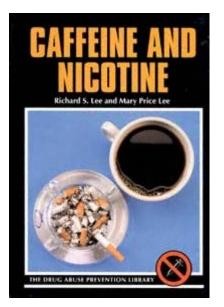
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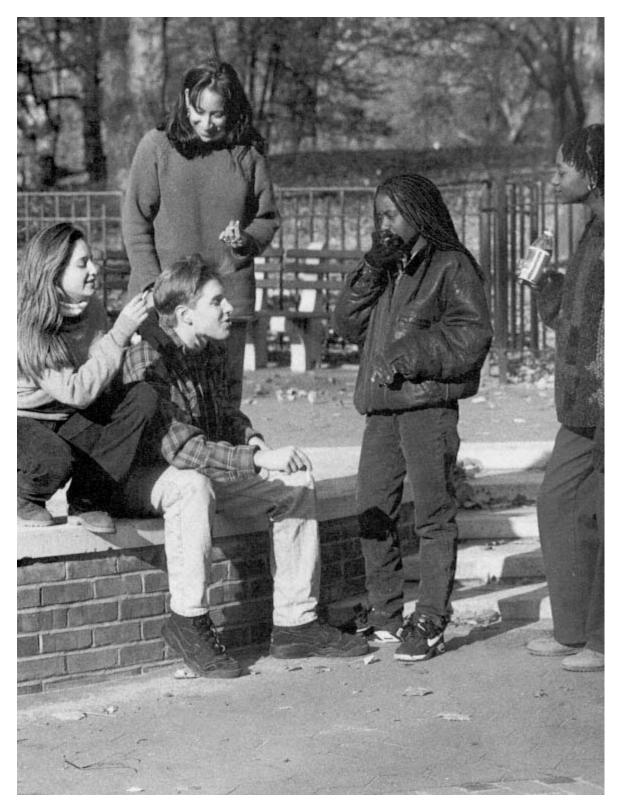
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Many teens don't realize the harmful effects of caffeine and nicotine.

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THE DRUG ABUSE PREVENTION LIBRARY

Caffeine and Nicotine

Richard S. Lee and Mary Price Lee



THE ROSEN PUBLISHING GROUP, INC. NEW YORK

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To Margo and Tony: "Sister" and "Brother"

The people in this book are only models; they in no way practice or endorse the the activities illustrated. Captions serve only to explain the subjects of the photographs and do not imply a connection between real-life models and the staged situations shown. News agency photographs are exceptions.

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Introduction

Caffeine and nicotine are two drugs that many people use every day. To many people, smoking a cigarette or drinking soda or coffee with caffeine is so common that they do not consider the effects that these drugs can have on their health. Even though caffeine and nicotine are legal, people who use these drugs should be aware of certain health risks. Using too much caffeine can cause some uncomfortable side effects. The risks of nicotine are much worse. It can cause long-term damage to a person's health, often resulting in death.

How Are These Drugs Used?

People have been using tobacco for thousands of years. Nicotine is in all tobacco products, including cigarettes, cigars, pipe

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tobacco, and chewing or "smokeless" tobacco. To buy nicotine you must usually be at least eighteen years old. Still, many young people are able to obtain products with nicotine and use them regularly. People who use them claim that it creates a calming or soothing feeling. They may also say that using it helps them to clear their heads and concentrate. Scientists believe that the nicotine found in tobacco products can cause many extremely serious health problems.

Caffeine is widely available and can be bought by people of any age. It is probably the most popular drug in the world. Caffeine is a stimulant, a drug that makes people feel more alert. It is found in many foods and drinks, such as coffee, tea, chocolate, candy bars, and cola drinks. It is also in many common medicines, including cold tablets, pain relievers, and "stayawake" drugs such as NoDoz and Vivarin.

Health Risks

Even though both of these drugs are legal, they can still be harmful to you. Nicotine is by far the most dangerous of the two. About 60 million Americans, almost one quarter of the population, use nicotine, mostly in cigarettes. Nicotine addiction

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Cigarette companies must warn consumers about the dangers of smoking.

kills about 419,000 people every year. It is a leading cause of death in America. In comparison, heroin, an illegal drug, kills about 3,000 people a year. The government requires all tobacco companies to put labels on their products warning consumers about the dangers of nicotine use.

Most people think that caffeine is harmless, but there can be unwanted side effects. It can cause problems if it is overused or not used responsibly. People who use caffeine regularly may feel that they need to take more and more to stay alert. Some people experience "coffee nerves" or "cola

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jitters" when they use products with caffeine. It can quicken a person's heartbeat and cause him or her to feel nervous. When the effects of the caffeine wear off, you may feel let down and sleepy or even depressed. It is easy to find alternatives to caffeine. Caffeine-free or decaffeinated coffees, teas, and sodas are all common.

Breaking the Habit

Today, a large number of smokers understand the dangers of tobacco and want to quit, but overcoming nicotine addiction can be difficult. Most people who try to quit will experience uncomfortable withdrawal symptoms. But there are many ways to help make quitting easier. Support groups can help you to quit smoking. Nicotine patches and gums might help reduce your cravings for the drug. There are also alternative methods to help you quit, including hypnosis and acupuncture.

You may need to cut back your use of caffeine. Experts agree that it can be done slowly, without causing feelings of withdrawal. The first step is to learn about the potential dangers of the drug and determine how much is safe for your body. Then you will be able to use caffeine responsibly. Some people may need to give it up altogether.

