

# The Sad Story of MaryWanna



or  
**How Marijuana  
Harms You**

**By Peggy Mann**

**Illustrated by Naomi Lind**

## About the AUTHOR

Peggy Mann has published over 35 books, most for young readers. Three have been dramatized on national television. *My Dad Lives in a Downtown Hotel* was an ABC After School Special and was nominated for an Emmy as the best children's drama of the year. *There Are Two Kinds of Terrible* was dramatized as a two-hour CBS-Made-for-TV-Movie, starring Ricky Schroder, and drew the highest ratings of the week. *The Street of the Flower Boxes* was an NBC Special and won a Peabody Award. Her book, "Gizelle, Save the Children!" was selected by the American Library Association as one of the eight non-fiction books on their 1981 Young Adult Best of the Year list. Her book, *Twelve is Too Old*, was the only book for young readers selected by the Library of Congress for their "Read More About It Program on Drug Abuse."

Ms. Mann has also written for most of the major magazines. Since 1978 she has specialized in writing about drug abuse and she has written more for the general public on the health hazards of marijuana than any other writer in the world. She has written numerous articles on this subject for magazines including *Reader's Digest*, *Ladies' Home Journal*, *Family Circle*, and *Woman's Day*. Her *Reader's Digest* article, "Marijuana Alert: Brain and Sex Damage," drew more orders for reprints in a shorter space of time than any article the *Digest* has published in its history; over 3,000,000 orders in 11 months.

She has also written five books about marijuana: *Marijuana Alert*, with a foreword by Nancy Reagan (for adults); *Pot Safari: A Visit to the Top Marijuana Researchers in the U.S.* (for teenagers); *Twelve is Too Old* (a novel on the "pot scene") for junior high or middle school students; *Pot Why Not: Your Questions Answered by a National Expert* (for grades four through six); and *The Sad Story of Mary Wanna*.

On February 25, 1985, Peggy Mann was honored at a first-of-its-kind U.S. Congressional reception as "our nation's foremost drug abuse prevention author."

## About the ARTIST

Naomi Lind is a well-known artist and designer; head designer of Boccio Design Studio in New York City. She has illustrated books for children and adults for Doubleday, Grosset & Dunlap, and other publishers (including the Peggy Mann's book *Arrive Alive: How to Keep Drunk and Pot-High Drivers Off the Road*, for Woodmere Press.) She has also done magazine illustrations, album covers and promotion brochures.

Woodmere Press  
New York, New York

# **The Sad Story of Mary Wanna**

**or  
How Marijuana  
Harms You**

**By  
Peggy Mann**

**Illustrated by  
Naomi Lind**

Copyright © 1988, Peggy Mann

Woodmere Press

Box 20190, Cathedral Finance Station  
New York, NY 10025

No part of this book may be reproduced in any form without written permission from the publisher.

Printed in USA  
ISBN 0-942493-04-4

Dear \_\_\_\_\_:

All of the small black-and-white photographs in this book are real pictures taken by scientists using a special mixture of a microscope and a camera. It can, for example, take a picture of a brain cell which is so tiny you couldn't even see it under a regular microscope. It magnifies the brain cell thousands of times—and then snaps its picture, so we all can see it. And, what's more, we can see what is happening to the brain cell. These black-and-white pictures are called photomicrographs.

The pictures are done by artist Naomi Lind. She wanted you to have fun looking at them or coloring them, so she used her imagination. For example, cannabinoids don't really look like horrid little creatures from outer space.

But if you want to know what the cannabinoids *do* to you—read the words. They, like the black-and-white pictures, tell exactly what happens.

And, at the back of the book, Peggy Mann has written more about this so an older person can answer questions you may have.

Sincerely,

A handwritten signature in cursive script that reads "Mary Wanna". The letters are fluid and connected, with a prominent loop at the end of the name.

Mary Wanna



**Hi, my name is Mary Wanna.  
At least I'd like you to call me that!  
Most people call me Marijuana.  
I hate that name because—**



**It reminds me of all the bad things  
I do to people.  
I don't mean to do bad things  
But I can't help it.**

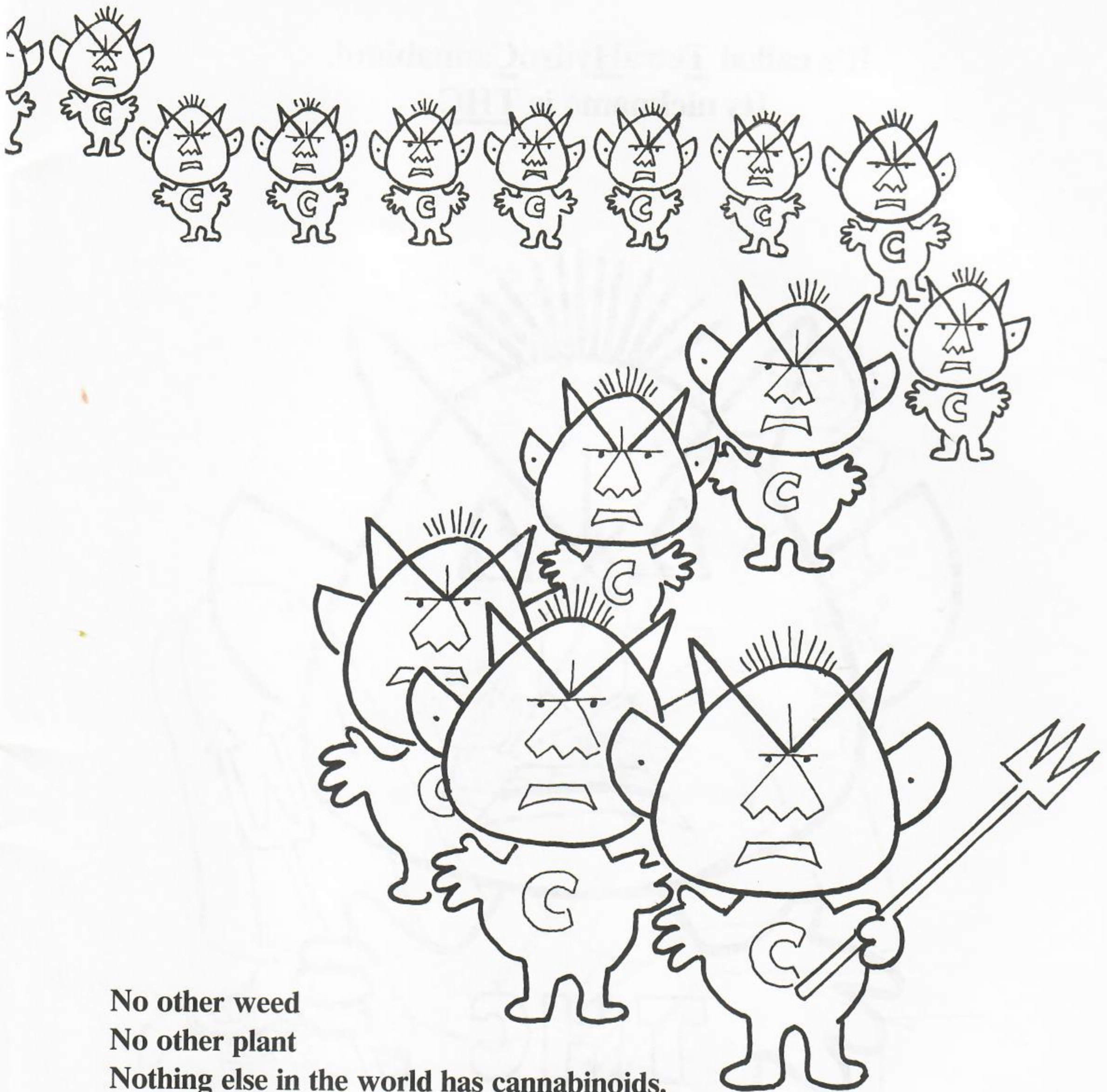


I'm a weed.  
I may look pretty.  
And if people would only leave me alone,  
I wouldn't hurt anybody.  
But if I'm smoked or if I'm cooked and eaten  
I can be very, very harmful.  
I can harm your brain . . . your lungs . . .  
and a lot more.  
How come?



**Because I have bad things in me.  
They're called cannabinoids.  
Say the word out loud.  
CAN AB IN OIDS.**





No other weed  
No other plant  
Nothing else in the world has cannabinoids.  
Only me.

Sixty-one different kinds of cannabinoids.  
All of them are bad.  
Some harm you in one way.  
Some harm you in another way.  
And the worst kind of all has a very long name.

It's called TetraHydroCannabinol.  
Its nickname is THC.



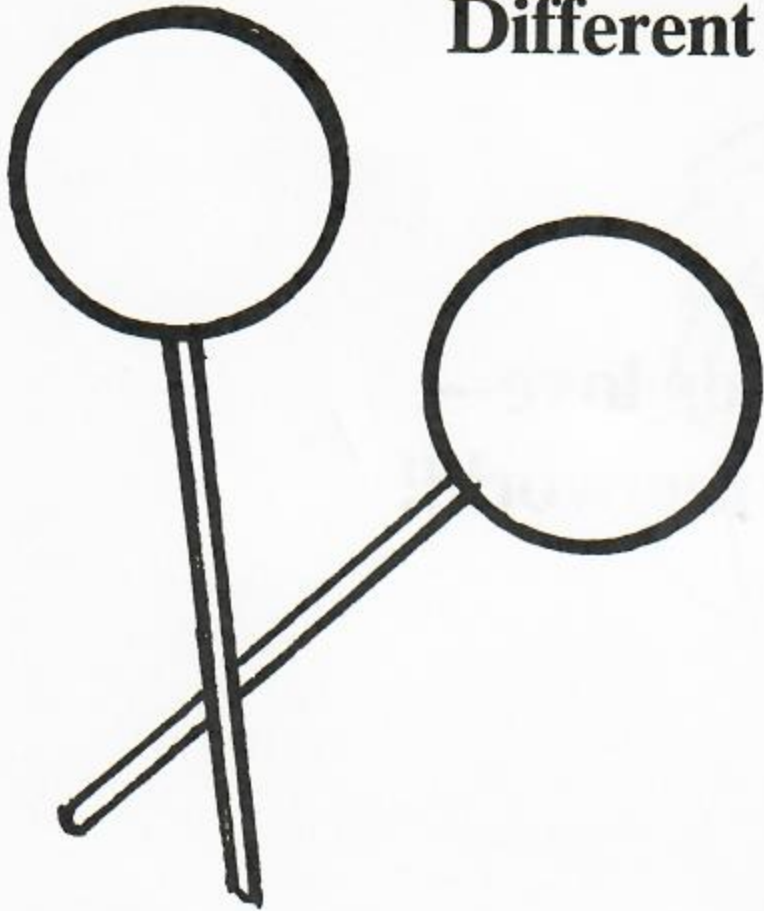


**Some people get the THC and other  
cannabinoids into them by smoking me.**



**Some get my cannabinoids into them  
by cooking me into brownies.  
This turns good brownies into  
ones that are very bad for you.**

