The book contains articles describing the frontline in research on biological markers of stress in daily life. The stressors inducing biological reactions range from extremely strenuous physical efforts in athletes (Japanese triathlon) to anxiety-provoking situations for children in nursery schools, examinations for students, and daily stressors at work in the form of job strain. The biological parameters discussed are immunological (interleukins and responses to vaccination), endocrinological (cortisol and prolactin) and physiological (blood pressure monitored during daily life). One chapter discusses new developments in research on mechanisms linking stress to atherosclerosis. Assessments are discussed in detail, and possibilities for their use in epidemiological studies are explored. Advantages and drawbacks of using blood pressure monitoring compared to conventional blood pressure assessments of cortisol concentration as an index of the circadian variation in the function of the HPA axis are examples of topics being discussed. The application of saliva cortisol assessment on children’s stress reactions is a breakthrough in research development.

This is a book for stress researchers, occupational health care teams and all clinicians involved in work aiming at the prevention and/or rehabilitation of psychosomatic disorders. It gives new insights into stress mechanisms and ways of assessing stress reactions.
The importance of psychosomatic research has been greatly reinforced by evidence demonstrating that psychological phenomena may have distinct effects on human health. Recognizing the complexity of interactions between personality and physical illness, this series employs an interdisciplinary strategy to explore areas where knowledge from psychosomatic medicine may aid in the prevention of specific diseases or help meet the emotional demands of hospitalized patients. In each work, the editor has managed to bring together distinguished contributors, creating a series of coherent and comprehensive reviews on a variety of novel topics.