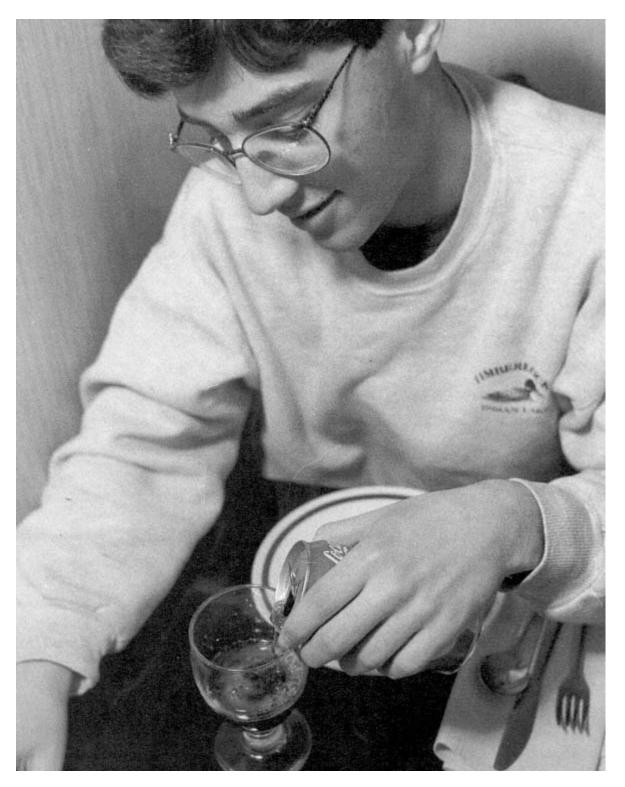
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Many people use caffeine every day without thinking about its effects.

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1 What Is Addiction?

Drugs are chemicals that can affect the way your body functions. While many are used for medical purposes, others have no health benefits and are taken only for the way they make a person feel. When a person needs to use a drug to feel happy, relaxed, or accepted by a group, he or she has become controlled by his or her drug use.

Getting Hooked

A person is addicted when he or she is unable to control his or her drug use. As an addict continues to use a drug, he or she develops a tolerance and will need to take greater amounts to feel the drug's effect. Without the drug, an addict will suffer with-

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drawal symptoms that make him or her feel sick or depressed. The specific symptoms of an addiction will differ with each drug. Withdrawal symptoms may be more or less severe with each drug. Or, people may develop a tolerance to one drug more quickly than another.

Nicotine is a very addictive drug. Nicotine addiction is the most common form of drug addiction. Researchers have suggested that it is as addictive as heroin or cocaine. As a tolerance develops, your body will need more nicotine to feel its effect. Once a person becomes addicted, it will be difficult to quit.

It is also possible to become addicted to caffeine. But the dangers of caffeine addiction are much less severe. Still, regular use of caffeinated products can have unwanted effects on your body. And once addicted, a person who stops using caffeine will suffer from withdrawal symptoms. But quitting caffeine addiction is not as difficult as overcoming a nicotine addiction.

Legal Drugs

Caffeine and nicotine are sold legally in many products. But the government has established certain guidelines regulating the way that products containing these drugs are made.

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Cigarette advertising is very common and often targets young people.

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The government has set standards that regulate the quality and the quantity of caffeine or nicotine in products. These regulations were created to make it less likely for a person to accidentally overdose. An overdose occurs when a person uses more of a drug than his or her body can handle. Still, smoking a single cigarette can make you feel dizzy or sick if you're not used to it, and too much caffeine can make you feel jittery. The effects will differ with each person.

In the United States, cigarettes and other tobacco products may not be sold to people under eighteen. In addition, the government insists that cigarette packages and advertisements carry labels warning about the dangers of smoking. The sale of caffeine is not restricted. People who use products with caffeine will have to determine for themselves what amount is safe to use.

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2 What's Wrong with Caffeine?

A legend says that shepherds at a monastery in Arabia were surprised to find their goats jumping around the fields and playing late at night when they should have been asleep. The shepherds found that the goats had eaten berries from coffee plants. The wide-awake goats got a kick from caffeine! Later, the monks figured out how to brew the beans into coffee and get the same effect.

Experts say that caffeine is the most widely used drug in the world. Most of us associate caffeine with coffee, from which its name came. Between 82 percent and 92 percent of Americans drink coffee. The average coffee drinker will consume 800 cups a year. Coffee is probably the easiest

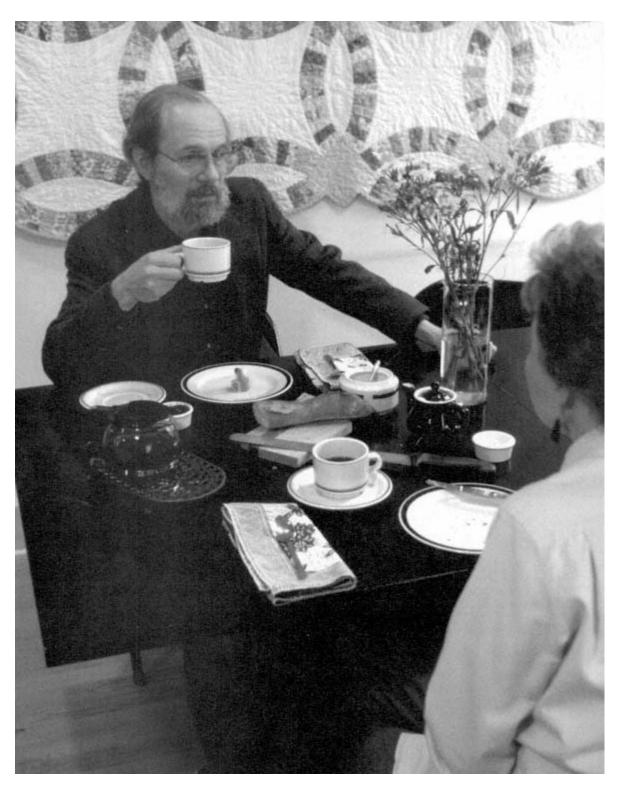
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Many people who have become addicted to caffeine will drink coffee every morning to avoid the symptoms of withdrawal.

