

SMOKING IS ADDICTIVE



**Front of Cigarette Pack
(representation only)**



**Back of Cigarette Pack
(representation only)**

Nicotine is the addictive substance in cigarette smoke. It is present in the tobacco leaf and when a cigarette is burnt, nicotine from the tobacco leaf is inhaled in cigarette smoke by the smoker. Nicotine enters the bloodstream via the lungs and reaches the brain within 10 seconds of inhalation. The risk of developing dependence following exposure to cigarettes is greater than the risk of developing dependence following initial use of cocaine, alcohol or marijuana.¹

People who start smoking in their teens are more likely to become life-long smokers than those who have their first cigarette as adults. Despite most adolescents believing that they won't be smoking five years after they start, by age 18 two thirds regret starting and half have tried to quit.² Recent animal studies indicate that teen smokers are especially vulnerable to the effects of nicotine and that nicotine addiction may be heightened if smoking is initiated during adolescence.³

Cigarette smoking is a complex behaviour that over time becomes powerfully compulsive. Nicotine causes changes in the structure and function of the brain producing both positive experiences such as feelings of arousal, relaxation, and improved concentration and negative withdrawal symptoms such as nervousness, restlessness, irritability, anxiety and impaired concentration. It is difficult to separate the positive effect of nicotine from the relief of negative withdrawal symptoms.

The initial kick experienced by a smoker as nicotine reaches the brain, rapidly wears off as nicotine is redistributed throughout the body and is metabolised. Falling nicotine levels initiate withdrawal symptoms, the intensity of which increase as

nicotine levels continue to fall. Smoking another cigarette relieves withdrawal symptoms but only for a short period of time when nicotine levels start to fall again. This variation of nicotine blood levels over the course of a day means a smoker is mostly experiencing states of nicotine withdrawal.

The positive and negative effects of nicotine reinforce smoking behaviours. The reinforcement occurs with every puff of a cigarette – if smoking a pack or more per day, this will occur hundreds of times per day and hundreds of thousands of times per year. Through this process the behaviours of seeking, lighting and inhaling become well entrenched and contribute to the compulsion to smoke.⁴

Tobacco addiction is considered to consist of two medically defined disorders – nicotine dependence and nicotine withdrawal.¹

Nicotine dependence is the continued use of tobacco despite the negative health outcomes of its use. The severity of nicotine dependence varies amongst smokers with more dependent smokers having their first cigarette more quickly on waking in the morning.⁵ Nicotine withdrawal is characterised by symptoms of nervousness, restlessness, irritability, anxiety and poor concentration.

Tolerance to the effects of nicotine develops with repeated use of tobacco and consequently consumption increases over time but produces only relatively weak effects compared to when smoking first began.⁶

Despite the perception of “light and mild” and “low nicotine/tar” cigarettes being a healthier option they are not. Smokers who switched to ‘light and mild’ and ‘low nicotine/tar’ cigarettes to reduce their nicotine intake, tend to compensate for the reduced smoke yields of nicotine by smoking the cigarette more deeply or more intensively in order to achieve their required dose of nicotine.⁷ Because a smoker may be smoking the cigarette more intensively, they may be exposing themselves to greater amounts of toxic substances in cigarette smoke.

Decided to quit? For help, talk to your doctor or pharmacist, call the Quitline on 131 848 or visit the Quitline web site at www.quitnow.info.au.

Sources

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