

## **Doctor, Please Explain Smokeless Tobacco**

Insight into its physical and mental effects

- What chemicals are in smokeless tobacco?
- Who uses smokeless tobacco?
- How to break the habit?
- and more...

Three percent of American adults are smokeless tobacco users. They run the same risks of gum disease, heart disease, and addiction as cigarette users, but an even greater risk of oral cancer. Each year about 30,000 Americans are diagnosed with oral and pharyngeal cancers, and more than 8,000 people die of these diseases. Despite the health risks associated with tobacco use, consumers continue to demand the product. In 2001, the five largest tobacco manufacturers spent \$236.7 million on smokeless tobacco advertising and promotion.

### **What is smokeless tobacco?**

There are two forms of smokeless tobacco: chewing tobacco and snuff. Chewing tobacco is usually sold as leaf tobacco (packaged in a pouch) or plug tobacco (in brick form). Both are placed between the cheek and gum. Users keep chewing tobacco in their mouths for several hours to get a continuous high from the nicotine in the tobacco.

Snuff is a powdered tobacco (usually sold in cans) that is put between the lower lip and the gum. It is also referred to as “dipping.” Just a pinch is all that’s needed to release the nicotine, which is then swiftly absorbed into the bloodstream, resulting in a quick high.

The chemicals contained in chew or snuff are poisonous and addictive. Every time smokeless tobacco is used, the body adjusts to the amount of tobacco needed to get a high. Consequently, the next time tobacco is used, the body will need a little more tobacco to get the same feeling. Holding an average-sized dip or chew in the mouth for 30 minutes gives the user as much nicotine as smoking four cigarettes.

### **Is smokeless tobacco less harmful than cigarettes?**

In 1986, the U.S. Surgeon General declared that the use of smokeless tobacco “is not a safe substitute for smoking cigarettes. It can cause cancer and a number of noncancerous conditions and can lead to nicotine addiction and dependence.” Also since 1991, the National Cancer Institute has recommended that the public avoid the use of all tobacco products due to their high levels of nitrosamines.

In a recent study, cancer researchers found that oral tobacco products including lozenges and moist snuff are not a good alternative to smoking, since the levels of cancer-causing nitrosamines in smokeless tobacco and lozenges are very high. Some smokeless products contain the highest amounts of nicotine that can be readily absorbed by the body.

### **What are the ingredients in smokeless tobacco?**

- Polonium 210 (nuclear waste)
- N-Nitrosamines (cancer-causing)

- Formaldehyde (embalming fluid)
- Nicotine (addictive drug)
- Cadmium (used in batteries and nuclear reactor shields)
- Cyanide (poisonous compound)
- Arsenic (poisonous metallic element)
- Benzene (used in insecticides and motor fuels)
- Lead (nerve poison)

### **Who are the most common smokeless tobacco users?**

According to the 2000 National Household Survey on Drug Abuse conducted by the Substance Abuse and Mental Health Services Administration, young adults between the ages of 18-25 are the most common smokeless tobacco users. This trend may be influenced by innovative marketing tactics targeted at a younger audience.

Smokeless tobacco manufacturers are marketing flavored smokeless tobacco. A 2005 American Legacy Foundation and National Cancer Institute study noted, "Tobacco companies are using candy-like flavors and high tech delivery devices to turn a blowtorch into a flavored popsicle, misleading millions of youngsters to try a deadly product."

### **What are the physical and mental effects of smokeless tobacco use?**

**Cancer.** Smokeless tobacco is a cancer-causing agent or carcinogen. Cancers are most likely to develop at the site where tobacco is held in the mouth, but it may also include the lips, tongue, cheek, and throat.

**Leukoplakia.** Smokeless tobacco users may develop a condition in which white spots form on the gums, inside of the cheeks and sometimes tongue. It can be caused by the irritation from the tobacco juice. The disorder can be considered pre-cancerous. Therefore, if a white patch does not heal within one week, a doctor should be consulted.

**Heart disease.** The stimulating effects of nicotine, an organic compound made out of carbon, hydrogen, nitrogen, and sometimes oxygen, increase the heart rate and blood pressure and may trigger irregular heart beats.

**Gum and tooth disease.** Smokeless tobacco permanently discolors teeth, causes halitosis (bad breath), and may contribute to tooth loss. Smokeless tobacco contains a lot of sugar which forms an acid that may eat away the tooth enamel causing cavities and mouth sores. Also, its direct and repeated contact with the gums may cause them to recede.

**Social effects.** Bad breath, discolored teeth.

### **What are some early warning signs of oral cancer?**

- A sore that bleeds easily and does not heal

- A lump or thickening anywhere in the mouth or neck
- Soreness or swelling that does not go away
- A red or white patch that does not go away
- Trouble chewing, swallowing, or moving the tongue or jaw

Tips to quit using smokeless tobacco for a lifetime

- Write down a list of reasons to quit. For example:
  - Don't want to risk getting cancer.
  - Family members find it offensive.
  - Don't like having bad breath after chewing and dipping.
  - Don't want stained teeth or no teeth.
  - Don't like being addicted to nicotine.
  - Want to start leading a healthier life.
- Pick a quit date and throw out all chewing tobacco and snuff.
- Remember daily of the decision to stop chewing tobacco.
- Ask friends and family to help stay committed to the decision to quit by giving support and encouragement.
- Find alternatives to smokeless tobacco, such as sugarless gum, pumpkin or sunflower seeds, apple slices, raisins, or dried fruit.
- Engage in recreational activities to keep the mind off of smokeless tobacco.
- Develop a personalized plan that works best; set realistic goals.
- Reward successes.