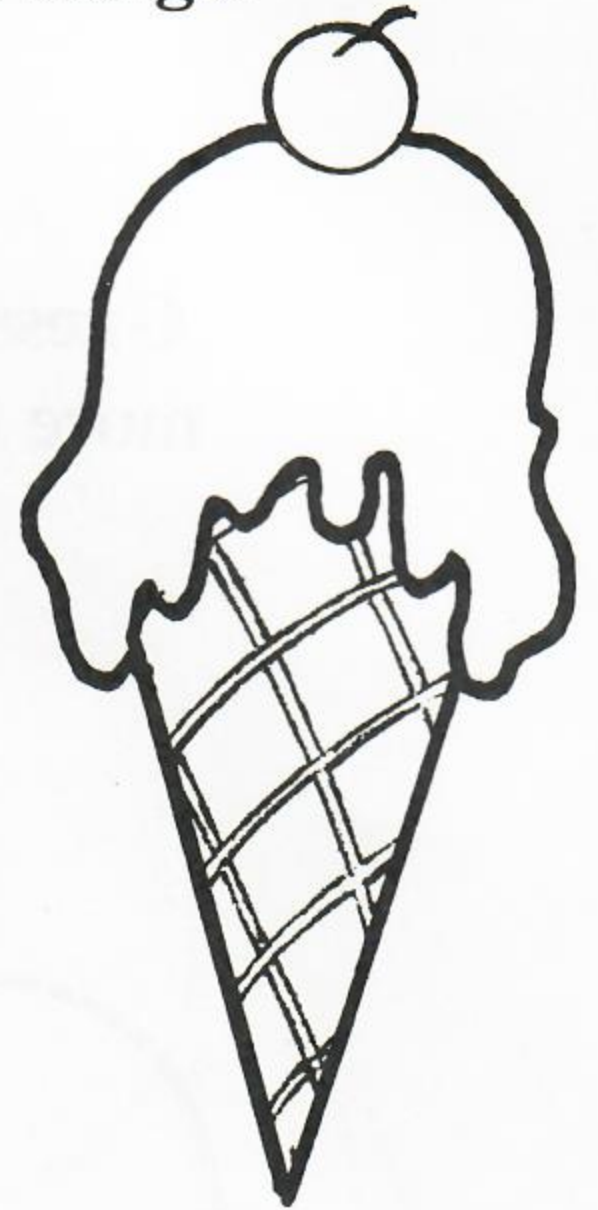
**Different people love different things.**



**Some love . . .**



**Some love . . .**



**Some love . . .**



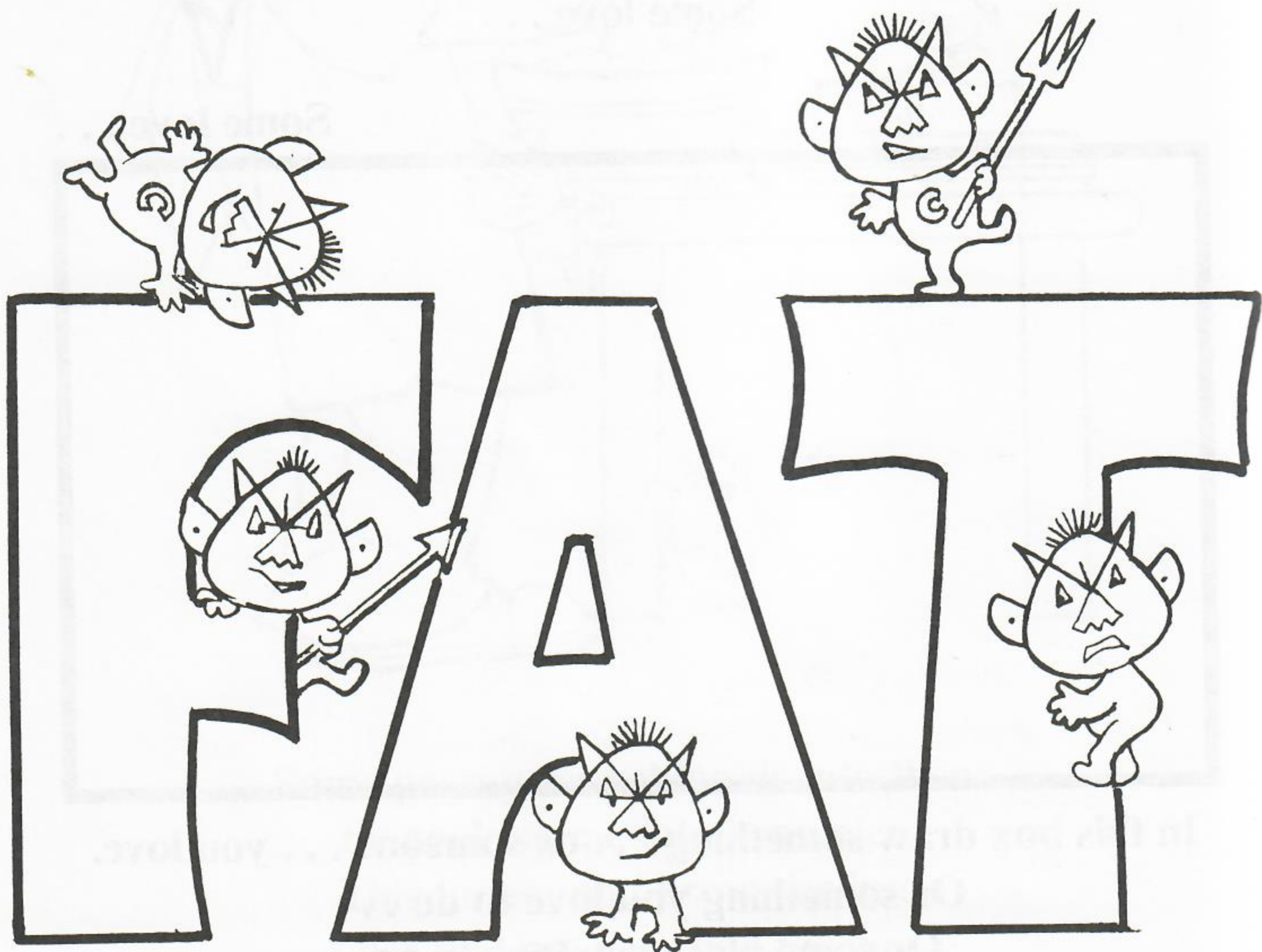
**In this box draw something . . . or someone . . . you love.**