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way to get large doses of caffeine, but it is not the only way.

Caffeine is an odorless, rather bitter drug found in coffee beans, tea leaves, cocoa beans, and cola nuts. From these sources, caffeine finds its way into many products besides coffee and tea.

Druggists classify caffeine as an analeptic, or stimulant. It is also psychoactive, which means that it affects your central nervous system. Caffeine, even in small doses, makes your heart beat faster. It makes you more alert. It can help you think more clearly. It may even give you a little more "energy" for running or other sports.

How Caffeine Works

The caffeine you take goes to work within fifteen to forty-five minutes. Its effect lasts from 2.5 to 7.5 hours. You won't feel its effects after thatbut it can take up to thirty hours for your body to get rid of it.

The "kick" in caffeine comes from molecules similar to those of adenosine, a chemical that your body manufactures. Adenosine keeps your brain at a regular pace. It controls brain activity through receptors, or gateways. When you drink a beverage containing caffeine, the brain

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receptors mistake the caffeine molecules for adenosine. The receptors "link" with the caffeine and block out the adenosine. Without adenosine to slow it down, your brain revs up.

Side Effects

While caffeine might wake you up it can also cause some unpleasant side effects. If you are allergic to the drug, even a little caffeine can create serious discomfort and should be avoided. Even if you are not allergic, caffeine can make your blood vessels smaller. This makes it harder for your heart to pump blood through your body, so your heart beats faster. At its worst, it can bring on a very scary condition called tachycardia, or "runaway heartbeat."

In larger doses, caffeine can make you anxious and nervous. It can cause stomach problems by creating more stomach acid. It can interfere with your sleep, even several hours after you drink it. Caffeine makes you need to urinate more often, and it can cause diarrhea. Athletes in the Olympic Games were banned from using large doses of caffeine after studies showed that it could cause dangerous health problems that effect their performance.

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Caffeine is a legal drug, but the amounts in products are regulated by the government.

Caffeine Addiction

Many people say they "just can't get started" in the morning without the caffeine in coffee or tea. This is a sign of caffeine addiction. Although it is not as dangerous as many other types of drug addiction, there are certain health risks when someone is addicted to caffeine.

Over time you can develop a tolerance to caffeine. Your body will need more of it

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By exercising, you can get a feeling of energy without using drugs.

to feel the same lift you once got from just a little. When caffeine's "lift" wears off, you may feel just the opposite effect. You may feel tired or let down. You might want more caffeine to get back the "kick" it gave you.

Without caffeine, a person who is addicted will feel uncomfortable withdrawal symptoms. Some people who drink at least two cups of coffee a day report feeling minor discomfort, usually beginning in about twelve to twenty-four hours. These symptoms are at their worst after one to two days and can last for a week. The symptoms include headache (reported by 52 percent in a recent study), a decrease in

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energy (11 percent), depression (11 percent), anxiety (8 percent), and fatigue or drowsiness (8 percent). These symptoms can be severe. They may be one reason why caffeine usersespecially coffee drinkersfind it difficult to stop.

Caffeine Advertising

Despite these dangers, caffeine is not as dangerous as nicotine, and so the government has not regulated the way it is advertised or sold. Soft drink companies may aim advertisements at young consumers by featuring entertainers who appeal to young people, using slogans that make their products sound important, or giving away prizes to people who frequently buy their product. But the makers of caffeinated products never mention the possible dangers of caffeine simply because they are not required to.

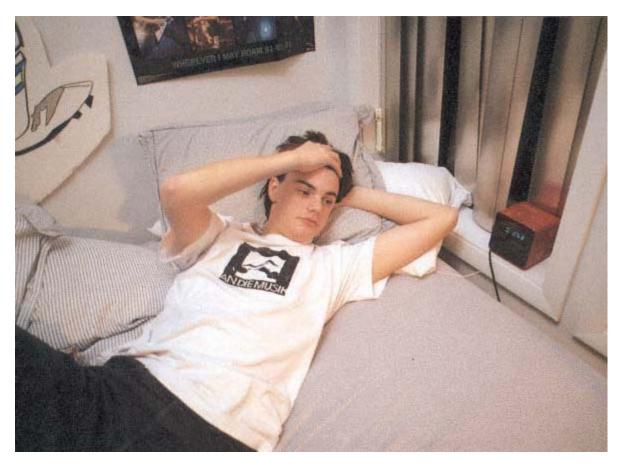
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3 How Much Caffeine Is Too Much?
Hi, Mom," said Sandy, coming into the kitchen.
"You're not dressed for school!"
"I'm not going to school. My cold is worse. I feel lousy. I'm going back to bed."
"I fixed your cereal. Do you want an egg?"
"No, thanks, Mom. Cereal and juice are fine. And I'll get some coffee."
"Just one mug, though."
"No problem. Do we have any pain relievers?"
"I think so. Well, I'm off to work. Will you be okay by yourself?"
"Don't worry about me, Mom. I'll be fine."
Sandy's mother left, and Sandy drank her coffee. She called her best friend to say she wouldn't be in school. She took two pain reliev-

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Too much caffeine can leave you sleepless at night.

ers and went back to bed. She wanted to sleep, but she couldn't. She turned on the TV and watched all morning.

At lunchtime, Sandy ate a peanut butter and jelly sandwich with a cola, and treated herself to a chocolate bar. Then she took two more pain relievers.

She really felt out of itjumpy, restless, and a little sick to her stomach. "That's what colds will do," she said to herself.

Sandy's "feeling out of it" was probably caused by her cold and taking too much caffeine in a short time. Caffeine dosages

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are measured in milligrams. Here's what she took in just five hours.

