Train Your Brain to Quit Its Addiction

Two powerful individuals are combining efforts and resources in a renewed campaign against tobacco – Bill Gates and Michael Bloomberg, mayor of New York City. Despite many best efforts to date to alter their addictive behavior, about one billion people on the planet still smoke. Half die prematurely from smoking-related causes, and the typical loss of life expectancy ranges from ten to fifteen years. Ironically, Philip Morris had it right when they made the claim in the Czech Republic decade ago that smoking actually reduced the costs of providing social security because it conveniently caused people to die sooner.

What may make the difference this time is that Gates and Bloomberg come with money, methods, and motivation. When it comes to methods, however, the plan is to be receptive to a wide variety of initiatives that have promise rather than funneling efforts into a pre-ordained program.

Neurofeedback has something unique to offer when it comes to smoking. As many have recognized, it is a mistake to campaign against smoking merely because of the long-term impacts when there are so many obvious near-term benefits. The human operating system responds much more effectively to short-term rewards than to vague long-term disincentives. Willpower is enormously over-rated when it comes to fighting a reward system that is largely mechanized subconsciously.

The missing piece is training the brain to the point at which smoking tobacco no longer boosts brain function in the moment. Nicotine is used by many simply to manage arousal level. Some brains are calmed with cigarettes; others are

activated. Neurofeedback can displace the need for nicotine by teaching the brain to regulate more efficiently the levels of activation that will satisfy what the addiction serves. And only then should we be talking about giving up smokes. Beyond that point, we are dealing with acquired habits of mind, and acquired habits of brain.

The habits of mind can be helped with Alpha-Theta training. This also helps with histories of emotional trauma that may underlie the nicotine addiction. After all, the lung cancer death rate is predicated not so much by smoking as by history of emotional trauma. Remediating the trauma may pave the way to resolving the nicotine addiction as well.

As to the acquired habits of brain, we have the history of neurofeedback for addictions to fall back upon. In the case of drug dependencies that have been researched, the elimination of craving is often observed with neurofeedback training. The achievement of sobriety and abstinence is not contingent on the elimination of craving, so we are dealing with a subset here of the people who are successful in shedding their addiction with neurofeedback. These findings imply a fundamental renormalization of the reward circuitry in the formerly addicted brain through neurofeedback.

In addition, we have anecdotal case histories from clinical work in which the same shedding of physiological dependency (as measured by craving) is observed with nicotine as with alcohol and the illicit drugs that have been previously researched. The implication of all the research to date is that we are largely dealing with "common pathways" of addiction, and these are now directly accessible to alteration through neurofeedback.