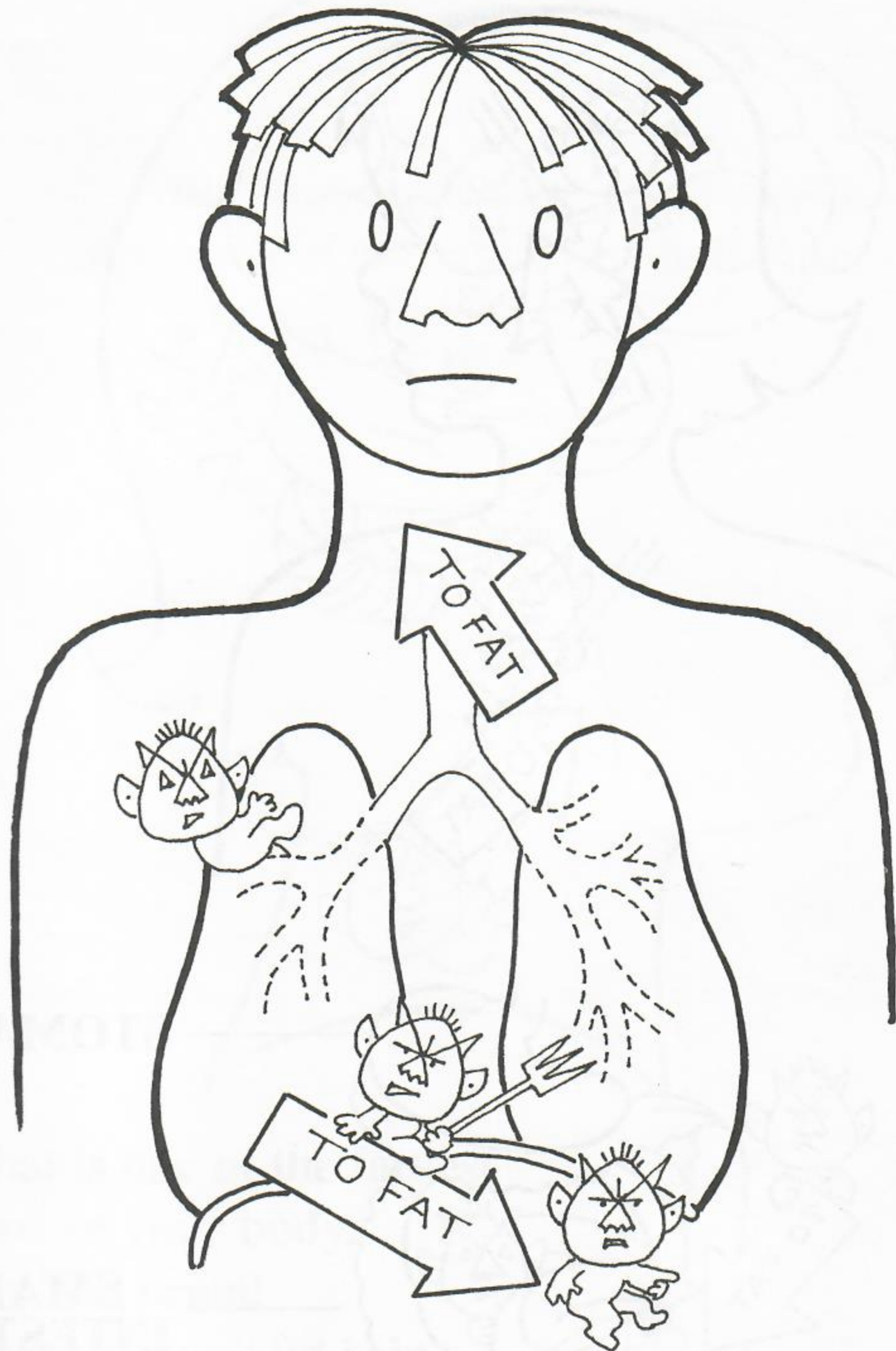
**Or something you love to do . . .**

**Or some place you love to go.**

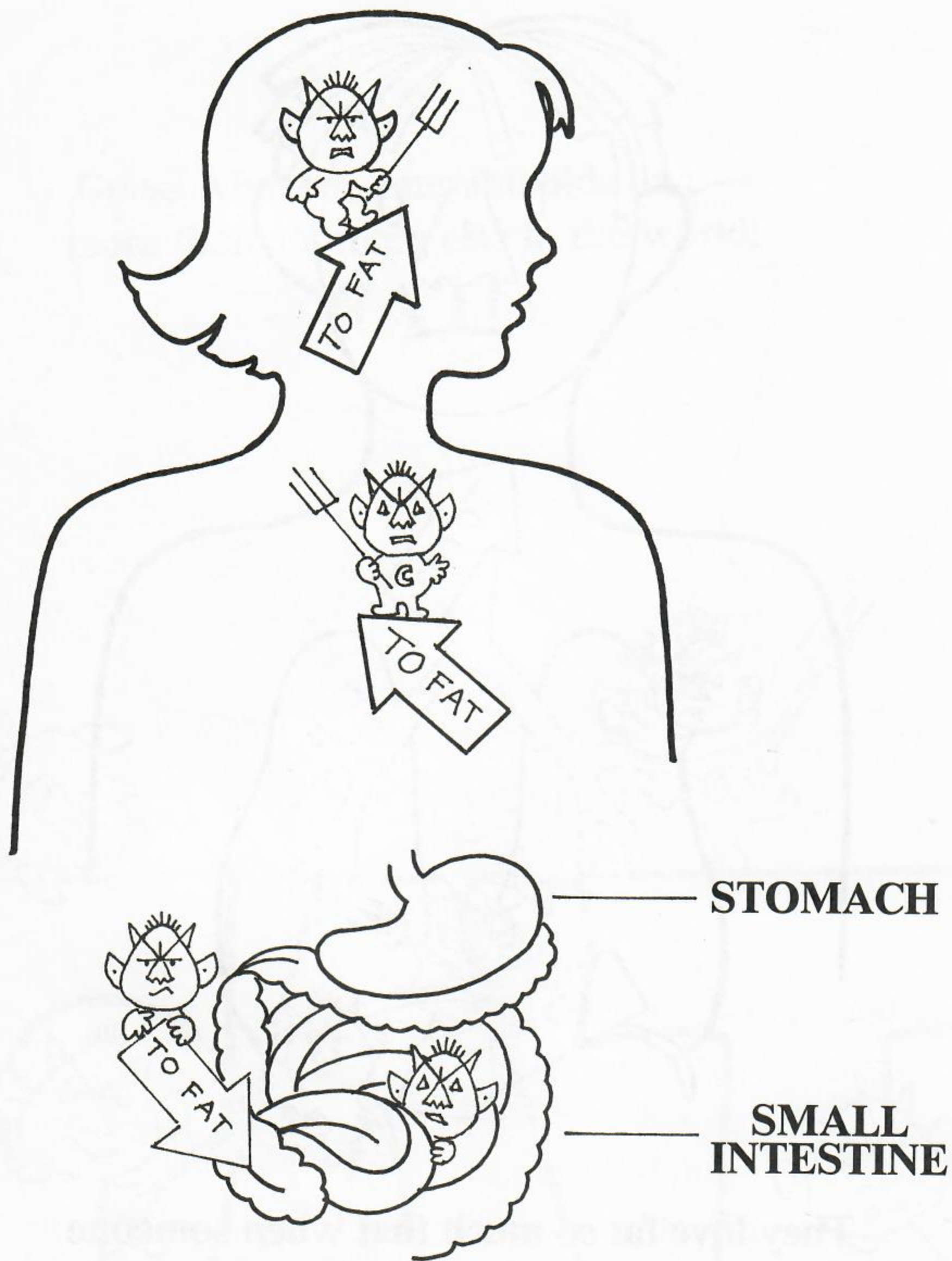
Guess what the cannabinoids love—  
more than anything else in the world!

**FAT!**





**They love fat so much that when someone smokes me, the cannabinoids pass from the lungs into the blood. Then the cannabinoids look around for fatty parts of the body. And they creep in there. And sit there for two or three weeks or more.**



**If someone gets my cannabinoids by cooking me into a brownie, the cannabinoids go from the intestines into the bloodstream. Then they look around for fatty parts of the body.**





**Guess what is one of the fattiest parts of your body.**

**The brain!**

**This is how much fat is in your brain.**



**One-third of your brain is fat!**

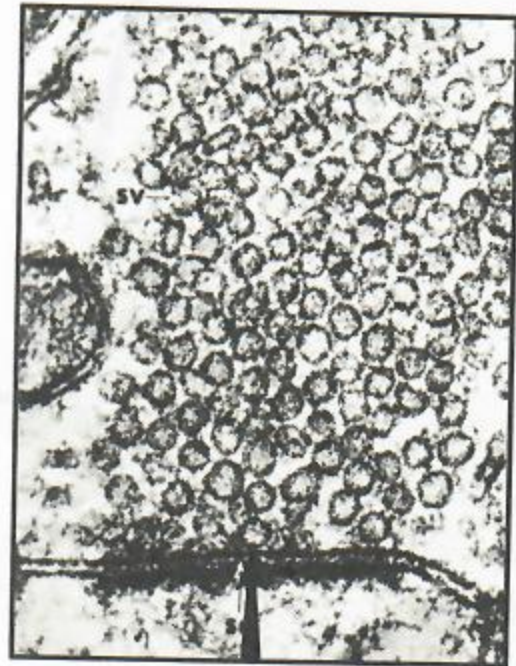
**As one doctor said,  
“We’re all fatheads,  
from that point of view.”**

**The brain is made up of billions of brain cells. The little picture on the right is a photograph of a real brain cell. It's a normal brain cell. Like yours.**

**These little brain cell “balloons” hold messengers which carry messages to the next brain cell. To do this the messengers pop out of the balloons and cross the empty space between one cell and the next. And they give a signal to the messengers in the next brain cell.**

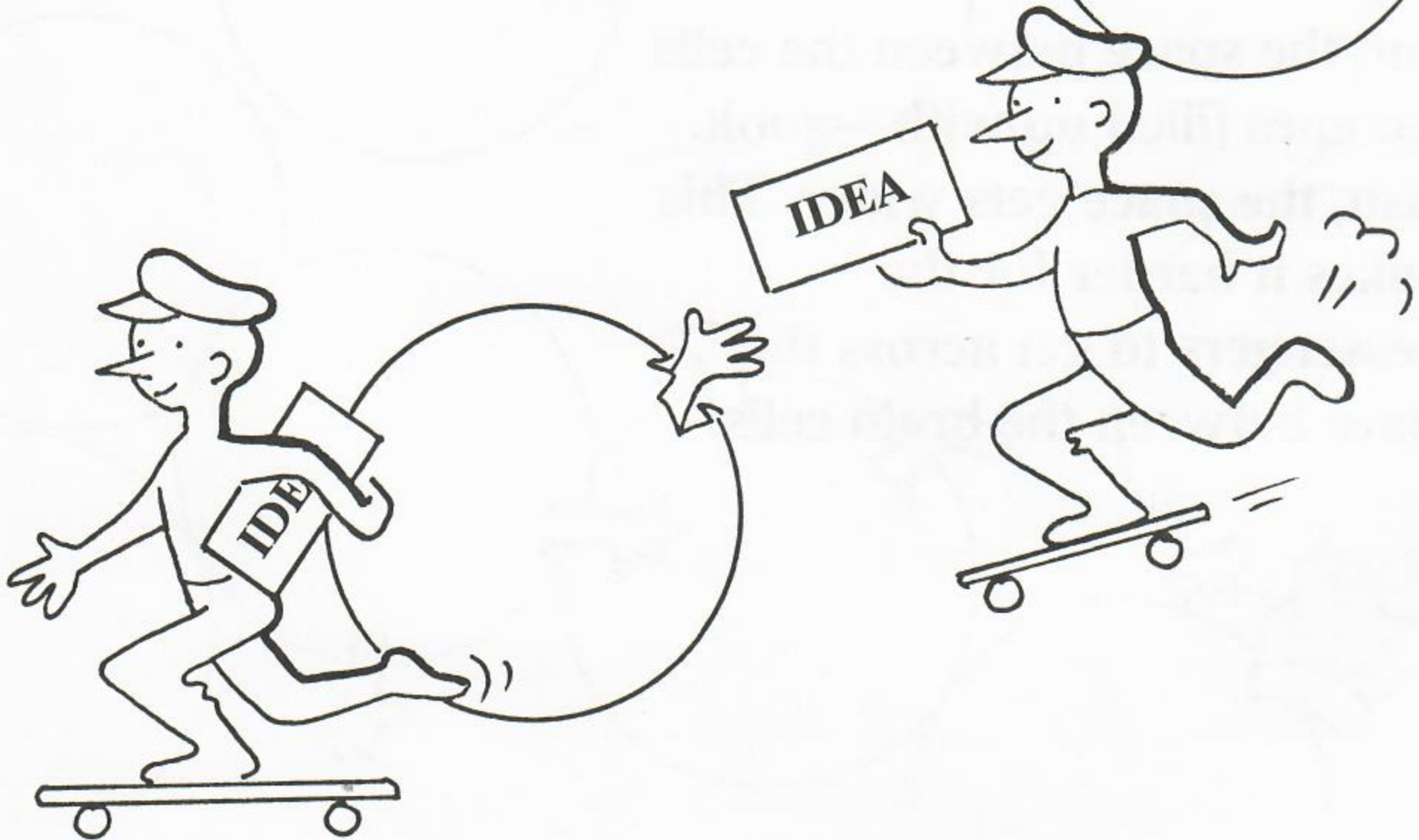
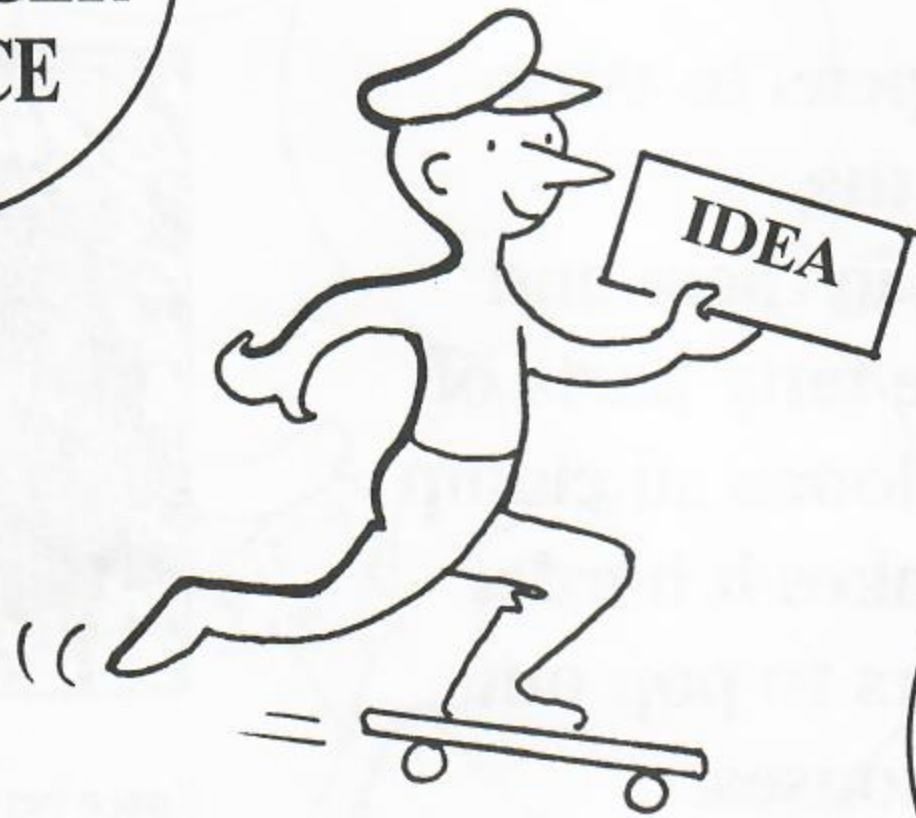
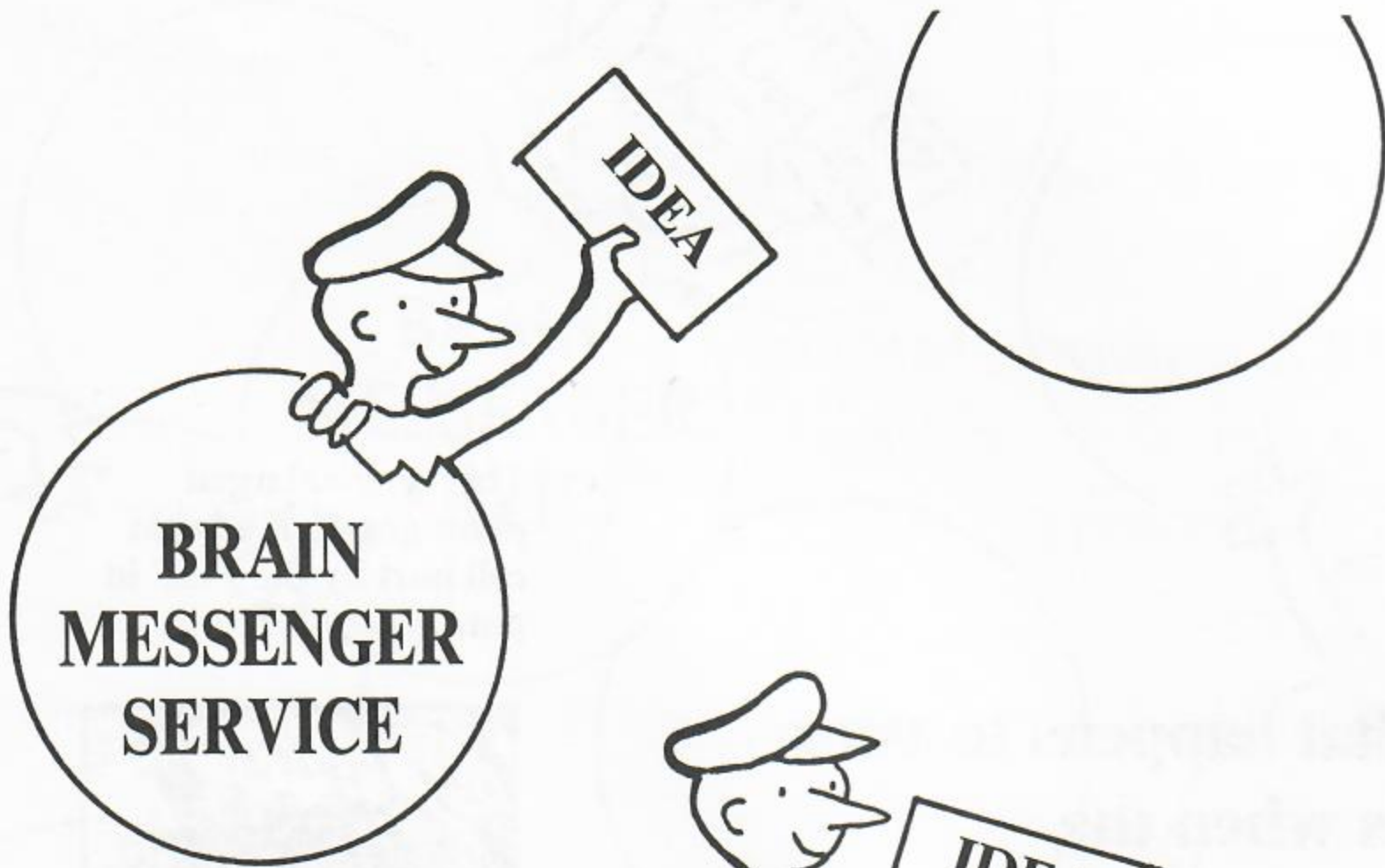
**This is how everything you think or feel or do is passed from one brain cell to the next.**