Eight-ounce mug of coffee	175 milligrams
Four pain relievers	260 milligrams
One twelve-ounce cola	50 milligrams
Once chocolate bar	20 milligrams
Total:	505 milligrams

Doctors say that adults should not have more than 600 milligrams of caffeine a day. Teens should have much less. You may not have reached your adult weight, so you should not bombard a smaller, lighter body with adult amounts of caffeine. As Sandy proved, without knowing it, she had a lot of caffeine in a short period of time. Without knowing which foods or drinks contain caffeine, it's hard to control your intake.

Caffeine is found in surprisingly many products. The dosages on the chart on page 25 are average.

If you eat sugary foods like chocolate cake or candy bars, put sugar in coffee or tea, or drink regular cola drinks, you get an extra lift from the sugar. You also get an extra let-down when the "sugar rush" and the "caffeine kick" both end.

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		Page 25
Food or Product	Caffeine in Milligrams	
Coffee, eight ounces		
	175 mg	
Drip grind		
	135 mg	
Percolated		
	100 mg	
Instant		
	4 mg	
Decaffeinated		
Tea, five ounces		
	40 mg	
Tea bag or leaf		
-	30	
	mg	
Instant		
Cocoa, eight ounces	7 mg	
Chocolate, solid, one ounce	20 mg	
Soft drinks, twelve ounces		
	35	
Core Cala	mg	
Coca-Cola	50	
	52 mg	
Mountain Dew		
	71	
	mg	

Jolt Cola

Stay-awake pills, each

	100 mg
NoDoz	
	200
	mg
Vivarin	
Pain relievers, each	
	32
	mg
Anacin	
	65
	mg
Exedrin	
	100-
	200
	mg
Diet/weight loss pills, diuretics (water removal pills), each	

*Many candy bars contain more caffeine per serving that shown for plain chocolate

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You can avoid addiction to caffeine by choosing other beverages such as water or juice.

Some soft drink makers actually buy the caffeine removed from decaffeinated coffee and add it to their products. The caffeine in some medicines and pain relievers comes from decaf coffee, too.

How to Manage Caffeine

Caffeine affects anyone who takes it. Since it is absorbed very quickly by the body, the effects are almost immediate.

Caffeine affects some people more than others. With each person the effects of caffeine can range from a mild lift to feeling jittery, nervous, or irritable.

So how do you manage the amount of

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caffeine that you take into your body?

If you experience severe side effects from caffeine, eliminating the drug from your diet could be the most healthy option. Fortunately, cutting back is not difficult. You can avoid the discomfort of withdrawal symptoms by gradually reducing the amount of caffeine until you're caffeine free. Slowly reduce the number of cups of coffee or soda you drink each day. Or try substituting half of the coffee you drink with decaffeinated coffee.

If you decide to continue using caffeine, use it responsibly and remain in control of the amount you take. Knowing how much caffeine is in many everyday foods and beverages can help you to limit how much you have each day. Although doctors believe that 600 milligrams is the most caffeine a person should have in a day, you may find that your limit is lower.

It is easy to reduce the caffeine in your diet without giving up the foods or drinks you like. Try to use substitutes like decaffeinated coffee, decaf or herbal teas, and caffeine-free soft drinks. Or drink healthful alternatives such as fruit juices or fruit-flavored "all-natural" sodas. Substitute hard candy for chocolate candy bars and use pain relievers that do not contain caffeine.

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Natural foods and beverages such as fruit and fruit juices, give your body the energy it needs to be at its best.

Study Jitters

"Man, if she gives us an essay question, I'm doomed!" said Diana. "What time is it?"

"Twelve-thirty," Eric answered. "We've been cramming since four this afternoon! I've had it. I'm so jumpy, I could party all night but I can't get this stuff to stick in my head. I don't think I'll remember anything in the morning."

"Me neither. But now I can't slow down enough to sleep," said Diana.

"Maybe we shouldn't have taken those pills."

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Diana and her brother made a common mistake. First, they drank caffeinated cola when they started studying. Then they figured that if one stay-awake pill would help them concentrate, two would help them concentrate better. What they forgot was that the soda plus the pills would affect them like four cups of coffee. They had real jitters and lost their ability to think straight. As for getting a good night's sleep? Forget it!

This next event really happened. It was described in *The Washingtonian* magazine. A doctor told about a student who was "pulling an all-nighter" to study and thought he was having a heart attack. He drank five colas, eight cups of coffee, and took eight stay-awake pills. By 2:30 in the morning, he had cramps and diarrhea. By 3:00, he had the sweats and an irregular heartbeat. He drove himself to the hospital emergency room. The diagnosis was "study anxiety."

It was really caffeine overdose. If you add it up, using the chart on page 25, you'll see that he had taken 2,450 milligrams of caffeine, a daily dosage four times greater than most doctors recommend.

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4 Why People Smoke

With all of the problems that cigarettes and other nicotine-containing products cause, why do so many people still smoke? At least 40 percent of young people who smoke know that it is harmful and have tried to quit. But many of these people fail and begin to smoke again. Other smokers are simply not aware of the massive amount of evidence that shows the serious damage caused by nicotine addiction, or perhaps they choose to simply ignore it. Some smokers make familiar excuses:

- "My friends smoke."
- "I don't want to feel left out."
- "It's cool."

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People who are around friends who smoke may feel pressured to start smoking.

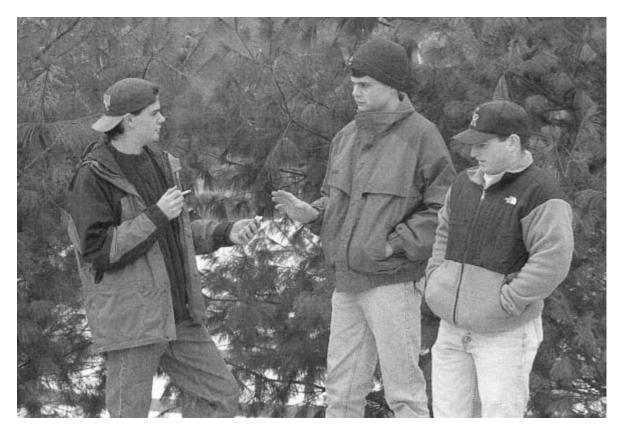
- "My parents smoke, and they're not sick."
- "Smoking helps me to relax."
- "It keeps me from getting fat."

