

Now we're smokin'.....

Smoking, Injuries, and Kicking the Habit

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The third Tuesday in November is the annual Great American Smokeout. If you are still smoking, we hope you will set this day as your goal to kick the habit. Please refer to the American Cancer Society website (http://www.cancer.org/docroot/PED/ped_10_4.asp) for more information about this event, materials and information to help you meet your goal.

Smoking is extremely addictive, for physical, psychological, and social reasons. If you need one more reason for committing to a smoke-free life, smoking has been identified as a risk factor for both Repetitive Strain Injuries (RSI)² and other musculoskeletal disorders (MSD), especially lower back pain.³

How is smoking related to MSD?

Smoking increases the risk of RSI and MSD because nicotine restricts blood circulation.¹ If blood doesn't flow well, then waste products settle into soft tissue instead of being carried away in the blood stream. In addition, good circulation brings food and oxygen to the muscles, tendons and ligaments. Smoking also replaces oxygen with carbon monoxide.¹ Oxygen is essential for healthy tissues. If your soft tissues don't receive food and oxygen, they tire easily.¹ Smoking increases the chances of back pain not only due to limited circulation but also to the back spasms caused by coughing.³

What is the evidence?

Research has indicated that there are connections between smoking and general injury rates as well as disorders of the neck, shoulders, and back. Smokers report more pain in all body parts and more musculoskeletal symptoms than non-smokers.^{4,5} Even people who have smoked, but have stopped smoking for a number of years, report more symptoms than people who have never smoked.^{4,5} One study researching neck and shoulder pain found it to be related to smoking only in female subjects, though other studies have found males to be just as prone to problems.⁶

Data from 25,455 patients was analyzed to determine if there was a relationship between smoking and back pain symptoms. Smokers were younger than nonsmokers (44.2 vs. 48.7 years) and were more likely to report severe back symptoms (37% vs. 50%). Nonsmoking surgical patients reported improved health status more quickly than smokers. While both smokers and non-smokers had spinal problems for a similar period of time, smokers reported more severe symptoms. In addition, smokers had lower scores on both physical and mental health status than nonsmokers.⁷

Another article that reviewed 38 published studies regarding the association of smoking and back disorders concluded that smoking is associated with the incidence and prevalence of nonspecific back pain. There are too few studies to make conclusions about other back conditions such as herniated discs.⁸

In another large study, the effect of smoking on people with and without scoliosis was investigated. Statistically significant associations between back pain and current cigarette smoking were found in women with and without scoliosis, and in men with scoliosis, but not among men without scoliosis.⁹ Among current smokers, the prevalence of back pain increased with cigarette consumption. In the three groups with significant associations, intensity,

frequency, and duration of episodes of back pain were found to increase with smoking. From this it might be concluded that smoking has a greater impact on people with damaged spines.⁹

Another study investigated the effects of smoking on exercise-related injuries during Army basic training. The study controlled for factors such as demographic, physical fitness, and health variables.¹⁰ Recruits who reported smoking at least one cigarette during the month prior to basic training had significantly higher injury rates during training than those who did not smoke prior to training. The relationship with smoking history was most strongly related to overuse injuries. Injury rates were approximately 1.5 times higher for the smokers than for the non-smokers. It was concluded that the detrimental effects of smoking persist at least several weeks after cessation of smoking, since smoking was not allowed during basic training.¹⁰ In addition, smokers had more previous injuries and illness, were less physically active, and were less physically fit than nonsmokers.¹¹

Some studies report that smoking can impair healing of wounds from trauma, surgery, and disease. It is plausible that smoking interferes with the body's ability to repair muscle, bone, and other tissue, leaving smokers more susceptible to injury.¹¹

Research Conclusions.

Studies have found that smokers (as opposed to non-smokers):

- report more pain in all body parts.
- report more severe back problems, increasing as tobacco use increases.
- are more prone to overuse injury during exercise.
- are less physically active and physically fit.
- heal more slowly from injury, surgery and disease.

Getting help.