**This is an enlarged photograph of part of a real brain cell.**



**Space between normal cells.**

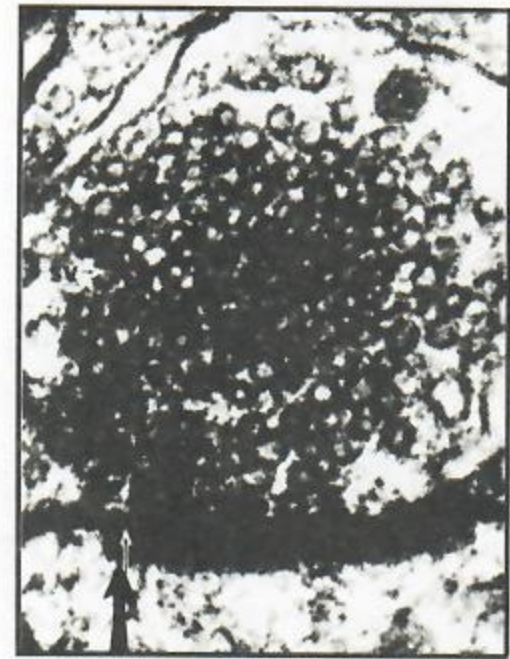




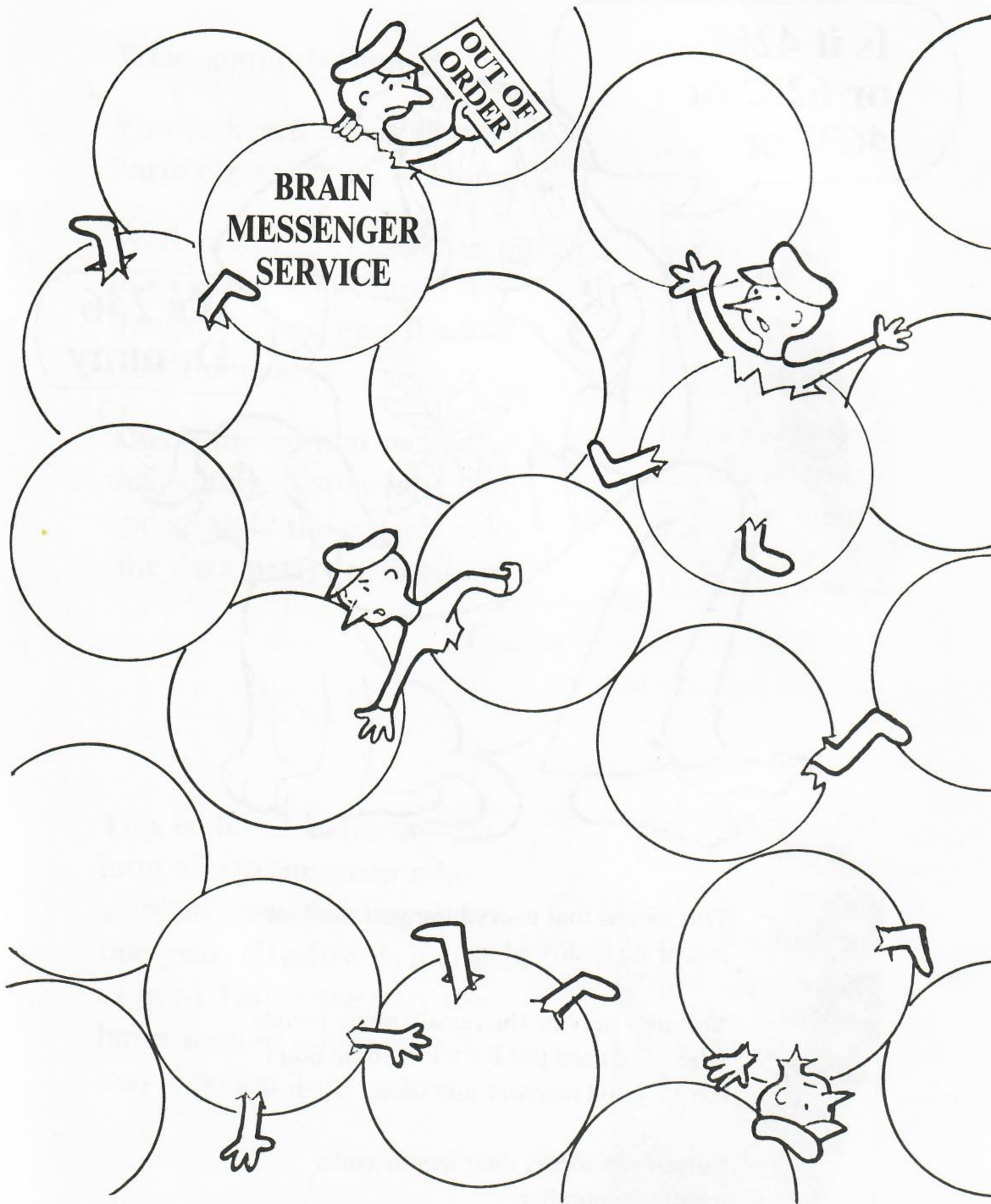
**This is what happens to your brain cells when the cannabinoids get in there and “hang out” in the fatty parts of the cells. The balloons all clump together. This makes it harder for the messengers to pop out of their balloon houses.**

**And the space between the cells becomes filled up with—gook. Also, the space gets wider. This makes it harder for the messengers to get across the space between the brain cells.**

