Our understanding of psychophysiological states are now more broadly defined by the inclusion of the lateralized ultradian rhythms of the autonomic and central nervous systems (ANS and CNS) that play a key regulatory role in mind-body states. These neural rhythms are a unique step in the evolution of the nervous system that have mostly been ignored or missed in our understanding of physiology, mental activities, brain rhythms, and in the treatment of psychiatric disorders. The multivariate physiological experiments reviewed in this book provide a new “big picture” for how the body’s major systems (ANS, CNS, neuroendocrine, cardiovascular, fuel-regulatory, gastrointestinal, immune) are regulated, integrated, and coordinated by the ANS via the hypothalamus during both waking and sleep. This discovery has implications for psychiatrists, psychologists, stress physiologists, cardiologists, sleep researchers, neuroscientists, neuroendocrinologists, cognitive scientists, and those interested in performance, anxiety, depression, schizophrenia, autism, and addictive and impulse control disorders. This book also describes the translational neuroscience aspects of this discovery that include methods of selective unilateral autonomic activation and their therapeutic potential.