INTRODUCTION

On January 11, 1964, Luther L. Terry, M.D., Surgeon General of the U.S. Public Health Service, issued a warning to the American people that smoking was hazardous to one’s health and was a cause of lung cancer and laryngeal cancer as well as the main cause of chronic bronchitis. The Surgeon General’s Advisory Committee on Smoking and Health had reviewed more than 7,000 articles relating to smoking and disease before issuing its report. The response of the American public was tepid (Centers for Disease Control and Prevention, 2009). Why was that the case? For one thing, smoking is highly addictive, and smoking cessation is difficult and uncomfortable. In addition, changing behavior is a complex process that takes time. There are some—the early adopters—who are in the vanguard of behavior change and lead the pack. The rest of the crowd takes much longer to believe that they should change their behavior and to actually adopt a new behavior. The new behavior, or innovation, does not take hold automatically. Its acceptance and adoption requires an effective health education campaign (Oldenburg & Parcel, 2002). The Diffusion of Innovations Theory provides a roadmap for promoting and gaining widespread acceptance of an innovation.

After the 1964 Surgeon General report, warning labels were put on cigarette packages. Tobacco companies continued to promote cigarette smoking on the radio television, movies, and print media with icons such as Joe Camel and Marlboro Man. Cigarettes were associated with being cool, sexy, and hip. The jingles for the commercials were catchy—even a young child could pick up the tune and repeat it. In 1969, the U.S. Surgeon General issued another smoking report that warned that low birthweight was associated with tobacco use (Report of the Surgeon General, 1969). Under pressure, Congress passed the Public Health Cigarette Smoking Act, which banned cigarette commercials from radio and TV, effective January 2, 1971. Print sources such as magazine continued to advertise cigarettes, and movies still glamorized smoking cigarettes. Additional federal restrictions were passed, banning cigarette advertising on billboards, and smoking on airplanes.

The next step in tobacco control was to take the diffusion of innovations to the state level. Slowly, a tipping point was reached, and the onus was on the smoker to leave and smoke outside. Individual states created tobacco-free areas, then tobacco-free buildings, and then tobacco-free campuses and workplaces. Of course, there are some who complain that smokers get “too many breaks” at work, because they have to go outside. But it is well worth it so that the non-smoking employees are not exposed to secondhand smoke. The ultimate goal is to get all smokers to stop and to prevent young people from starting. One step in the right direction is the refusal of CVS to sell cigarettes. Otis Brawley, Chief Medical Officer for the American Cancer Society, called CVS’s an “act of corporate courage,” and added “the Cancer Society has pressured pharmacies to ban cigarettes for several years. Studies show that being forced to travel just two extra blocks can deter someone from buying cigarettes” (Szabo, 2014).

Refraining from tobacco use is one of the leading national health indicators for adults in the United States today (Healthy People, 2020). Other key health indicators include eating a healthy diet, getting adequate exercise, maintaining a healthy weight, refraining from substance abuse, and getting regular clinical preventive services such as cancer screenings. A full list of the 26 leading health indicators is found on the Healthy People 2020 website (Healthy People, 2020).

It is important for workplace management to understand how to use the DOI theory to improve compliance from employees with their lifestyle health factors. The focus of this chapter is on applying DOI to the workplace and developing strategies for its successful implementation in improving employees’ nutrition and physical activity level.

BACKGROUND: **DIFFUSIONS OF INNOVATION THEORY**

Everett M. Rogers first published his seminal work *Diffusion of Innovations Theory* in 1962. The fifth edition of his work was published in 2003, a year before he died. By the time he wrote his final edition of *Diffusion of Innovations* (2003), the theory had become so widely recognized as a valuable framework for social change that Rogers estimated that there were approximately 5,200 publications about DOI theory. Rogers grew up on a farm in Iowa and became interested in the diffusion of agricultural innovations after watching how farmers responded to the availability of new technology to improve agricultural output and efficiency. He noticed that some farmers delayed adopting innovations that would have been profitable for them. He wondered why some farmers adopted innovations while other resisted. Rogers enrolled in graduate school at Iowa State to study rural sociology and the diffusion of agricultural innovations (Rogers, 2003). He developed a generalized diffusion theory, and posited that his theory explained social change, a fundamental human process.

Rogers (2003, pp. 11-12) defined innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption” and diffusion as “the process in which an innovation is communicated through certain channels over time among the members of a social system.” The four main elements of DOI are innovation, communication channels, time, and the social system.

The perceived characteristics of an innovation influences its rate of adoption. Rogers (2003) lists the following five characteristics as the most predictive of the adoption rate:

- Relative advantage (the degree to which the innovation is perceived to be an improvement over the status quo)
- Compatibility (the degree to which the innovation is perceived to be consistent with target audience’s existing values, experiences, and needs)
- Complexity (the degree to which the innovation is perceived to be difficult to understand and use)
- Trialability (the degree to which the innovation can be experimented with on a limited basis)
- Observability (the degree to which the results of the innovation are visible to others)

The first two characteristics—relative advantage and compatibility—are particularly important. The less complex an innovation appears to be to the target audience, the more likely they are to adopt it more readily. Another characteristic Rogers (2003) cites is the ability to re-invent the innovation, that is, to make it one’s own by customizing it. Re-inventability makes an innovation more attractive to the target audience (Rogers, 2003).