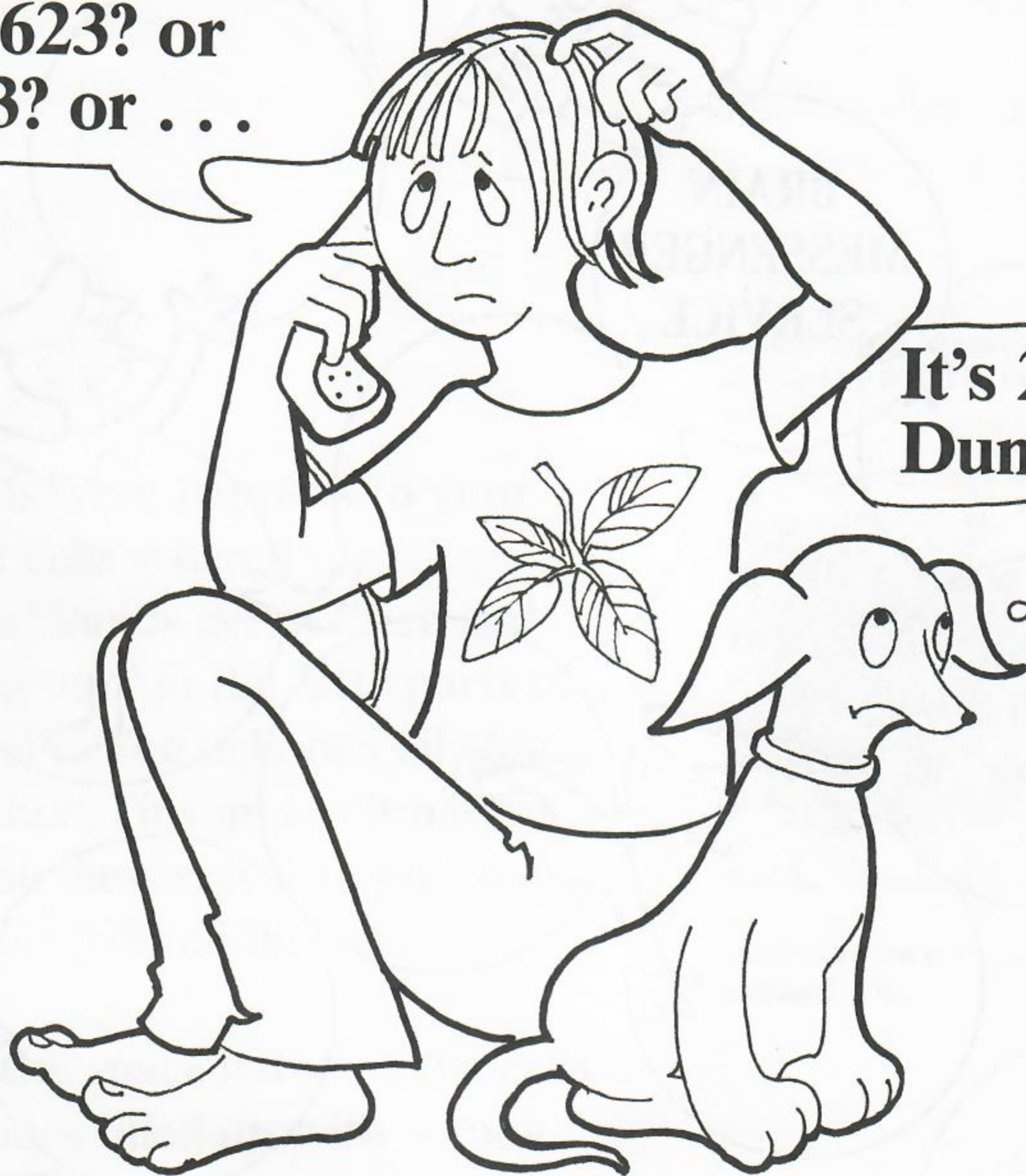
**This is an enlarged photograph of a brain cell hurt by the THC in pot.**



**Space between pot-damaged cells.**



**Is it 426?  
or 623? or  
463? or . . .**



**It's 246  
Dummy**

**This means that everything you think or feel or do is slowed up.**

**This also may be the reason many people who have used pot for a long time don't have a good memory any more.**

**Some even forget their best friend's telephone number.**

**What about the lungs?**

**You've heard about all the harm cigarettes do to the lungs.**

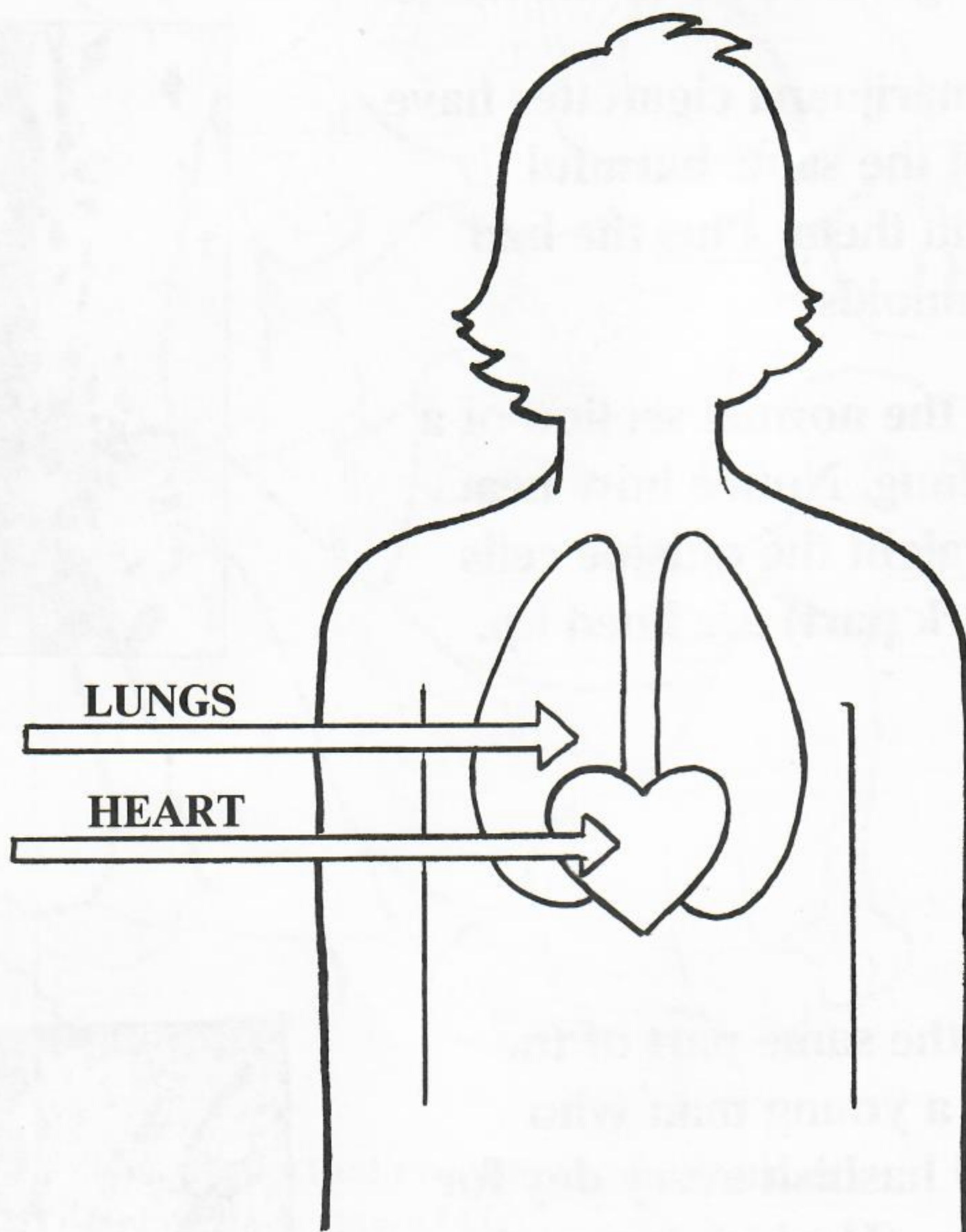
**Well, marijuana cigarettes have most of the same harmful things in them. Plus the bad cannabinoids.**

**This is the normal section of a man's lung. Notice how neat and straight the outside cells (the dark part) are lined up.**



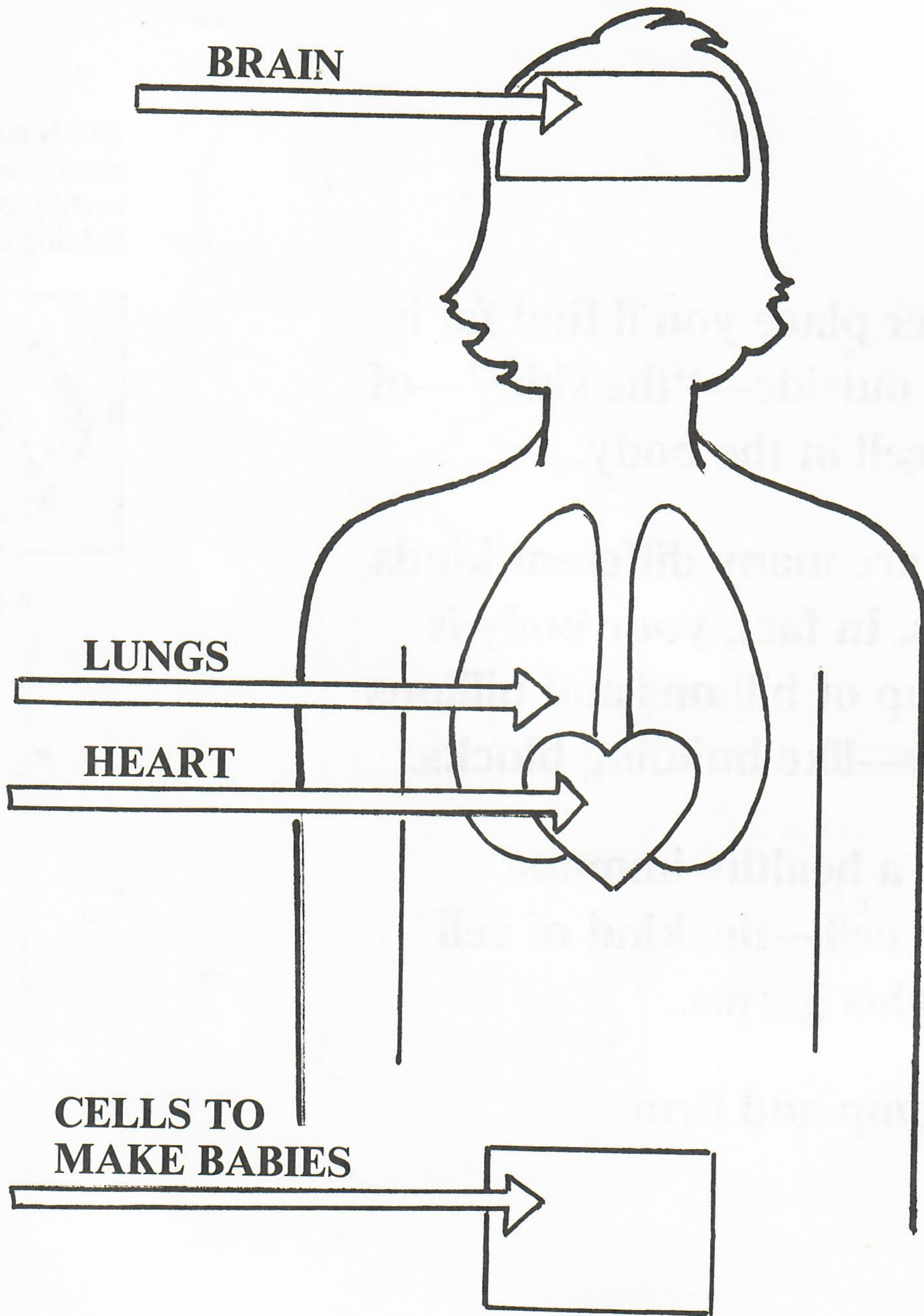
**This is the same part of the lung of a young man who smoked hashish every day for one year. (Hashish is a cousin of pot.) This is the way the lungs look in a person who may develop lung cancer.**





