. Fortunately, there are certain nonaspirin-containing pain remedies that can be used in these circumstances. By being careful about taking nonprescribed medications, you may be able to avoid possible serious side effects of these medications.

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recipe of the month Recipes the but good f

Recipes that are not only good, but good for you.



By Lydia M. Sonnenberg



Lydia Sonnenberg is associate professor of nutrition in the School of Health, Loma Linda University, Loma Linda, California. Possessing more than theoretical knowledge, she was for sixteen years director of dietary services on the Loma Linda University campus. No novice at writing and no stranger to LIFE AND HEALTH, she wrote the dietitian's page of this journal for five years, 1960 to 1965.

Holday Entertaining

Next-door neighbors visit one another in a spirit of festivity. Aunts and uncles and cousins come for dinner and spend the day. The college kids are home again, planning parties and gaily wrapping gifts to exchange. People are making plans for holiday times together.

Although the critics decry the short-lived joys, the rushing shoppers, and overemphasis on the dollar value of Christmas, the basic joy of the season remains—being with family and friends, sharing simple hospitality.

Because the Christmas season can be both a lonely as well as a happy time, bless someone else this holiday season by including in your plans some folks you know who do not have a family to enjoy. Savor the real joy of the season and entertain in a relaxed, friendly way, perhaps roasting chestnuts in the fireplace or popping corn and munching on crisp, refreshing apples.

Having a buffet supper is a congenial way to entertain a crowd. Set the mood by your appointments. Part of the success of the meal depends on the attractiveness of the buffet table. Elegant service is not necessary, but a few

charming serving pieces, such as chafing dishes for entree and vegetables, pretty trays or platters for salads and desserts, and a Lazy Susan for relishes, make your serving easy and gracious. A centerpiece you created yourself becomes a conversation piece, adding interest and artful novelty to the meal.

Now for the menu. The main course might feature—

Creamed Chow Mein
on Steamed Natural Rice
French-cut String and
Lima Beans With Pimiento
Stuffed Tomato Star
Assorted Vegetable Relishes
Whole-Wheat Dinner Rolls
and Margarine

Arrange the dessert buffet with a selection—

Trays of Fruit
Individual Pieces of
Lime-Pineapple Pie
Assorted Cookies
Nut-stuffed Figs
Hot Cereal Beverage
Chilled Cranberry Cocktail

Lure your guests into a tasteful display of tantalizing choices in combined and colorful seasonal and unseasonal fruits harmoniously balanced for flavor and fragrance. You will conjure up visions of Christmases past when you serve nut-stuffed figs. This traditional fruit is first simmered in orange and lemon juices to give it that nostalgic holiday flavor. The eye-catching soft-green lime pie appears light enough to float but boasts a solidly haunting flavor that keeps your guests guessing what fine ingredients you put together. The children will go for handfuls of favorite peanut-butter cookies, if you let them.

Creamed Chow Mein

- 1 13-ounce can chicken-style Soyameat*
- 1 1/4 cups celery, sliced diagonally
 - 1/3 cup green pepper, chopped
 - 1/4 cup green onions, sliced
 - 3 tablespoons margarine
 - 2 tablespoons flour
 - 2 cups milk
 - 1/3 cup mushrooms
 - 1/3 cup pimiento

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- 1 tablespoon chickenlike seasoning
- 1/3 cup cashew nuts, toasted Accent and salt as needed.
- Cut Soyameat into small-to-medium bite-sized pieces.
- 2. Lightly steam celery, green onions, and green peppers in about 2 table-spoons water. *Do not overcook*. Celery should still be *crisp*.
- 3. Make white sauce of margarine, flour, and milk. Add seasonings.
- Combine all ingredients. Heat to serving temperature.

Serves 8

* Vegetable protein meat analogue (substitute). Meat analogues are made by General Foods Corporation, White Plains, New York; Loma Linda Foods, Arlington, California; Worthington Foods, Inc., Worthington, Ohio, subsidiary to Miles Laboratories, Elkhart, Indiana. These products are available in a growing number of markets. Meat analogues other than the Soyameat may be used, if desired.