It's generally agreed that without help, your chances of kicking the habit alone are only about 5%. Unfortunately, there is no magic was that seems to work for everyone.^{14,19}

Medications

Use of the anti-depressant Zyban (bupropion SR) has been shown to be very beneficial, though the reasons for this are not understood.^{12,13,14} Zyban in combination with behavioral counseling has been found to have a 24% to 33% success rate after one year.¹² Though dosages of 300 mg improved success rates over a three-month period, a dose of 150 mg was found to have fewer side effects such as sleep disturbances, concentration problems, shakiness, and gastrointestinal problems.¹²

A naturopathic over-the-counter, non-nicotine tablet and gum program is currently under clinical trials, called Nico-Rx.¹⁵ Preliminary results have shown that 45% of the subjects were able to reduce cigarette use after 1 month, and 10% were able to quit for 1 month.¹⁵ More independent research is required to determine its effectiveness, but it can be a safe, natural alternative or supplement to your program.¹⁵

Nicotine gum, patches, and candy are alternative forms of nicotine. The theory is that you can wean yourself off of nicotine, though these substitutes can actually supply you with loads of nicotine and potentially intensify your addiction.^{16,17} These alternatives actually facilitate cessation if they are used in combination with some sort of support group, but success rate is not high; less than 10% successfully quit for a month.¹⁵ People who decide to quit "cold turkey" (that is, stopping completely without trying to wean themselves off) have the highest success rate,¹⁶ especially when accompanied by behavioral counseling or support.

Support and Behavioral Counseling

Having good social support, behavioral counseling, and a role model who has successfully quit smoking have proven essential when attempting to quit.^{12,13} SRI International found that participation in a behavioral counseling program significantly improved the chances of quitting smoking.¹² The highest success rate was for people receiving 300 mg of Zyban combined with behavioral counseling. A less intensive approach using mailed questionnaires, phone follow-ups, and an access to a "quitline" was not as successful.

Dr. Edward Feil of the Oregon Research Institute found that one of the most valuable ways to find support is online, especially for women.¹³ The internet is there for you 24 hours a day. You can get a "helping hand" any time you

feel you can't stand another moment without a cigarette, just by logging on to a website. Give yourself one more chance by waiting to log on (or call up) and see if there is some tip that will help you make it through this time....and the next.

Check out the following programs and see if they can help you.^{12,13}

- CHP Free & Clear Quit-Smoking Program. <http://www.freeandclear.com/> or 1-800-292-2336
- <http://quitnet.com>
- <http://www.lungusa.org> (American Lung Association's program called Freedom From Smoking)
- 800-227-2345 (American Cancer Society's "Quitline")

Alternative Therapies

Acupuncture and hypnosis can be helpful in your smoking cessation program.^{18,19} Breathing exercises can help your motivation to quit and reduce cravings.¹⁴ Taking vitamin and mineral supplements may help reverse the damage smoking has done to your lungs.¹⁴

Results using acupuncture range from highly successful to completely ineffective, without regard to whether the person is skeptical about it ahead of time. Some people report a complete loss of craving after just one session.¹⁸ If it doesn't work for you, pursue a different approach, but don't give up!

Unfortunately, there are some hypnosis seminars, often given by laypersons, which have given hypnosis a bad name. A one-time seminar is not going to help! If you would like to explore hypnosis, there is a CD set by the respected Steve Gurgevich, Ph.D., which is recommended by Dr. Andrew Weil.^{19,20}

Reaching for success.

As with any addiction, looking at the rest of your life without another cigarette will seem hopeless when the craving sets in, but simply not smoking "this time" is not impossible. Over time, the physical need will decrease. Healthy substitutes for the psychological and social needs will make quitting easier.

Be aware that there are differences between men and women regarding addiction. Nicotine dependence is generally lower for women but behavioral dependence is higher (e.g., women value taste over strength and they enjoy the rituals of lighting up). And women smokers have almost twice the risk of heart disease and lung cancer compared to male smokers. Because women tend to experience depression while they are trying to quit, Zyban may be especially effective for them, since it is an anti-depressant. It is recommended that women time their smoking cessation with the first half of their menstrual cycle, since it has been clearly shown that tobacco withdrawal symptoms and low moods are noticeably milder during that time.¹³

Many people don't stop smoking because they fear weight gain. Since nicotine suppresses appetite and increases metabolism, weight gain is common when smoking is stopped.²¹ People who don't try to diet while they are quitting smoking have been found to put on less weight and are more likely to quit.¹³ However, if you've been inactive, it's helpful to add moderate exercise to your life. Improving your diet by increasing fruits and vegetables, whole grains, and low-fat sources of protein should help you combat weight gain.²¹ Most people actually gain less than 10 pounds when they stop smoking.^{13,21} This is definitely an insignificant risk when compared with the risk of getting emphysema, lung cancer or MSD!

This article and all of our articles are intended for your information and education. We are not experts in the diagnosis and treatment of specific medical or mental problems. When dealing with a severe problem, please consult with a healthcare or mental health professional and research the alternatives available for your particular diagnosis prior to embarking on a treatment plan. You are ultimately responsible for your own health and treatment!

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