



## OSU COMPREHENSIVE WOUND CENTER

University Hospital East  
1492 East Broad St.  
Tower 9  
Columbus, OH 43205

Martha Morehouse  
Medical Plaza  
2050 Kenny Rd. 1<sup>st</sup>  
Floor Concourse

614-293-4811

## HOW DOES SMOKING AFFECT THE BODY?

**Carbon Monoxide**, a part of cigarette smoke, competes with oxygen by attaching itself to the hemoglobin on the red blood cells. If carbon monoxide is attached to the hemoglobin, oxygen does not have a place to travel through the blood. This results in less oxygen available for the tissues to heal themselves.

**Nicotine**, a part of cigarettes, is a vasoconstrictor. A vasoconstrictor is a chemical that narrows blood vessels and reduces the flow of blood. When this happens, the body does not receive adequate amounts of nutrients or oxygen to stay healthy or repair itself. When body tissues are injured they require ten times the nutrients and energy of normal tissues to heal. So smoking delays the body's ability to heal itself by preventing an adequate energy and oxygen supply to the wounded tissue.

**Tar**, a component in cigarette smoke that coats the lining of the lungs and trachea. The body tries to clear this "sticky" product from the lungs by coughing. This is why smokers develop a chronic cough. When the lungs are coated with tar, the exchange of oxygen and carbon dioxide is inhibited. This means that the blood carries a lower concentration of oxygen to the tissues, which also slows the healing process.

## How to quit smoking...

There are many methods to help you quit smoking. Family and friends may be supportive and encouraging, but ultimately the decision to quit smoking is yours.

- ⊗ People who use stop smoking aids\* or who attend support groups have a 26% chance of successfully quitting.

*\* Smoking aids include such products as Zyban, Wellbutrin, nicotine patches or Nicorette gum*

- ⊗ Only 10% of those who do not use stop smoking aids will quit smoking successfully.



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### **When you make the decision to stop smoking, use these helpful tips to assist you in quitting.**

- ⊗ Prepare for quitting by picking a date and start to make plans for how you will cope with not smoking.
- ⊗ Avoid acidic foods such as tomatoes and citrus. These foods allow nicotine to leave the body faster and can increase the urge to smoke.
- ⊗ Nibble on low calorie snacks such as carrot sticks, celery or apples.
- ⊗ Suck on hard candy or chew gum.
- ⊗ After dinner, brush your teeth or sip mint tea to avoid the urge to smoke.
- ⊗ Exercise! Swimming, running and other sports help relieve tension and reduce the urge to smoke.
- ⊗ Plan ahead and think of alternatives to smoking before the urge to smoke occurs.
- ⊗ Relax. Remember the urge to smoke will pass.

### **Smoking Also...**

- ⊗ Increases the heart rate 10-20 beats/minute. This means the heart is working harder and requires more nutrients and oxygen.
- ⊗ Increases the blood pressure 5-10 mm Hg.
- ⊗ Increases the blood sugar level. This higher level causes the red blood cells to become “sticky”. When this happens, they may clump together and be unable to travel through the smallest vessels, called capillaries. The tissues being nourished by these vessels will not receive all the blood flow they require.



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- ⊗ Increases the chance for platelets to clump together. This can result in blood clots that cause strokes, heart attacks or damage to other tissues.

Quitting smoking is a learned behavior. It is critical to stay positive during this learning process, and attempt to focus on why you decided to quit in the first place.