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Nota di contenuto	Cover; Title page; Copyright page; Contents; Contributors; CHAPTER 1: Introduction: Why Should We Care about Organic Chemicals and Human Health?; References; CHAPTER 2: Sources of Human Exposure; Introduction; Human Exposure Pathways; Direct or Nondietary; Dietary; Chemicals of Concern; POPs; Pesticides; Benzene; Perfluoroalkyl Substances (PFASs); Conclusions and Recommendations; References; CHAPTER 3: The Burden of Cancer from Organic Chemicals; Introduction; The Global Burden of Cancer; Childhood Cancers; Exposure to Organic Chemicals: Contributions to the Global Burden of Cancer Occupational/Outdoor Air Pollution; Indoor Air Pollution; Water Pollution; Consumer Products; Food Contaminants; Pesticides; 2,4-Dichlorophenoxyacetic Acid (2,4-D); Health Impacts of a Widely Used Organic Chemical Herbicide; Linking Chemicals to Specific Cancer Sites; Examples of Individual Organic Chemicals; Sources of Exposure Information; Estimating the Percentage of Cancers Attributable to Occupational and Environmental Exposures: Methodological and Conceptual Difficulties; Efforts to Estimate Attributable Fractions; Causes: Genes or Environment?; Conclusion: Opportunities for

## Prevention

References  
CHAPTER 4: Carcinogenicity and Mechanisms of Persistent Organic Pollutants; Introduction; Many POPs Are Complete Carcinogens in Animal Studies; Aspects of Cancer Induction; Carcinogenesis Is a Multistep Process; Compounds May Require Metabolic Bioactivation to Reactive Intermediates and/or By-Products to Act as Carcinogens; Example Lower-Chlorinated Biphenyls; Direct versus Indirect Action; Cancer-Initiating Activity of POPs; Cancer Initiation Is Based on Genotoxic Events; Initiating and Genotoxic Activity of POPs In Vitro and In Vivo; Genotoxicity of Individual Pesticides  
Tumor-Promoting Activities of Environmental PollutantsPromoting Activity of Individual POPs; Mechanisms of Tumor Promotion by Environmental Pollutants; Progression in Carcinogenesis; Summary and Conclusion; Acknowledgments; References; CHAPTER 5: Diabetes and the Metabolic Syndrome; Introduction; Why Is There an Epidemic of T2D?; Human Evidence Linking POPs and T2D; Earlier Evidence; Recent Evidence: Cross-Sectional Studies; Recent Evidence: Prospective Studies; Human Evidence Linking POPs and Metabolic Syndrome; Mismatch of Time Trend: Issues Related to Inverted U-Shaped Associations  
Polybrominated Biphenyl Ethers (PBDEs) and T2DThrifty Gene Hypothesis and POPs; POPs and Glycemic Control among Diabetic Patients; Dietary Interventions in T2D; Summary; References; CHAPTER 6: Mechanistic Basis for Elevation in Risk of Diabetes Caused by Persistent Organic Pollutants; Introduction; Diabetes; POPs: Novel Diabetogenic Factors; POPs and Diabetes: Mechanistic Basis; AhR; CAR and SXR; Challenges and Perspectives; References; CHAPTER 7: Cardiovascular Disease and Hypertension; Introduction; Animal Studies and Laboratory Evidence  
Standardized Mortality Ratios (SMRs) for Heart Disease

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### Sommario/riassunto

Examines what we know about the relationship between organic chemicals and human disease. Organic chemicals are everywhere: in the air we breathe, the water we drink, and the food we eat. They are also found in a myriad of common household and personal care products. Unfortunately, exposure to some organic chemicals can result in adverse health effects, from growth and developmental disorders to cancer and neurodegenerative diseases. This book examines how organic chemicals affect human health. It looks at the different diseases as well as how individual organ systems are affected.

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