**Tobacco cigarettes are very, very harmful. They harm your heart and lungs. Marijuana is even worse. It hurts even more parts of your body.**





**Marijuana harms the brain, the lungs,  
the heart, the cells to fight germs,  
and the cells which make babies.**

**Another place you'll find fat is on the outside—"the skin"—of every cell in the body.**

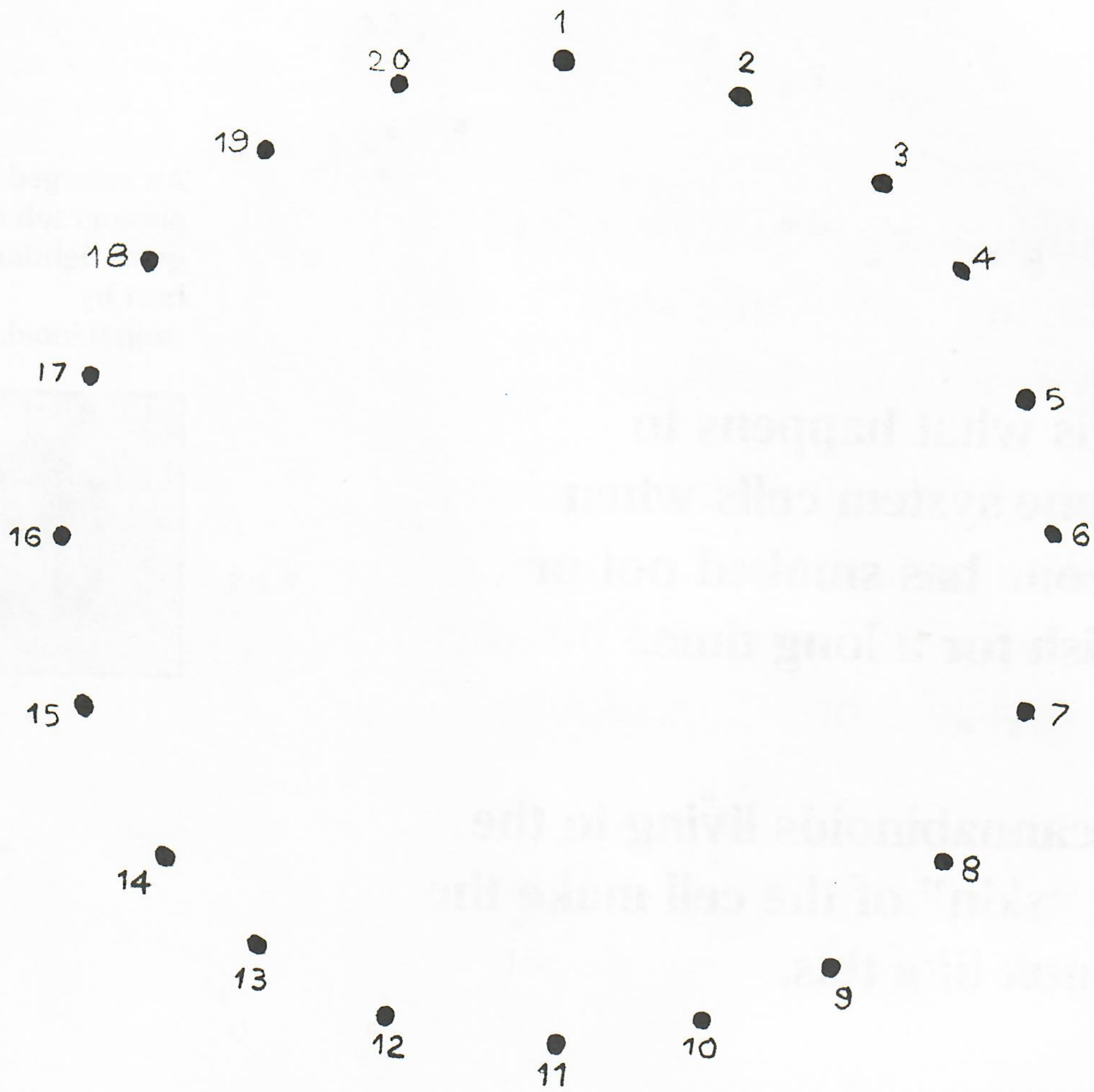
**There are many different kinds of cells. In fact, your body is made up of billions and billions of cells—like building blocks.**

**This is a healthy immune system cell—the kind of cell that fights germs.**

**It's plump and firm.**

**This is an enlarged photograph of a healthy germ-fighting cell.**





**Connect the dots to see  
the shape of a healthy  
immune system cell.**

**This is what happens to immune system cells when someone has smoked pot or hashish for a long time.**

**An enlarged photograph of a germ-fighting cell hurt by cannabinoids.**



**The cannabinoids living in the fatty “skin” of the cell make the cell look like this.**

**Would you want your immune system cells to look like this?**



**Connect the dots to see  
what happens to the immune system cells  
of a person who smoked pot or hashish  
for a long time.**



A “sickly” cell can’t do a good job  
in fighting off germs.

That’s why some long-time pot smokers say:

“I’m sick of being sick!”

**Not only do cannabinoids hurt the outer part—the skin—of the cell.**

**They also hurt the inside “heart” of the cell (the nucleus).**

**In the heart of the cell are little squiggly-looking things called chromosomes. They are the most important of the cell.**

**All your cells have 46 chromosomes—except the cells you may one day use for making babies. They have 23 chromosomes.**

**This is an enlarged photograph of a normal human cell with 46 chromosomes.**



**All animals have fewer chromosomes in their cells than you do.**

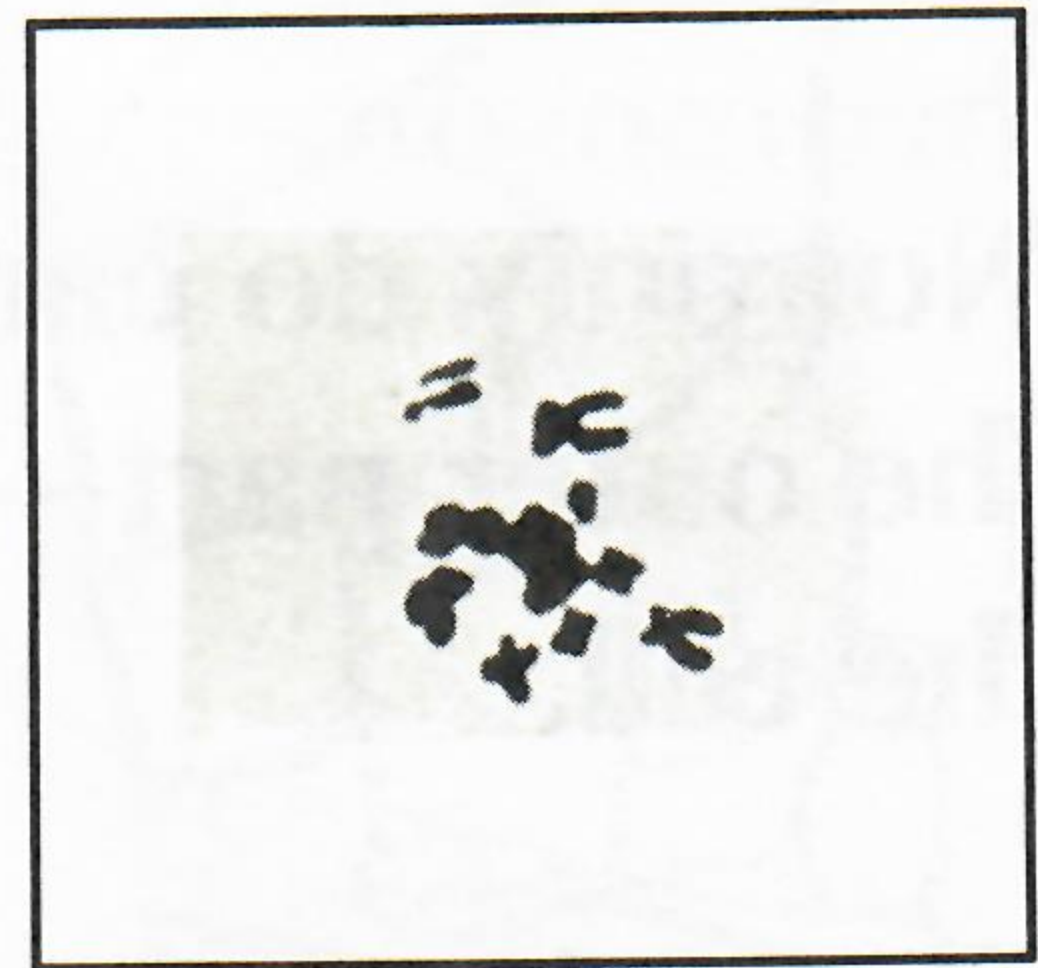
**A frog, for instance, has 26 chromosomes in its cells.**

**Cannabinoids kill chromosomes.**

**Pot-smokers have many cells with 10 or 8 or 5 chromosomes—far fewer than a frog!**

**Baby-making cells of pot-smokers also have fewer chromosomes than they should have. Some of the chromosomes are killed by pot. Some are broken. Some are strange-looking. This can affect the health of the baby the pot-smoker may have one day.**

