Introduction

More than 90% of smokers are addicted to nicotine, 10% of drinkers are addicted to alcohol and 85% of adult Americans are dependent on caffeine. Nicotine is one of the strongest addictions known to man.

What is the difference between a dependency and an addiction? With both, your body adapts to the substance. If you stop the substance you have unpleasant withdrawal symptoms. With a dependency, there are no cravings, just withdrawal.

With an addiction you have unpleasant withdrawal symptoms AND strong cravings. These can lead to irrational or illegal behavior to obtain the substance. With a dependency, if you know the substance is hurting you, you can stop it. With an addiction, you can't stop it even though you want to.

What Makes Nicotine Addictive?

You have nicotine receptors in your brain. When you puff on a cigarette, nicotine enters the mucous membranes of your mouth and lungs and travels to the brain within three seconds. The nicotine quickly attaches to the nicotine receptors producing a pleasurable feeling. With each puff you have a new surge or spike of nicotine to the brain. These quick hits of pleasure are very addictive.

Why Do People Smoke?

Certainly addiction is a strong reason that people continue to smoke but there are more.

- **SOCIAL** Most people start smoking in a social setting when peer pressure is strong. The lure of doing what the crowd does is hard to resist.
- **PLEASURE** People enjoy smoking. The taste of the tobacco, stimulus, increased energy and improved concentration are pleasurable.
- **WEIGHT CONTROL** Women quickly learn that smoking helps control their appetite and weight. Interestingly enough, nicotine is not the chemical that does this. Nicotine patches or gum do not prevent weight gain. In the early days of cigarette advertising, this was the message projected to women ... smoke and stay slim.
- **ANTIDEPRESSANT** Nicotine's stimulant effect is an anti-depressant. Depression is a common response to quitting smoking.
- **HABIT** Smoking becomes a habit separate from addiction. With a cup of coffee or an alcoholic drink you light up without thinking about it. You associate situations with smoking and instinctively get a cigarette out of habit.
- **AVOID WITHDRAWAL**—One reason you will light up is not obvious. Because of the addiction to nicotine, you will start having unpleasant withdrawal symptoms if you don't smoke. You will then smoke *to stop the withdrawal*. People interpret this as feeling good due to the cigarette ... yes ... but what is really happening is that you are trying to avoid feeling bad.

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How Can I Quit?

Quitting is hard ... perhaps the hardest thing you will ever do. Most successful quitters do so by going *"cold turkey"* and willpower is the strongest predictor of success. If you know that you should quit ... but you really don't want to quit ... then don't bother. No person, drug or product can make you want to quit. You have to want to quit for yourself. When you reach the point that you *really* want to quit, it is easier than you think.

Withdrawal symptoms are the most common reason people start smoking again. These include dry mouth, sore throat, headaches, fatigue, difficulty sleeping, constipation, hunger, irritability, dizziness, lack of concentration and coughing. You may become unbearable to other people.

For the dry mouth, sip cold water or chew gum. For the headache take a warm bath or shower. To aid sleep avoid all caffeinated beverages after 4:00 p.m. For the constipation add fiber to your diet and drinks lots of water. For the fatigue, take naps and back off on your busy schedule. For the hunger, drink water and low calorie snacks. For the irritability, try exercise.

Other than willpower there are some medical aids to quitting.

What Can Nicotine Replacement do For me?

Though cigarettes are the ideal nicotine delivery device, you can also get nicotine from gum, patches or a nasal spray. The purpose of using a nicotine replacement method is to curb the withdrawal symptoms without the harm of the other 3000 chemicals in cigarette smoke.

I listed the six reasons for smoking above to compare them to quitting with nicotine replacement devices. I will use the patch as the most common example.

- There is nothing social about using a nicotine patch. You can't say to your buddies ... "Here ... want to try one of mine?"
- The patch does nothing for habit. It doesn't keep your hands or your mouth busy.
- The patch does not prevent weight gain.
- The patch is not pleasurable. It does not cause any of the pleasurable nicotine spikes to the brain because the level of nicotine in your blood is constant. The gum and the spray are a little better at this.
- The patch may or may not prevent the depression with quitting smoking.
- The patch **does** prevent withdrawal symptoms.

Thus to use a patch successfully you need to be realistic in your expectations. You have to work on the social, pleasure and habit problems on your own. The patch will not make you want to quit. It can help you to avoid withdrawal discomfort but that is all.

What about Wellbutrin/Zyban?

These two drugs are the same. Both are made and sold by GlaxoSmithKline. Wellbutrin came out first and has been sold for years as an antidepressant. When this was given to addicts, many (not all) would reduce or quit smoking.

Wellbutrin works on the dopamine receptors of the brain, the ones that are associated with pleasure. It is theorized that many people with addictive personalities (use lots of alcohol, cigarettes, coffee, sweets, etc.) are low on dopamine and these substances quickly but temporarily raise the dopamine. Wellbutrin gradually raises the brain dopamine level, reducing cravings and desire for nicotine. Because it works gradually, it is not addictive. It is also useful for preventing withdrawal depression.

