

PREFACE

The discovery of leptin by Friedman and his colleagues in 1994 was a seminal discovery in the study of metabolism, providing a new tool to study energy expenditure and appetite regulation. Early studies actively investigated many aspects of metabolism, obesity, and diabetes but it was soon evident that leptin was much more than a metabolic hormone. Today leptin, with almost 11,000 reports in the world's literature, is recognized to be important in many areas of physiology with strong suggestions for involvement in clinical conditions as well. Leptin, of course, remains of great interest in obesity and diabetes but other, previously unimagined, areas are now in the realm of leptin physiology. Perhaps leptin and its involvement in many areas of reproductive physiology may be of greatest interest outside of obesity, but other physiological arenas are becoming increasingly involved in the broader understanding of leptin and its pleiotropic functions. These areas include cardiovascular disease, bone physiology, immune regulation, and even cancer and genetics. Clinical trials have suggested other areas of leptin pharmaceutical potential beyond the original promise of obesity management. These topics and others, for the first time, have been collected in one volume as the first comprehensive review of leptin and its many actions. This area will continue to increase and is now compounded by new endocrine factors that have been elucidated in the wake of leptin's explosion onto the physiological scene. The future seems promising for an increased physiological understanding and the development of clinical applications. This volume will serve as the basis for understanding the past and present of leptin, and to indicate where the future direction of leptin may lead.

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