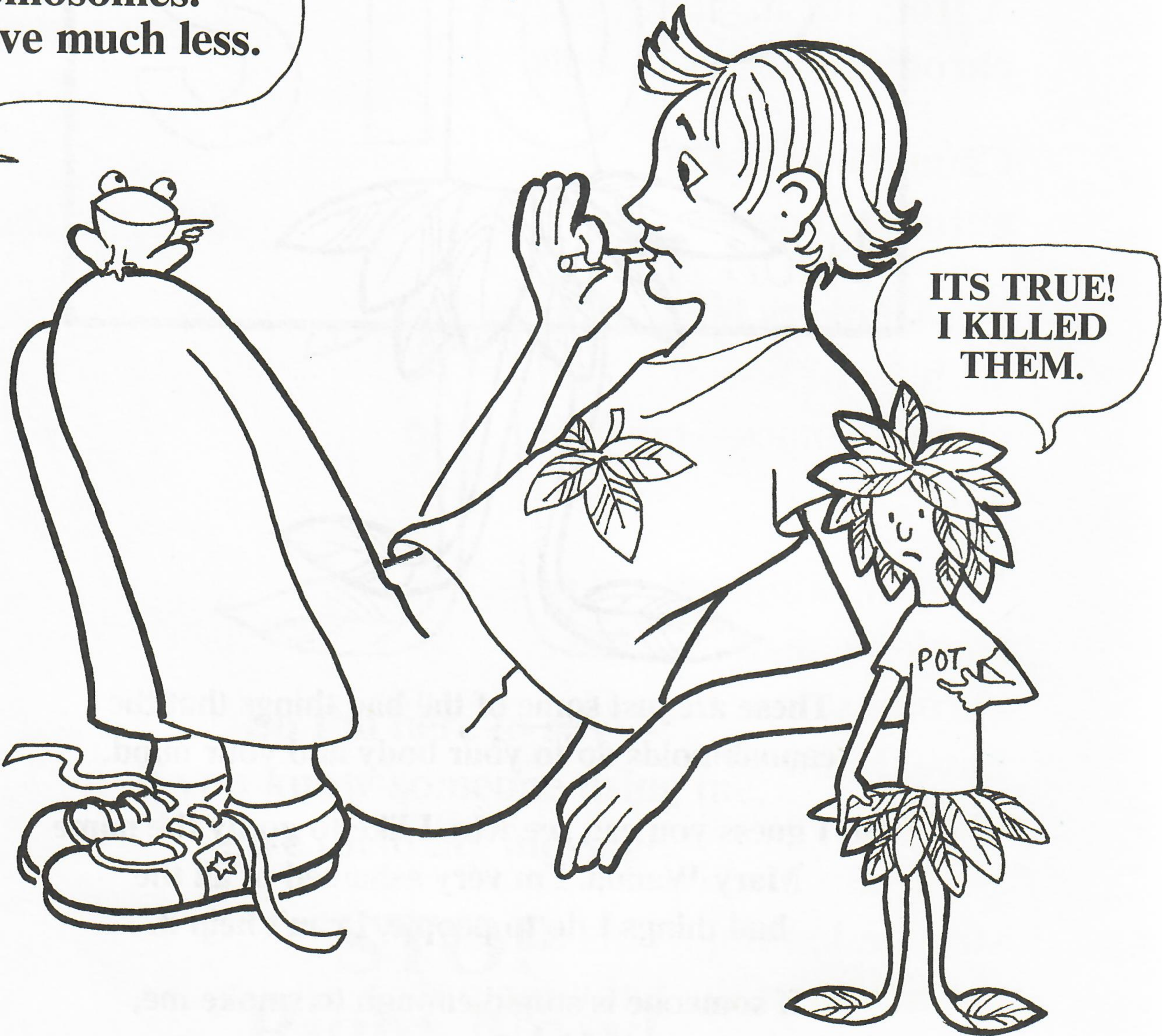
**This cell from a human pot-smoker has only 9 chromosomes.**





**I have 26  
chromosomes.  
You have much less.**

**You GOTTA be  
kidding!**



**ITS TRUE!  
I KILLED  
THEM.**



**These are just some of the bad things that the cannabinoids do to your body and your mind.**

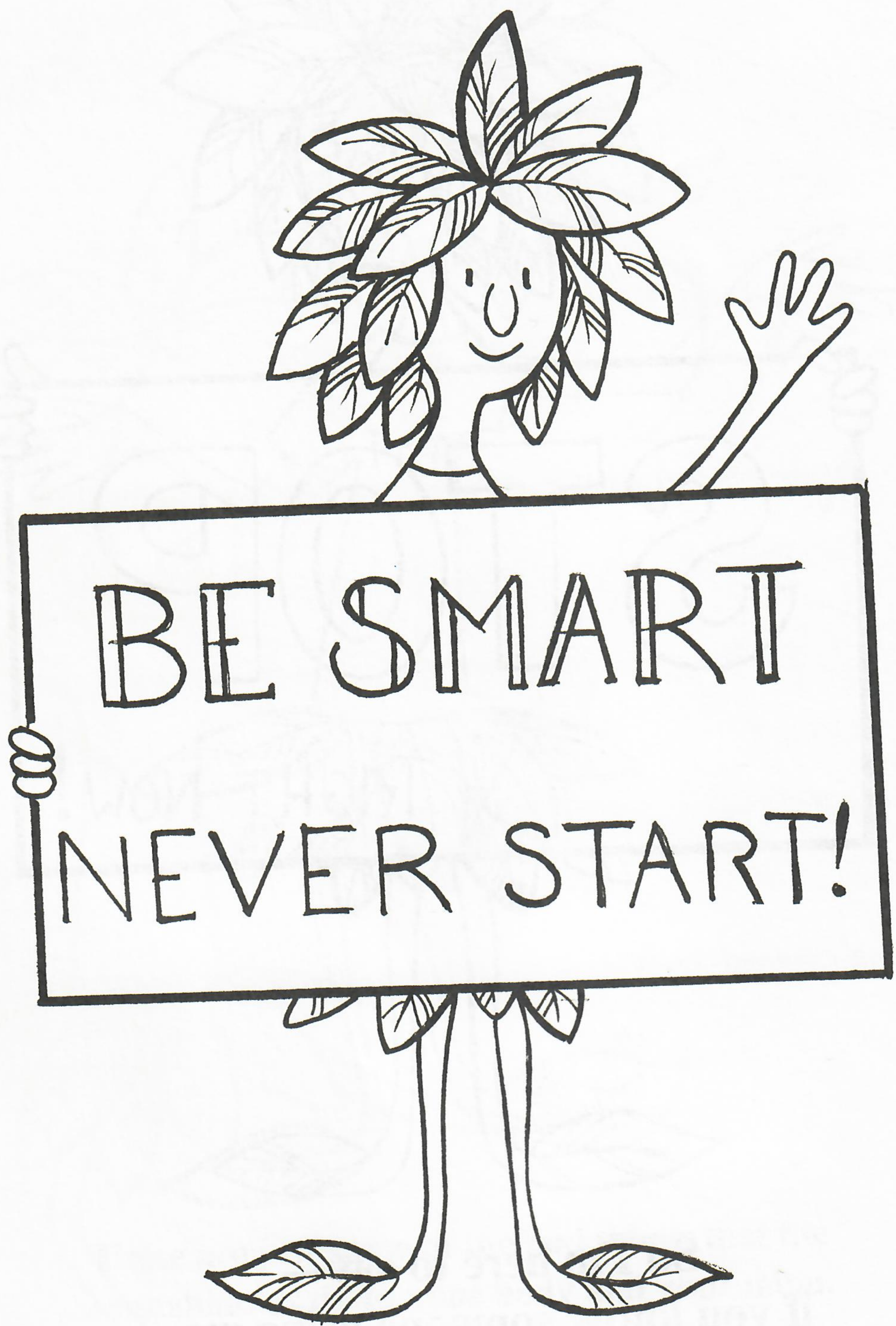
**So I guess you can see why I like to go by the name Mary Wanna. I'm very ashamed of all the bad things I do to people. I can't help it.**

**If someone is stupid enough to smoke me, that's what happens.**



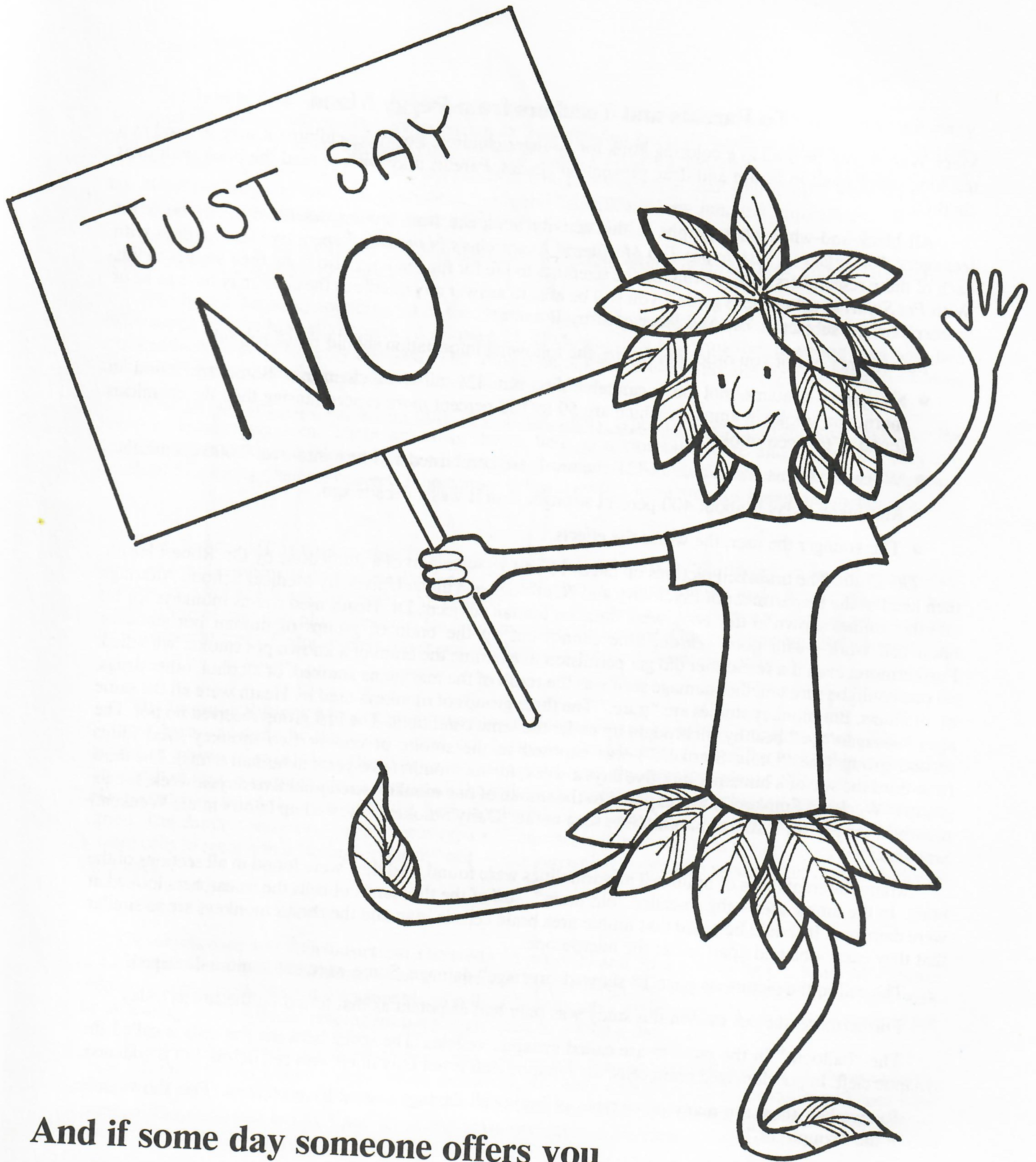
So I'm here to say—  
if you know someone using me,  
give them my message:

**STOP**  
**Right Now!**



My message to you is just as simple:

**BE SMART  
NEVER START**



And if some day someone offers you  
marijuana—

**JUST SAY NO!**

## To Parents and Teachers from Peggy Mann

Mary Wanna may be used as a coloring book for younger children. For older children it may be used as a teaching supplement in health and drug prevention classes. Parents may wish to read the book with their children.

