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Nota di contenuto	Front Cover; Contents; Foreword; PREFACE; Authors; Chapter 1: Adenosine Triphosphate (ATP); Chapter 2: Adrenaline/Epinephrine : (Noradrenaline/Norepinephrine); Chapter 3: Ammonium Nitrate; Chapter 4: Artemisinin; Chapter 5: Aspirin; Chapter 6: Caffeine; Chapter 7: Capsaicin; Chapter 8: Carbon Dioxide; Chapter 9: - Carotene; Chapter 10: Chlorophyll; Chapter 11: Cholesterol; Chapter 12: Cisplatin : The Anti-Cancer Drug; Chapter 13: Cocaine; Chapter 14: DEET; Chapter 15: Difluorodichloroethane, CF ₂ Cl ₂ : (Freon-12, CFC-12 or R-12) and Related Compounds Chapter 16: DDT : The Controversial Insecticide Chapter 17: Digitalis; Chapter 18: Dimethylmercury : And the Karen Wetterhahn Story; Chapter 19: Dimethylsulfide : (and Truffles); Chapter 20: Dopamine; Chapter 21: Epibatidine; Chapter 22: Estradiol : The Main Female Hormone; Chapter 23: Glucose; Chapter 24: Glycerol; Chapter 25: Heavy Water : Deuterium Oxide, D ₂ O; Chapter 26: Heme; Chapter 27: Hexenal : (and 'Green Grass' Smell); Chapter 28: Hydrogen Peroxide; Chapter 29: Insulin; Chapter 30: Kisspeptin; Chapter 31: Lauric Acid : (the Fatty Constituent of Coconut Oil); Chapter 32: Limonene Chapter 33: Linoleic Acid Chapter 34: Lysergic Acid Diethylamide (LSD); Chapter 35: Medroxyprogesterone Acetate : The Drug Used for

Chemical Castration; Chapter 36: Methamphetamine : (or Methedrine, Speed, Crank, Meth, Ice, Glass, Crystal Meth, etc.); Chapter 37: Methane; Chapter 38: 2-Methylundecanal; Chapter 39: Monosodium Glutamate : (and the Fifth Flavor); Chapter 40: Morphine, Codeine and Heroin; Chapter 41: Nandrolone; Chapter 42: Nicotine; Chapter 43: Nitrous Oxide, N₂O : (Laughing Gas); Chapter 44: 1-Octen-3-ol : or 'Mushroom Alcohol'; Chapter 45: Oxygen : (and Ozone) Chapter 46: Oxytocin Chapter 47: Paracetamol/Acetaminophen : (The Painkiller Known by the Brand Names Tylenol or Panadol); Chapter 48: Penicillins; Chapter 49: Proanoic Acid and Prostaglandins; Chapter 50: Psilocybin and Mescaline : The Magic Mushroom Molecule (Along with Mescaline from Cacti); Chapter 51: Quinine : (and Synthetic Antimalarial Drugs); Chapter 52: Sodium Hypochlorite : (Better Known as Bleach); Chapter 53: Serotonin; Chapter 54: Skatole; Chapter 55: Sucrose; Chapter 56: SWEATY' ACID, (E)-3-METHYL-2-HEXENOIC ACID; Chapter 57: Taxol (Paclitaxel); Chapter 58: Testosterone Chapter 59: Tetrahydrocannabinol (THC) Chapter 60: Tetrahydrogestrinone (Thg) : (and 'Illegal' Steroids); Chapter 61: Tetrodotoxin; Chapter 62: Thujone : The 'Suspect' in Poisoning by Absinthe; Chapter 63: Trimethylamine : (and Fish-Breath Odor); Chapter 64: TNT; Chapter 65: Vancomycin; Chapter 66: VX Gas : The Film-Star Molecule; Chapter 67: Water; Bibliography; Back Cover

Sommario/riassunto

"This new book is by two knowledgeable and expert popularizers of chemistry and deals exclusively with molecules and compounds rather than with the simpler atoms and elements. It is based on the very successful Molecule of the Month website that was begun by Paul May fifteen years ago and to which his co-author Simon Cotton has been a frequent contributor. The authors strike an excellent balance between introducing the novice to the world of molecules while also keeping the expert chemist interested. I highly recommend this book to all readers. It will vastly expand your knowledge and horizons of chemistry and the human ingenuity that surrounds it." From the Foreword by Dr. Eric Scerri, UCLA, Los Angeles, website: www.ericscerri.com, Author of The Periodic Table, Its Story and Its Significance and several other books on the elements and the periodic table. The world is composed of molecules. Some are synthetic while many others are products of nature. Molecules That Amaze Us presents the stories behind many of the most famous and infamous molecules that make up our modern world. Examples include the molecule responsible for the spicy heat in chilies (capsaicin), the world's first synthetic painkiller (aspirin), the pigment responsible for the color of autumn leaves (carotene), the explosive in dynamite (nitroglycerine), the antimalarial drug (quinine), the drug known as "speed" (methamphetamine), and many others. Other molecules discussed include caffeine, adrenaline, cholesterol, cocaine, digitalis, dopamine, glucose, insulin, methane, nicotine, oxytocin, penicillin, carbon dioxide, limonene, and testosterone. In all, the book includes 67 sections, each describing a different molecule, what it does, how it is made, and why it is so interesting. Written by experts in the field, the book is accessible and easy to read. It includes amusing anecdotes.