Stuffed Tomato Star

- 8 medium-sized tomatoes, peeled
- 8 ounces cream cheese, softened
- 1 cup cucumbers, finely chopped
- 1/4 cup stuffed olives, minced
- 1/4 cup nonfat milk

Salt as needed

- Turn tomatoes stem end down. Cut each one not quite through in 6 equal sections, spread apart, and sprinkle with salt.
- 2. Blend remaining ingredients carefully.
- Fill tomatoes with cheese mixture. Chill.
- Serve on bed of curly endive or other crisp salad greens.

Serves 8

NOTE: As a budget saver, thick slices of tomato may be topped with filling instead of using whole tomatoes.

Lime-Pineapple Pie

- 1 cup evaporated milk
- 1 cup (8 ounces) crushed pineapple
- 1 package lime-flavored vegetable gelatin
- 2 tablespoons lemon juice Sprinkle of salt
- 1 9-inch graham-cracker crust
- Chill evaporated milk in small bowl of electric mixer in freezer.
- Bring pineapple to boil. Add vegetable gelatin, and stir until dissolved. Add salt, and cool mixture in refrigerator until syrupy.

- Combine lemon juice and chilled evaporated milk. Beat at high speed until stiff
- Pour whipped milk over pineapple mixture and beat on slow speed until nicely blended. Pile into crust and chill about 2 hours or overnight.
- Garnish with crumb mixture from crust.

Serves 8

NOTE: Several drops of green vegetable coloring enhance the color of the filling.

Graham-Cracker Crust

- 1 2/3 cups graham-cracker crumbs 1/4 cup softened margarine
 - 2 tablespoons sugar
- 1. Thoroughly blend together grahamcracker crumbs, margarine, and sugar.
- 2. Pour mixture into 9-inch pie plate. Press firmly into an even layer against bottom and sides of plate (the easy way is to press crumbs into shape with an 8-inch pie plate).
- Bake in moderately hot oven (375°)
 minutes. Cool.

NOTE: Breakfast cereal flakes may be substituted for graham crackers, if desired.

Peanut Butter Cookies

- 1/2 cup crunchy peanut butter
- 1/4 cup vegetable oil
- 1/4 cup brown sugar
- 1/4 cup honey
 - 1 teaspoon vanilla
- 1/4 teaspoon salt
 - 1 cup plus 3 tablespoons whole-

wheat pastry flour

- 12 maraschino cherries (optional) '
- Combine peanut butter, oil, brown sugar, honey, vanilla, and salt. Stir until well mixed.
- Add whole-wheat pastry flour, and mix until blended.
- Form into small balls the size of a walnut.
- 4. Place on oiled cooky sheet. Flatten with fork.
- Top each cooky with one-half cherry.
- Bake at 350° from 8 to 12 minutes until lightly browned.

Yield: 2 dozen cookies.

Nut-stuffed Figs

- 1 12-ounce package dried whole figs
 - 1 cup orange juice
 - 2 tablespoons lemon juice
 - 1 teaspoon grated lemon rind
 - 1 tablespoon sugar
 - 24 pecans
- 1. Remove stem end from figs.
- Combine orange juice, lemon rind and juice, and sugar.
- Pour over figs in saucepan and heat to boiling.
- Cover and simmer until fruit is tender—about 45 minutes. Cool.
- Insert blunt-pointed knife in stem end of each fig to form pocket. Fill each with a pecan half.
- Let dry overnight. Lightly sprinkle with powdered sugar, if desired.

Yield, 24.

NUTRITIVE VALUE	Creamed Chow Mein	Stuffed Tomato Star	Lime- Pineapple Pie With	Peanut Butter Cookies	Nut- stuffed Figs
	(Approx. 2/3 cup)	(1 each)	Graham Cracker Crust	(1 each)	(1 each)
			(1/8 of 9" pie)		
Calories	198	165	240	90	56
Protein (gm.)	10.2	4.7	5.0	2.1	0.8
Fat (gm.)	13.2	12.1	8.2	4.7	1.1
Carbohydrate (gm.)	10.4	8.8	35.9	10.0	12.0
Iron (mg.)	0.5	1.1	0.6	0.5	0.5
Phosphorus (gm.)	0.093	0.076	0.104	0.040	0.17
Calcium (gm.)	0.109	0.060	0.095	0.008	0.021
Vitamin A (I.U.)	718	1823	358	_	30
Thiamine (mg.)	0.060	0.103	0.046	0.070	0.033
Riboflavin (mg.)	0.161	0.143	0.160	0.015	0.020
Niacin (mg.)	1.1	1.0	0.5	1.1	0.15
Ascorbic acid (mg.)	11.0	36.0	4.0	_	3.0

Health High Lights

Re prepared!