All black-and-white photographs in this activity book are from studies described in my book for teenagers: *Pot Safari: A Visit to the Top Marijuana Researchers in the U.S.* I spent two to four days with each of these researchers and, in bringing the scientists to life for the reader, I also bring their studies to life. With *Pot Safari* as a "teacher's guide," you will be able to answer any questions the child may have as he or she explores the subject in *The Sad Story of Mary Wanna*.

But whether or not you order *Pot Safari*, the following information should prove helpful:

- Marijuana contains, not only cannabinoids, but 421 different chemicals. Some are found in marijuana smoke in amounts which are 50 to 100 percent *more* cancer-causing than the chemicals found in tobacco smoke.
- When marijuana is smoked, its 421 chemicals are combusted and turn into over 2,000 chemicals.
- Marijuana today is about 400 percent stronger than it was a decade ago.
- The younger the user, the worse the effects.

*The Brain:* The brain cell pictures on pages 16 and 18 were part of a study done by Dr. Robert Heath, then head of the Department of Psychiatry and Neurology at Tulane University Medical School. Although all other studies shown in this book were done on human subjects, Dr. Heath used rhesus monkeys for his brain cell work—with good reason. One cannot cut up the brain of groups of human pot smokers. Furthermore, even if a researcher did get permission to examine the brain of a known pot smoker who died, no one could be sure whether damage seen was the result of the marijuana smoked, or alcohol, other drugs, or an illness. But monkey studies are "pure." The three groups of monkeys used by Heath were all the same age ("teenagers"), all healthy, all brought up under the same conditions. The first group received no pot. The second group (the "Daily Smokers") was exposed to the smoke of one or two monkey-sized joints (one-third the size of a human joint), five days a week, for six months (two years in human terms). The third group ("Weekend Smokers") was exposed to the smoke of one monkey-sized joint two days a week, for six months. Many of the distinct abnormalities seen in the "Daily Smokers" showed up faintly in the Weekend Smokers.

Many different types of brain cell abnormalities were found, and they were found in all sections of the brain. In the limbic area—the so-called "old brain"—*all* of the thousands of cells the researchers looked at were damaged. It should be noted that limbic-area brain cells in man and the rhesus monkeys are so similar that they cannot be told apart under the microscope.

The cell in the picture on page 18 showed "average" damage. Some were much more damaged.

Furthermore, the pot used in this study was only half as potent as that found on the streets today.

The "balloons" in the pictures are called synaptic vesicles. The space between the cells is called the synaptic cleft. In pot-damaged brain cells, the synaptic cleft is not only filled with cell debris, but is widened.

Remember, there are many *other* types of brain-cell damage caused by marijuana. This shows only two of the "symptoms."

**The Lungs:** One chapter in *Pot Safari* is called, "Lung Effects which Don't Show." There are many so-called sub-clinical effects. The pot smoker may look and feel perfectly healthy. No pot cough. No other symptoms. But Dr. Donald Tashkin, Director of the Lung Function Laboratory of UCLA Hospital in Los Angeles, did a study of healthy young pot smokers who had smoked at least four joints a week for the past six months. Using sophisticated equipment, he found "significant lung function impairment." When the young men stopped smoking pot all these symptoms disappeared.

If they had not stopped, said Tashkin, their lung symptoms would begin to show, and could eventually lead to chronic bronchitis or emphysema.

Dr. Forest Tennant, now director of the largest drug abuse research and treatment facility west of the Mississippi, did the lung study pictured on page 21. He found lung abnormalities in young men who had smoked hashish daily for only one year. The same type of abnormalities are not seen in tobacco smokers unless they have smoked a pack or two a day for 20 to 30 years.

The picture on page 21 shows only one of the many types of lung abnormalities found in the hash-smoking young men. There are areas shown here so abnormal in size and shape that they are considered pre-cancerous. Not everyone who has this condition (called precancerous squamous metaplasia) develops lung cancer, but no one gets lung cancer unless they first have areas of squamous metaplasia.

**The Tobacco/Pot Connection:** It is well known that tobacco is "the largest cause of preventable death and preventable illness in America today." But all studies comparing pot and tobacco show that bad as tobacco is for the lungs, the heart, the general health, marijuana or hashish are even worse. And the combination of cannabis plus tobacco is far more than double trouble. One plus one equals four or five on the impairment scale. Unfortunately, most pot smokers also smoke tobacco cigarettes.

**The Immune System:** Many studies have shown that marijuana harms the immune system. The study pictured here was done by the noted Greek cell biologist, Dr. Marietta Issidorides. Her subjects smoked hashish, a cousin of marijuana. (Both drugs are processed from the cannabis plant.) She examined many thousands of immune-system cells. Almost all the cells of the non-hash smokers looked healthy (as on page 24). But almost all of the cells from the hash smokers looked unhealthy. The extent of the cell damage varied. The damage shown on page 26 was typical. Cannabis not only weakens the ability of the immune-system cells to recognize a "foreign invader," but—once recognized—pot also weakens the body's ability to fight back.

**Chromosomes and Reproduction:** The study on pages 29 and 30 was done by Dr. Akira Morishima of Columbia University. Morishima is an authority in cytogenetics, the branch of genetics concerned with cellular heredity. He looked at the white blood cells of healthy adult males ages 23 to 45, who'd smoked pot for an average of four years, ranging from a joint a week to a joint a day.

He found that almost *one-third* of their cells had far less than the normal number of chromosomes. Those who had smoked once a week, or on weekends, had cells with 30 to 20 chromosomes. Those who smoked daily had an increase of cells with 12 to five chromosomes. The chromosome-short cells had, of course, a sharp decrease in DNA and RNA, the mastermodules of life itself.

All cells in the human body should have 46 chromosomes, except sperm and ova. They have 23 chromosomes so when the first cell of a new baby is created by sperm entering egg, that cell will have 46 chromosomes. Dr. Akira Morishima looked at eggs of female mice when they had been fertilized and multiplied to two to four cells. One hundred fifty "teenage mice" got a miniscule dose of THC, (the "human equivalency" of a teenage girl who is stoned three hours a day). The control group received the injecting fluid with no THC. Result: The fertilized eggs of the control group were normal. In the "THC mice" twenty percent of the eggs had died, were dying, or had divided abnormally. Many other animal studies, ranging from mice to monkeys, show other serious chromosome-related effects marijuana has on offspring. For example, Dr. Susan Daltario showed grossly abnormal carry-over effects in mice exposed to THC only through their grandfather. (Their parents received no THC, nor did their grandmothers.)

But chromosome damage is far from the only adverse effect that cannabis has on reproduction.

My book, *Pot Safari*, has a chapter called, "Marijuana's Effects on Having Babies." It includes human studies, and shows effects ranging from deformed or abnormal sperm to behavioral abnormalities in the babies of pot-smoking mothers.

We have not dealt with the subtle but serious reproductive effects of cannabis in the coloring book pages but you may wish to discuss such effects with older children. As Dr. Gabriel Nahas, a pioneer marijuana researcher put it, "Pot smokers play genetic roulette with the babies they may one day have."

If you wish to learn more about this subject, my book for adults, *Marijuana Alert*, with a foreword by Nancy Reagan, has a 26-page chapter called "Effects on Sex and Reproduction: Female," and a 13-page chapter "Effects on Sex and Reproduction: Male." (The 526-page book is available from McGraw Hill Book Co., Special Sales, 11 West 19th Street, New York, NY 10011.)

**Research Papers:** Over 8,000 papers have been published on cannabis in scientific journals. These show not only the biological but also the damaging psychological effects of the drug. Dr. Carlton Turner read these papers for a fat two-volume work he edited called, *Marijuana: An Annotated Bibliography*, published by MacMillan. Says Turner: "Not *one* of those papers gives marijuana a clean bill of health."

Turner has been called "the man who knows more about marijuana than anyone else in the world." He was the former Director of the National Institute on Drug Abuse Marijuana Research Project at the University of Mississippi, and former Director of the White House Drug Policy Office under President Reagan. He is currently President of Psychiatric Diagnostic Laboratories of America and he is a pharmacologist of world renown.



Turner sums up cannabis in these words: "*There is no other drug used or abused by man that has the staying power and the broad cellular action that cannabis does.*"

**A "Step-Up Drug":** The National High School Senior Survey has been conducted every year since 1975. Each year it shows the same thing: of those youngsters who have ever smoked pot (even occasionally) one in three become daily users at some point in their lives. The Survey also shows that of those 12th graders who smoke pot at all during the year, about half also "do" one or more additional illegal drugs. However, of those seniors who do not smoke pot, virtually none become regular users of any other illegal drug.

Therefore, if a youngster does not start smoking pot, it is very likely that he or she will steer clear of all illegal drug use.

We hope that *The Sad Story of Mary Wanna* will be a start in helping the child *never* to start!





“Peggy Mann has done it again. In numerous articles and in her book *Marijuana Alert* she reached adults and warned them of the dangers of marijuana. In her book *Pot Safari* she reached teenagers, in *Twelve Is Too Old* she reached pre-teens, and in *The Sad Story of Mary Wanna* she presents the data in an engrossing way that will reach yet another audience, grade-school children. As a parent, a pediatrician, and as an American citizen, I salute her for her continuing contribution to the field of drug prevention and education.”

**Dr. Donald Ian Macdonald—Administrator  
Alcohol, Drug Abuse & Mental Health Administration**

“*The Sad Story of Mary Wanna* represents an unique approach to producing a negative attitude towards marijuana use by our young people. Peggy Mann and Naomi Lind should be lauded by all those working towards a drug-free America.”

**Dr. Charles R. Schuster—Director  
National Institute on Drug Abuse**

“Peggy Mann and Naomi Lind deserve our praise and our thanks for their brilliant and important new book written to help kids say no to pot. They get just the right combination of scientific integrity and powerful persuasion. This new book shoots hard and straight in telling children just “How Marijuana Harms You.” My hat is off to my favorite author on drug abuse prevention, Peggy Mann, for another triumph. Peggy Mann is a one-person international program to stop the spread of marijuana use. It is no accident that the decade-long climb of the rate of use of marijuana among American youth ended in 1978 when Peggy Mann started to write about the negative effects of marijuana use. No one has done more to stop the pot epidemic than Peggy Mann. She is a real hero.”

**Dr. Robert L. Dupont—Public Health Expert and  
Founding Director of National Institute on Drug Abuse**

“Peggy Mann has once again come to the forefront in the fight against substance abuse. Her earlier books—*Pot Safari*, *Marijuana Alert* and *Twelve Is Too Old*—focussed public attention on the serious problems of marijuana use. With the addition of *The Sad Story of Mary Wanna* Ms. Mann has provided us with a long-needed means for reaching young children. At last we can feel confident about presenting factual information to them in a way that is appealing, exciting, and, most importantly, understandable. Thank you, Peggy.”

**Julio Martinez—Commissioner  
New York State Division of Substance Abuse Services**