Zyban was created to get away from the stigma of taking an antidepressant. By changing the name and the image, people could use Zyban without the fear of insurance or social reprisals. It is the identical medication though.

Wellbutrin does not work for everyone but it does work very well for many people. The best way to take Wellbutrin is once a day for one week, then twice a day for another week. Set your quit date for the end of the second week. Unlike the patch there is no harm in using Wellbutrin while you smoke. This allows the medication to work before you try to quit. The highest quit-rates are from using Wellbutrin and the patch at the same time but this is expensive. Common side effects include ringing of the ears, increased anxiety, tremors and insomnia. Wellbutrin should not be taken by any one with a seizure disorder or a history of serious head trauma.

Does Wellbutrin Come in a Generic?

Yes. Bupropion is the generic for Wellbutrin and comes in 75 mg and 100 mg strengths. It is taken three times per day while the more expensive Wellbutrin SR is twice a day. The approximate retail price at <u>www.drugstore.com</u> in February 2003 was \$50 for 90 (one month supply) of the 75 mg tablets and \$66 for 90 of the 100 mg tablets.

Branded Wellbutrin SR 150 mg twice a day is about \$100 and is not covered by insurance if it is used for smoking cessation.

Are There Any Other Drugs Available?

Yes. The old, original anti-depressant nortriptyline (Pamelor) has been shown to be just as effective in stopping nicotine cravings. Since it is an inexpensive generic, there is no advertising for this drug and thus few doctors know that it also works. It comes in 10, 25, 50 and 75 mg capsules and the dose should be gradually increased to 50 to 75 mg every night. A one-month supply (30 capsules) of the 75 mg strength costs \$12.00, considerably cheaper than the buproprion. This anti-depressant can improve sleep.

Common side effects with nortriptyline are dry mouth, constipation and some weight gain.

The latest drug is Chantix

Chantix is the latest drug to be marketed for smoking cessation. It partially blocks the nicotine receptors in your brain preventing some of the pleasurable effects of smoking. It works as well as Zyban/Wellbutrin but your chance of successfully quitting with this drug is still low.

To take Chantix, begin one week before your quit date. Take 0.5 mg once a day for 3 days, then 0.5 mg twice a day for four days then quit smoking and take 1 mg twice a day for 3 to 4 months.

One out of three people will have nausea with this drug ... that is why you gradually build up the dose. The chance of nausea is higher if you use a nicotine patch or smoke while using the drug. The cost is about \$2 per tablet ... either strength ... or about \$4 per day. At this time, we do not recommend taking Wellbutrin and Chantix together.

How Long Do I Have To Take The Drug?

It takes three months to quit a habit. If you stop the drug a week after you stop smoking you will most likely restart smoking. Keep in mind ... no matter how you quit smoking (hypnosis, patch, drugs, will power, acupuncture) in one year you will have the same risk of restarting the habit. At best, any of these methods have a 20% success rate at one year. *You still have to want to quit smoking*.

Any Other Tips?

Here are some observations:

- This will probably be the hardest thing you have ever done. Give yourself credit for even minor victories in breaking this addiction.
- Set a quit date and tell everyone. When that date arrives, you will be less likely to back out and set another date.
- Try to start thinking of yourself as a non-smoker. This is not easy. We all have a mental image of who we are and you have to think of yourself as a non-smoker.
- You will quit a thousand times. Every time you want a cigarette you will need to make the decision to quit again.
- Keep your hands and mouth occupied. For some this means chewing gum. For others this can mean keeping a cocktail straw handy and handling it like a cigarette.
- Set a positive reward. For example, put a glass jar on your bedroom dresser where you can see it. Everyday put the money you would have spent on cigarettes in the jar. At the end of the month, take the money and spend it on something you wouldn't normally do or buy. Go to a nice restaurant. Buy some clothes. Donate it to charity. This money is free. Remember it was going up in smoke before.
- Set a negative reward. This one is tough. Write a check for \$500, sign it and endorse it to an organization you despise ... for example, the Osama Bin Laden kidney dialysis

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fund. Don't date it and give the check to a friend. If you start smoking, the friend will date the check, mail it and *tell all your friends* about your donation!

• If someone would give you ten million dollars if you could quit smoking, could you? If the answer is yes, then you know you can quit smoking ... you just have to find the right reason. Is better health a good enough one?

Summary

- It's hard.
- If you know you should quit but really don't want to, save your money until you really want to quit.
- Learn more at <u>www.megalink.net/~dale/quitcigs.html</u>, <u>www.quitnet.org</u> (Boston University), <u>www.lungusa.org/tobacco/quitting_smoke.html</u> (American Lung Association) and <u>www.surgeongeneral.gov/tobacco/default.htm</u> (Office of the Surgeon General)