

# Are We through with Chew Yet?

As many as 20 percent of high school boys and two percent of high school girls continue to use smokeless tobacco, according to the Centers for Disease Control and Prevention. Despite public education campaigns sponsored by medical societies, organized baseball, and individuals, 12 to 14 million American users, one third are under age 21, and more than half of those developed the habit before they were 13. Peer pressure is just one of the reasons for starting the habit. Serious users often graduate from brands that deliver less nicotine to stronger ones. With each use, you need a little more of the drug to get the same feeling.

There has been some progress. The organizer of America's fastest growing sport, National Association for Stock Car Auto Racing (NASCAR) has dropped its long-time affiliation with Winston tobacco. NASCAR president Mike Helton says a total tobacco ban is an issue that's on our radar for next year.

And there have been setbacks in the fight against smoking tobacco. New marketing campaigns that feature flavored smokeless products have won over new young users. Journalistic coverage of Dr. Brad Rodu and his support of smokeless tobacco as a substitute for cigarettes has diluted the Academy's No Smokeless Tobacco Use message that has been an official campaign for this Academy since 1989. In a November 10, 2005 study; New Cigarette Brands with Flavors That Appeal to Youth: Tobacco Marketing Strategies; Health Affairs, November/December 2005, Volume 24, number 6, funded by the American Legacy Foundation and the National Cancer Institute noted that candy flavors were also added to smokeless tobacco products, cigars and cigarette rolling papers.

Gregory Connolly, senior author of the study and a professor of the practice of public health at the Harvard School of Public Health 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. Although the study focuses primarily on cigarettes, it noted that the addiction to smokeless tobacco or chew is as strong if not stronger than to cigarettes. Additional research has shown that there continues to be substantial evidence that smokeless tobacco is deadly. A December 18, 2003 study by Patricia Richter, Ph.D and Francis Spierto, Ph.D, two CDC researchers released by the Center for the Advancement of Health reported that the most popular brands of smokeless tobacco contain the highest amounts of nicotine that can be readily absorbed by the body. According to Richter, Consumers need to know that smokeless tobacco products, including loose-leaf and moist snuff, are not safe alternatives to smoking, Richter says. The amount of nicotine absorbed per dose from using smokeless tobacco is greater than the amount of nicotine absorbed from smoking one cigarette.

## **KICKING TOBACCO MEANS KICKING IT ALL**

In November 11, 2005 Reuters story, Oral Tobacco Not Safe Substitute for Smoking, Dr. Stephen Hecht and colleagues from the University of Minnesota Cancer Center in Minneapolis related data from their current research that compared the levels of cancer-causing nitrosamines

in popular smokeless tobacco products and medicinal nicotine products such as the nicotine patch, nicotine gum, and nicotine lozenges.

The results clearly showed that the levels of cancer-causing nitrosamines are far higher in smokeless tobacco products than they are in medicinal nicotine products, Hecht said during a press briefing. While smokeless tobacco has demonstrably less carcinogens and toxins than cigarette smoke, said Hecht, smokeless tobacco still has remarkably high levels of carcinogenic tobacco-specific nitrosamines -- levels that are 100 to 1,000 times higher than in any other consumer product that is designed for oral consumption. In a separate study, the team evaluated carcinogen biomarker levels in individuals using these products. They had 54 users of popular US smokeless tobacco products use their usual brand for two weeks and then had them switch to either Swedish snus or a nicotine patch for four weeks.

The team found that carcinogen levels in urine were statistically significantly lower after the switch from US-made smokeless tobacco brands to snus or to the nicotine patch. When comparing snus users to patch users, levels of cancer-causing compounds were significantly lower in patch users, indicating that medicinal nicotine is safer than snus, Hecht said. These results conflict with some prior studies that suggested that smokeless tobacco including moist snuff may be a less harmful habit than cigarette smoking because many of the carcinogens in cigarette smoke are either reduced or absent in smokeless tobacco. The bottom line, Dr. Hecht said, is that smokeless tobacco products are dangerous.

The evidence suggests, he continued, that smokeless products are in fact a cause of oral cancer and pancreatic cancer in humans. The current evidence does not support smokeless tobacco as a substitute for cigarette smoking.