Peer Pressure

Teens may smoke to feel more accepted by other smokers. This influence by friends or acquaintances to try something that could be harmful is called peer pressure. It's the number one reason young people start to smoke. You probably know that peer pressure isn't a good reason to start smoking or to do anything else you don't want to do for that matter, but that doesn't mean it's

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The easiest way to avoid nicotine addiction is not to try smoking

easy to avoid. Consider all of these reasons to avoid smoking that aren't simply related to your health:

- Three out of four of your peers (those your age) do not smoke.
- Smoking is permitted in fewer and fewer places. Growing numbers of people don't allow smoking in their homes. Many office buildings are now entirely smoke-free. Some drug stores have stopped selling all products.
- Cigarette smoke gets into everything, such as your clothes and your hair.

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You have a strong smoke smell, especially to nonsmokers. You also have bad breath.

• Smoking on school grounds may get you suspended. If you do it several times, you might be expelled.

How can you resist the peer pressure to smoke? Here are some ideas:

- Make it clear to your smoker friends that you don't smoke, period.
- If you've tried smoking and didn't like it, say so. Tell your friends it does nothing for you.
- Don't be influenced by the fact that members of your family smoke. Smoking is their choice. It doesn't have to be yours.
- Let nonsmoker friends know you agree with them. Saying so can help to make you a part of *their* peer group.

Many teens also start smoking to lose weight. Cigarette makers often use words like "Slim" and "Light" in brand names to promote the idea that smoking can make people thin. Smoking may reduce your appetite, but the long-term health risks just aren't worth it.

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Teens and Smoking

A survey of 9,965 teens by the National Center for Health Statistics showed that:

• One out of two teens (50 percent) who hang out with smoking friends begin to smoke. Only 3 percent who have nonsmoker friends start smoking.

• Three out of ten teens whose older brothers or sisters smoke take up the habit. And 15 percent of teens whose parents smoke will smoke too.

• If you start smoking early, you are sixteen times more likely to smoke as an adult than if you started smoking after age twenty-one.

• Teens misjudge the addictive power of cigarettes. Of the millions of teen who smoke, 92 percent say they don't plan to be smoking in a year. But only 1.5 percent manage to quit!

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Pressure From Advertising

It is Senior Weekparty time at the New `ersey seashore. Aaron and Jamal, along with several other members of their high school graduating class, are staying in Wildwood. On this bright morning they head to the boardwalk for a stroll by the ocean.

"Hey Jamal, "Aaron says, "why don'tyou stop in the drugstore and buy me some cigarettes?"

"When are you going to turn eighteen, man?" replies Jamal. "I've been buying smokes for you for about four months now. Why do you smoke those things anyway?"

"No reason, "Aaron responds.

The two continue on toward the boardwalk. "Hey look, they're taking down Joe," says Aaron, pointing to a partially torn-down billboard of Old Joe Camel shooting pool with his animal friends.

"Yeah, I guess enough people were pressuring Camel and some of the other cigarette brands to stop targeting young people with their ads," Jamal says. "Now the companies are starting to change."

"Well, I don't smoke Camels anyway. I'm a Marlboro Man," jokes Aaron.

Jamal points to another billboard several blocks away. It shows the Marlboro Man riding his horse on the range. He says, "Yeah, but I wonder how much longer he's going to last?"

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Cigarette advertising is seen by millions of people under age eighteen, the legal age for tobacco use. Tobacco companies that use cartoon characters in ads are often accused of trying to appeal to children.

Some encourage people to buy more cigarettes by offering prizes such as sweatshirts, caps, and jackets with the brand name on them. To get these items, you have to sign a statement that you are twenty-one years old. But these gimmicks often appeal to younger people.

Although cigarette companies are no longer allowed to advertise on television, they spend millions of dollars promoting televised sports events enjoyed by young viewers. Brand names are often mentioned on the air. Brand name banners and signs are also seen on the TV screen.

But as Jamal observed, the federal government and organizations such as the American Cancer Society and the American Medical Association have criticized tobacco companies responsible for advertising aimed at youth. The Food and Drug Administration has recommended that certain kinds of magazine advertisements read by many young people be banned, and that tobacco billboards should not be allowed near schools. The FDA has worked

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in other ways to reduce the number of teen smokers. People who want to buy cigarettes must show proof of their age, usually eighteen years or older, to buy cigarettes. Also, the FDA says that tobacco brand names should not be used to sponsor sporting events.

Not all of these recommendations have taken effect, but they are part of an attempt to reduce tobacco brand awareness among teens and children, and hopefully to decrease the sale of these harmful products to young people.

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5 What's Wrong with Nicotine?

Nicotine is a stimulant. It speeds up the way your body and brain work. It makes your heart beat faster. It increases your blood pressure. Some smokers feel a "kick" or "lift" when they smoke. Some smokers also claim that smoking helps them relax.

The nicotine in cigarette smoke and in chewing tobacco creates dependence by forcing the body to demand it. Once a person is hooked on nicotine, the smoker finds that he or she has also developed nicotine tolerance. He or she will use nicotine to avoid withdrawal symptoms and satisfy the body's demand.

Nicotine is so poisonous that it is the main ingredient in many products made to kill insects. But nicotine is not the only danger-

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ous chemical in tobacco. Thousands of other chemicals are released in cigarette smoke. Carbon monoxide is one poisonous gas. Hydrogen cyanide is another.

