Obesity has become a major epidemic in the United States and other developed countries. Usually defined by a Body mass Index (BMI) of 30 or greater, obesity has been shown to pose major health risks including cardiovascular disease and cancer. While on the basest level, obesity results from taking in more calories than are expected over a long period of time, studies also show that the problem is much more complex than that. Genetics, lifestyle choices, chronic disease, and environment all play key roles in the propensity of obesity. Medical Research has continually supported that exposure to fine particulate matter in the air increases the risk of several respiratory and cardiovascular diseases. The correlation between air pollution and these disorders is particularly noticeable in children, low income communities, and areas that are close to sources of air pollution. Recently, particulates have been linked to other inflammatory processes, including type 2 diabetes mellitus. Diabetes and its accompanying epidemic of obesity are two of the most persistent and expensive health problems in modern developed countries. This chapter outlines the relationship between different types of air pollution and their possible link to the obesity epidemic in the Western world.

Biography

Rajat Sethi received his Ph.D. from the Department of Medicine, University of Manitoba, Canada. Dr. Sethi is currently the Chair of Department of Pharmaceutical and Biomedical Sciences, and Director of Research at the California Health Sciences University, Clovis, California. He has more than 100 publications in the field of cardiac toxicology, holds 22 patents, has authored 7 books, and serves in the editorial board for many journals. Dr. Sethi has received grants from federal and local agencies and from various foundations and has been an invited speaker in many national and international meetings and he is the recipient of numerous awards and honors for his contribution to research and education.

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