Heavy liquor drinking causes hypoglycemia

or thousands of years it has been known that large amounts of alcohol can cause coma and even death. But recently it has been found that the alcoholic coma is sometimes due to low blood sugar and that giving glucose by vein may be lifesaving.

Between 1941 and 1968 a group of 120 people were studied whose blood sugar was low (hypoglycemia) because of drinking alcohol. Most of them went into coma within six to twelve hours after drinking, and several died. Many in the group were malnourished alcoholics.

Alcohol may cause low blood sugar, even in normal people, especially after prolonged fasting. A three-day fast causes a more rapid drop in blood sugar than an overnight fast. Normally the liver stores blood sugar or glucose as glycogen and releases it as needed. When necessary, fat and even protein may be changed to blood glucose. Alcohol interferes with this function of the liver and may completely block the conversion of fat and protein to blood sugar. This is why blood sugar levels drop after drinking and hypoglycemia may result.

A private pilot flying his own plane over an airport with which he was very familiar, stalled and crashed after two erratic passes. Study of his blood immediately after the accident showed a high level of alcohol and an extremely low level of blood sugar (glucose). According to his family, he hadn't eaten any food for eighteen hours and very little for the twenty-four hours preceding the accident. An autopsy showed his stomach was completely empty!

He is now one more statistic adding to the evidence that beverage alcohol and normal body function are not compatible.

For Further Reading

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Drug-abuse hazards

Major disorders are caused by the self-administration of narcotics

and other drugs directly into the veins. Drug contaminants and nonsterile techniques are largely to blame. Endocarditis or inflammation of the valves on the right and left sides of the heart is common as is pneumonia and abscess formation in the lungs and elsewhere. Infections occurring on the valves of the heart throw off clumps of bacteria that form septic emboli (an embolus is an object that is carried by the blood and lodges elsewhere). These may lodge in the lung, if coming from the right side of the heart, or may go to any organ of the body when coming from the left side of the heart. Germs such as staphylococci, streptococci, and fungi are introduced by nonsterile techniques. Drugs are frequently adulterated with inert fillers such as starch or talcum powder. These may produce emboli that plug the lungs and cause lung abscesses. Filtering through cotton is not adequate. Fourteen per cent of all intravenous drug abusers had one or more serious complications. (See Richard B. Jaffe, and Edgar B. Koschmann. Amer. J. Roentgen, 109:107-120,

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Notice

Inadvertently, the author's name was omitted from an article appearing in our November, 1972, Issue. "This Chemical World and Your Skin" was written by Donald R. Shasky, M.D.

Send your inquiries to: Your Health Questions Answered. LIFE AND HEALTH, 6856 Eastern Avenue NW., Washington, D.C. 20012. Please enclose stamped, addressed envelope for your reply. Names will be withheld on request.

Here are plain answers to some of your health questions.

Cataracts

Q. When I went to have my glasses changed, the doctor said I have cataracts growing in both eyes and that in six months these cataracts will have to be removed.

Does reading make the cataracts grow faster or is it just diabetes that makes them grow? S. M., New Hampshire.

A. It is unlikely that reading will affect your cataracts, either in making them worse or better. People who have diabetes, especially if uncontrolled, are more likely to have cataracts than are people who do not have diabetes.

Masturbation

Q. I have been masturbating since I was sixteen years of age. I am now twenty-one. Is it harmful? Will it affect fertility and brain work? Name withheld.

A. In the first place, masturbation requires a considerable expenditure of nervous energy. The act of masturbation is followed by a deep letdown experience during which the person is "stupid" because his nervous energy is now in short supply. This stuporlike condition makes him less than normally able to perform his usual activities and causes him to be somewhat depressed.

Second, the excessive expenditure of vital energy in masturbation tends to reduce a person's general resistance to disease. The effect is similar to that of becoming excessively tired or of losing sleep. One's good health depends on having an abundance of vital energy in reserve. Masturbation tends to deplete this reserve and, therefore, makes the person more than normally susceptible to illness.