All gases and chemicals condense out of the smoke to form a brown goo called tar. Tar does serious damage. Tar is a carcinogen, a substance that causes cancer.

When you use tobacco, the nicotine and tar reduce the oxygen entering your blood. Oxygen is absorbed into the blood by 300 million air sacs, called alveoli, that are in your lungs. Your heart then pumps oxygenrich blood to your body through the arteries and blood vessels. The oxygen nourishes your muscles and all the organs in your body, including your brain. When the oxygen in the blood has been used, what is left is carbon dioxide, a waste substance. The veins carry this "used" blood back to the lungs. The alveoli in the lungs exchange the carbon dioxide for fresh oxygen.

When you breathe in smoke and tar, you irritate your nose, throat, bronchial tubes (windpipe), and lungs. The blood vessels become smaller, so less oxygen is carried into your system, including your brain. Your heart has to pump faster to deliver the oxygen your body needs. Along with the oxygen, harmful chemicals in the smoke

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are transferred to your blood and circulate throughout your body.

You feel the effects immediately. You can get dizzy or feel sick. If you continue to smoke, the elements in tobacco and tobacco smoke can cause all kinds of health problems.

Smokeless Tobacco

Smoking is not the only way that tobacco can damage your health. Some teens use smokeless or chewing tobacco. Since it does not produce smoke, many people chew tobacco thinking that it is safer than smoking. But the U.S. Surgeon General has reported that these smokeless tobaccos are as "dangerous and deadly as other tobacco products." Smokeless tobacco produces tar and can cause mouth cancer. It delivers nicotine to the body even faster than cigarettes.

A government report, "Spit Tobacco and Youth," shows that nearly 20 percent of boys in high school use it in any thirty-day period. Many start chewing as early as age nine. In 1992, 75 percent of the 30,000 new cases of mouth cancer were caused by smoking or chewing. Half of people who develop mouth cancer die within five years.

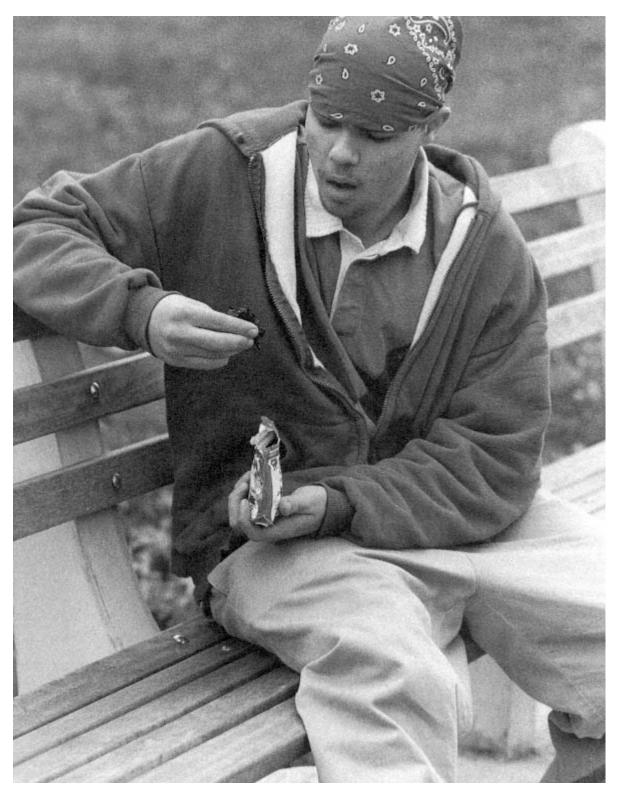
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Chewing tobacco can cause cancer of the mouth and throat.

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How Bad Is Long-Term Smoking?

Doctors at a leading medical college recently compiled all the facts on the killer effects of smoking. The list may be a bit painful to read, but it shows that smoking can do great damage.

• *Addiction*. The longer a person continues to smoke, the greater the risks to his or her health. Quitting may be hard, but millions of people have done it.

- Back pain. Smoking can prevent the spinal disks from getting enough oxygen.
- Bladder cancer. Smoking is responsible for 40 percent of all cases. This totals 4,000 cases a year.
- Breast cancer. Women smokers are 75 percent more likely to develop this cancer than nonsmokers.
- *Cervical cancer*. Up to 33 percent, or 7,000 cases a year, are caused by smoking. Women who smoke are four times more likely to develop this disease than nonsmokers.

• *Childhood respiratory (breathing) problems.* Kids who live with smokers have six times as many of these infections as other children.

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• *Diabetes*. Smoking reduces one's level of insulin, which is vital to a diabetic. It increases the damage to the small blood vessels in eyes, ears, and feet by depriving them of oxygen.

• Drug interactions. Smokers need higher doses of certain medicinal drugs to be effective.

• Ear infections. Smokers' children are at greater risk.

• *Emphysema (obstructive lung disease)*. Smoking accounts for 85 percent of deaths from this disease. The alveoli in the lungs are permanently damaged by smoke. The more of them that are damaged, the harder it is to breathe. Emphysema sufferers must breathe oxygen from tanks. Eventually, they die of suffocation.

• *Esophageal (mouth-to-stomach tube) cancer*. Smokers get 80 percent of all cases. The disease kills 15,000 Americans a years.

• Fires. Smoking is the number one cause of fires in homes, hotels, and (believe it or not) hospitals.

• *Gastrointestinal (digestive system) cancer.* Many researchers believe that smoking doubles a person's risk of developing this cancer

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• *Heart disease*. Smokers are up to four times as likely to develop heart disease as nonsmokers. This is because carbon monoxide and other poisonous gases in tobacco smoke replace oxygen in blood cells. Also, a smoker's heart has to pump harder and faster, which puts it under greater strain.

• Infertility. Couples that include at least one smoker are three times more likely to have trouble having babies.

• *Kidney cancer*. Smoking causes 40 percent of all cases.

• *Laryngeal (voice box) cancer*. People who smoke twenty-five or more cigarettes a day are twenty-five to thirty times more likely to develop this cancer than nonsmokers.

• *Leukemia (blood cancer)*. The tar or condensed smoke in cigarettes contains cancerous chemicals including benzene, a known cause of leukemia.

• Low birth weight. Mothers who smoke as few as five cigarettes a day can give birth to underweight babies.

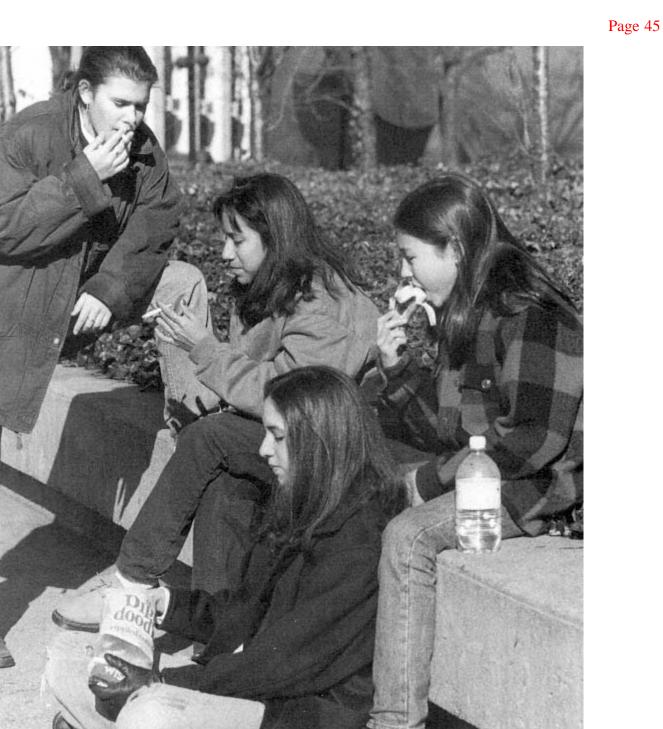
• *Mouth cancer*. People who use smokeless tobacco are twenty-seven times more likely to develop this cancer than people who do not use tobacco. People who smoke are six times more

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Smoking can harm both the smoker and the people who breathe the secondhand smoke.

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likely than nonsmokers to develop mouth cancer.

• *Osteoporosis (weakened bones).* Women who smoke reach menopause (the age when they can no longer have babies) five to ten years earlier than nonsmokers. After menopause, a woman's bones tend to become weaker because of lower estrogen levels. Estrogen is an important hormone that is made in smaller quantities after menopause begins.

• *Pharyngeal (throat) cancer*. A smoker's throat will be repeatedly exposed to chemicals that cause cancer. The vast majority of the 3,600 people who die from this disease each year are smokers.

• *Premature aging*. Smokers develop wrinkles earlier than nonsmokers. Their teeth and fingernails can turn yellow from nicotine staining.

• *Recovery*. Smokers take longer to recover from injuries or surgery than nonsmokers. They run higher risks of pneumonia. They have longer stays in hospitals.

• Stroke. Smoking doubles the risk of this form of paralysis.

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• *Tooth loss.* People who chew tobacco are more likely to lose teeth.

What About Secondhand Smoke?

Cigarette smoke can even harm the nonsmokers who breathe it. The Environmental Protection Agency reports that so-called secondhand smoke is very harmful to children who live with smokers. Every year it causes 150,000 to 300,000 cases of breathing infections in babies. It also hurts children with asthma and each year causes up to 26,000 new cases. Between 2,500 and 3,000 nonsmokers die of lung cancer each year. So if you smoke, you don't just hurt yourself, you may also hurt those around you.

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6 Quitting Smoking

If you quit smoking, your health can begin to recover. If you have smoked for a long time, the healing will take longer. You may not be able to overcome all the effects of smoking, particularly lung problems. But you will reverse a lot of the damage.

How to Quit Smoking

One of the best ways to stop is cold turkey. Just quit! It can be difficult to do, and many people who try this method start smoking again. The largest obstacle to quitting by going cold turkey is nicotine withdrawal. The symptoms can include craving a cigarette, nervousness, anxiety, restlessness, irritability, mood swings, fatigue, sleep disturbance, headache, poor concentration,

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increased appetite, and weight gain. The more cigarettes you smoke each day, the more likely you are to have one or more of these symptoms. They will pass in time if you can hang in there!

There are other ways to quit smoking besides cold turkey method:

• Find other teens who are trying to stop smoking and form a support group. In a support group, people help each other to reach a goal. Be sure to invite teens who have quit, so they can act as peer counselors and tell you how they did it.

• Consider joining a commercial stopsmoking program. But be careful. They can be very expensive, and success is not always guaranteed.

Alternatives

There are also some alternatives to help you quit smoking, but these methods can be expensive and are controversial. One method is hypnotism. Hypnotist Sheila Kahn Alper says the method works if you really want to quit. Young people, she says, participate well in hypnosis. Under hypnosis you accept the idea that smoking is a dirty habit. After the hypnotic sessions

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Quitting smoking will allow you to have a longer and healthier life.

are over, your subconscious mindthe part of your brain that directs much of what you do without your being aware of ithelps you stay off tobacco.

A second alternative is acupuncture. Acupuncture has been practiced by the Chinese for centuries. It is becoming more and more popular. In acupuncture, very thin needles are painlessly placed under the skin. They stimulate the nerve pathways linking different organs of the body to help relieve pain. If you are willing to be hypnotized, and also believe that acupuncture works, combining them could help you stop smoking. You must be referred by a doctor for acupuncture. Remember, however, there's

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no guarantee that either hypnotism or acupuncture will work.