Third, masturbation has an unfavorable effect on the personality. Masturbation usually is practiced in secret, and the person feels somewhat humiliated

because he does not want others to know of his having used this means of obtaining personal pleasure. We might say that it is a substitute for the genuine pleasure a person should experience, once he is married, from the exercise of legitimate husband-and-wife relationships. It thus makes a person less able to adjust satisfactorily in normal social contacts and social activities. It handicaps him in his own self-appraisal and in the fortitude with which he looks forward to ideal marriage and establishing his home.

You asked, Can masturbation affect a man's fertility? No, I do not know of any evidence that masturbation makes a man less able to become a father, except as it may reduce his general vitality, as mentioned above.

By reducing one's vitality and resistance to disease masturbation can make a person more susceptible to lifeshortening illnesses.

Another of your questions was, Can masturbation affect a man's "brain work"? Yes, masturbation has the effect of making a person less alert. Especially when practiced repeatedly, it reduces mental efficiency.

Overcoming the habit of masturbation is not easy. The sexual reflexes when once activated in a person's life experience are powerful reflexes that clamor insistently for expression. It takes more than a mere determination to stifle the persistent desire. Not just determination but a quite completely different pattern of life is necessary. I suggest the following:

- 1. Avoid periods of solitude.
- 2. Keep busy with activities that demand the total attention. Plan deliberately to become physically tired by the end of the day so that sleep comes quickly and is deep.
 - 3. Rise early and promptly in the

morning and engage in active physical exercise.

- 4. Avoid thoughts, daydreams, pictures, and conversations relating to matters of sex.
- 5. Avoid stimulating foods (highly seasoned foods and sweetbread types of meat).
 - Avoid tobacco and alcoholic drinks.

Do not expect that following such a program will enable you to discontinue the habit of masturbation once and for all. There will probably be times when you will lapse back into the old habit. Do not condone this in yourself-neither let it cause you to become discouraged. Consider that you are making progress if it has been longer this time than previously since the habit overtook you. When you experience the urge to practice masturbation, deliberately try to postpone the urge second by second. Say to yourself, I think I can hold out at least another five seconds. Then try for a second period of five seconds. Then say, "If I can hold out a few more seconds, the urge may weaken." By thus delaying your response to the urge, a few seconds at a time, the desire will eventually weaken and you have gained a victory.

Harold Shryock, M.D.

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health high lights

Alcohol sponging and low blood sugar

t is well-known to physicians that alcohol taken internally frequently puts the skids under blood sugar. Now, Dr. Moss, a pediatrician from Englewood, New Jersey, reports the case of a six-month-old boy who developed a fever of 105.° The family physician advised alcohol sponge bathing to lower his temperature. The parents, apparently deeply concerned over the seriousness of the situation, did all in their power to improve it-during the next thirteen hours they applied a pint and a half of ethyl alcohol as a sponge bath! When the child began to act strangely, rolling his head and his eyes, he was taken to a hospital. The pediatrician who checked him found his blood sugar (glucose) was extremely low as a result of inhaling the fumes of alcohol. Immediately glucose was given by vein. The boy recovered quickly and without complications. (See Malcolm H. Moss. Pediatrics 3:46, 1970.)

Old problem, new approach

n managing the diets of diabetics, the Intake of carbohydrate (sugars and starches) has to be limited and carefully regulated.

Dr. John Brunzell, of the VA Hospital in Seattle, Washington, and associates report in the New England Journal of Medicine that a diet high in carbohydrate and low in fat improved the glucose tolerance (this is the ability of the body to control sugar in the blood) and that the level of fasting blood sugar decreased in the twenty-two diabetics studied. Another advantage was the lower cholesterol level found in the blood. Just how this is accomplished is not understood, but the results suggest that further study be done on this new dietary approach to the problem of diabetes. (See J. D. Brunzell, et al. N. Eng. J. Med. 284:521-524, 1971.)

Winter peril

ach winter, because of exposure to cold, a tragic crop of deaths occur. Some persons may be exposed to cold air or snow, while others may fall into icy water,

When the body temperature drops excessively, the heart stops beating and the person loses consciousness. The most important and practical measure is to prevent this dangerous loss of heat, so the person should be insulated by being wrapped in whatever materials are available. Moderate external heat may be applied.

Since serious problems can result from severe drops in body temperature, competent medical help should be sought immediately. The heart rate, the rate of breathing, the body temperature when possible, and the circumstances of the exposure to cold should be relayed to the physician.



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