Two stop-smoking aids can be made available to teenagers: nicotine chewing gum and the nicotine patch. A smoker will get nicotine from these products instead of cigarettes. Then he or she will slowly reduce the amount of nicotine until his or her cravings stop. These products can be dangerous if a person who uses them continues to smoke. The body will not be able to handle the high amount of nicotine. Like cigarettes, nicotine patches or gum cannot be legally bought by people under the age of eighteen.

Some smokers try to reduce the amount of nicotine they use by smoking cigarettes with less tar and nicotine. But often this approach doesn't help since smokers are likely to smoke more cigarettes to make up for the nicotine they are not getting in each one. Many smokers who switch to these brands smoke more, not less.

Some people have quit smoking by gradually cutting down the number of cigarettes they smoke each day. The longer you can put off the first cigarette of the day, the betterif you don't make up for it by smoking more later in the day. If in time you can put off the "first puff" from

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morning to afternoon, then to evening, and finally to day's end, you will eventually quit.

You have to want to quit. Then your plan stands a better chance of working, whatever method you choose.

Four Things to Remember

1. It can be very difficult to quit smoking once you start. Nicotine is highly addictive. According to some experts it is as addictive as heroin or crack cocaine.

2. If you start smoking at a young age it will be harder to quit and your chances of becoming a smoker for life will greatly increase.

3. In order to quit you must stick to your decision. You can get help, but you'll have to rely on yourself more than on anyone else.

4. Don't feel ashamed if you start smoking again and have to quit a second, third, or fourth time. Don't get discouraged! Eventually you'll quit for good.

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7 It's Your Choice

Who's in charge here? You are! You and only you can decide how you are going to live your lifeand how you are going to treat your body.

If you drink caffeinated sodas, teas, or coffee, or eat chocolate, be careful to moderate the amount of caffeine per day. If you begin to feel withdrawal symptoms, you may need to cut back. Set limits for yourself and stay with them. Switch to caffeinefree sodas. Keep away from stay-awake pills!

You are surrounded by images that promote smoking. Popular stars are often shown smoking in magazines, on TV, and in films. Movies may make smoking look romantic, cool, and macho. First Lady Hillary Rodham Clinton has criticized

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Keeping active helps ensure your body's health.

several recent movies in which young actors smoke. She explained that these images make smoking seem acceptable and may are encouraging young people to start.

The tobacco companies love this kind of free advertising. Most won't admit it, but they want you to smoke. They will not admit to the health problems either, even though the connections between smoking and illness are clear. Instead, they run ads with cool-looking people lighting up. They emphasize the macho nature of sports and the outdoors and try to relate it to smokingeven though there's no connec-

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tion. They spend billions of dollars to promote smokingfar, far more than the anti-smoking forces are able to spend to stop it.

Remember These Points

1. Caffeine and nicotine are both addictive. Your body will demand them once it tries them.

2. Caffeine and nicotine are both stimulants. They give you a a brief "lift," followed by a "down" feeling and a wish for more of the stimulation.

3. Caffeine and nicotine both cause withdrawal symptoms when you cut down or quit using them. But the withdrawal symptoms of nicotine are much more severe.

4. Nicotine is a powerful poison, and the tar that's left over from smoking and chewing tobacco causes many kinds of cancer and other diseases.

5. The later you start and the less you smoke, the easier it will be to quit.

6. Once you quit smoking, you may start up again. Try to quit again! Keep hanging in there! Quitting is worth it.

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Glossary Explaining New Wordsacupuncture
Ancient Chinese healing art that uses tiny needles to stimulate body nerves and control pain.addiction
When you can no longer control your use of a drug and you experience withdrawal symptoms without it.adenosine
Body chemical that manages brain activity.alveoli
The air sacs in the lungs; they can be damaged by cigarette smoke.analeptics
Drugs that stimulate the brain.asthma
Illness in which breathing is difficult because the small air passages in the lungs have become narrowed.bronchial tubes

Tubes that carry air from the mouth to the lungs.

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cancer

drug

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bronchitis Irritation of the bronchial tube linings, common among smokers. One of a group of diseases in which the body cells grow out of control. cold turkey Completely stopping the use of an addictive drug. decaffeinated. decaf Coffee or tea with the caffeine removed. Anything taken into the body that changes the way we feel or behave. emphysema Lung disease in which the air sacs stop working, making breathing difficult. hypnosis State of being in a sleeplike trance during which you can be told to do (or not do) certain things, such as smoke. When you are awakened, your subconscious mind obeys the instructions without your being aware of it. nicotine A poison; the addictive substance in tobacco. peer pressure Influence exerted on you by others your age. receptors Elements of the brain that, once influenced by an addictive substance, want more and more of it. secondhand smoke Tobacco smoke in the air. smokeless tobacco Tobacco that is < previous page page_57

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placed in the mouth instead of being smoked; also called spit tobacco or chewing tobacco.

tar

The brown substance formed when tobacco smoke condenses or spit tobacco is moistened.

tolerance

The need for more and more of a drug to satisfy the craving of addiction.

withdrawal symptoms

The uncomfortable physical effects felt when giving up a drug.

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Where to Go for Help

American Cancer Society 19 West 56th Street New York, NY 10019 (800) ACS-2345

American Heart Association 7272 Greenville Avenue Dallas, TX 75231 (214) 373-6300

American Lung Association 1740 Broadway New York, NY 10019 (212) 315-8700

Nicotine Anonymous P.O. Box 1468

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Baldwin, NY 11510 (516) 665-0527

Students to Offset Peer Pressure P.O. Box 103 Hudson, NH 03051-0103

In Canada

Canadian Cancer Society 10 Elkhorn Avenue Suite 200 Toronto, ON M4V 3B 1 (416) 961-7223

Canadian Lung Association #908, 75 Albert Street Ottawa, ON K1P 5E7 (613) 237-1208

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