LEONID PORETSKY
EDITOR

# Principles of Diabetes Mellitus

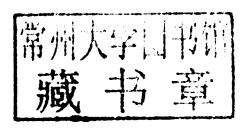
SECOND EDITION



Leonid Poretsky Editor

# Principles of Diabetes Mellitus

Second Edition





Editor
Leonid Poretsky
Division of Endocrinology and Metabolism
Beth Israel Medical Center
317 East 17th Street
New York, NY 10003
USA
lporetsk@chpnet.org

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Second Edition

### **Preface to the Second Edition**

Seven years have elapsed since the first edition of the *Principles of Diabetes Mellitus* appeared. It is sobering to realize how much new important information on the subject of this textbook has been developed during this relatively short period of time. Hence, the second edition.

Every chapter has been updated in terms of both material it covers as well as the references and the websites where additional useful information can be found. Several new chapters have been added. These chapters cover such topics as the role of brain in glucose metabolism, the role of incretins in the pathogenesis and therapy of diabetes, the relationship between diabetes and cancer and between diabetes and human immunodeficiency virus infection, diabetes among minorities, and hospital management of diabetes. Many authors who contributed to the first edition worked on the second edition as well, but many new writers joined the "crew." We thank *all* of the authors of the first edition for their role in preparing this textbook.

The goals of this text are outlined in the preface to the first edition, which follows. We hope that our readers will continue to find *Principles of Diabetes Mellitus* both useful and enjoyable.

New York
2009
Leonid Poretsky

### Preface to the First Edition

Diabetes mellitus is a very common disease. Described initially in the Egyptian papyrus *Ebers* in 1500 BC and now affecting approximately 150,000,000 people worldwide, with its prevalence rising rapidly, diabetes continues to mystify and fascinate both practitioners and investigators by its elusive causes and multitude of manifestations.

A neurosurgeon operating on a patient with a life-threatening brain tumor, an obstetrician delivering a baby, a psychiatrist trying to penetrate deep into a patient's emotional life – all will encounter diabetes from their very early days of medical practice. This disease will significantly affect the choice of therapeutic approaches throughout their careers, regardless of their specialty. Hence, there is need for every student of medicine, whatever his or her ultimate career goals, to understand and learn to manage diabetes.

Many excellent diabetes textbooks exist. Most of them, however, are written for endocrinologists. This text-book is written not only for endocrinologists, but also for other specialists, primary care physicians, housestaff, and particularly for medical students.

The needs of the latter group are well understood by the authors of this text, most of whom have been medical students and all of whom continue to teach medical students on a regular basis. The main challenge for a medical student is to "digest" a large amount of complicated, rapidly changing information under heavy time pressure. Therefore, a book written for medical students must be up-to-date and cover all aspects of the disease, from its pathogenesis on the molecular and cellular levels to its most modern therapy. Such textbook must also be concise, clear, and easy to use. To achieve these goals, we have made liberal use of illustrations and tables, provided a summary after each chapter, and added website addresses where additional information can be found to the lists of references. Each chapter is written to stand on its own, and readers who wish to explore a particular subject should not have to search through many chapters. This may have resulted in redundancies noticeable to readers of the entire text, but the pages where the most detailed discussion of a given topic can be found are highlighted in the index in bold print.

We hope that these features will make *Principles of Diabetes Mellitus* user-friendly. We also hope that readers will find this volume useful for studies of diabetes throughout their professional lives: first in medical school, then during the years of residency, and, finally, as they enter their chosen specialty.

The authors would like to dedicate this book to those from whom we learned and continue to learn about diabetes: our teachers, who inspired us to undertake studies of the challenging diabetes problems and then supported us throughout these studies; our students, who lead us to ponder new questions; and finally, our patients, who live with the disease every moment of every day and in some ways know more about it than we do.

We thank Jill Gregory for her expert help with illustrations and Anthony J. DiCarlo for help with computer programming. We also gratefully acknowledge the efforts of Marilyn Small Jefferson, who helped coordinate the work of 61 writers, and without whose patience, diligence, and dedication this book would not have been possible.

New York, 2002 Leonid Poretsky

### **Contributors**

**Zinoviy Abelev, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY 10003, USA

Martin J. Abrahamson, M.D. FACP Joslin Diabetes Center, Harvard Medical School, Boston, MA, USA

**Bianca Alfonso, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

Omar Ali, M.D. Medical College of Wisconsin, Milwaukee, WI, USA

Mazen Alsahli, M.D. Division of Endocrinology, Department of Medicine, University of Rochester School of Medicine, Rochester, NY, USA

**Kalliopi M. Arampatzi, M.D.** Division of Endocrinology, Diabetes, and Metabolism, Beth Israel Deaconess Medical Center, Boston, MA, USA

**Bradley W. Bakotic, DPM, DO** Podiatric Pathology, DermPath Diagnostics, Pompano Beach, FL, USA; Barry University School of Podiatric Medicine, Miami Shores, FL, USA; New York College of Podiatric Medicine, New York, NY, USA

Mary Ann Banerji, M.D. Downstate Medical Center, State University of New York, Brooklyn, NY, USA

**Rajiv Bhambri, M.D.** Division of Endocrinology, Metabolism and Nutrition, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, NJ, USA

**Henry C. Bodenheimer Jr., M.D.** Department of Medicine, Beth Israel Medical Center and Albert Einstein College of Medicine, New York, NY, USA

**Barry J. Brass, M.D., Ph.D.\*** Division of Endocrinology and Metabolism, Albert Einstein College of Medicine, Beth Israel Medical Center, New York, NY 10003, USA

**David J. Brillon, M.D.** Division of Endocrinology, Diabetes and Metabolism, Weill Cornell Medical College, New York, NY, USA

**Kevin Brown, M.D.** Division of Endocrinology, Diabetes and Nutrition, University of Maryland School of Medicine, Baltimore, MD, USA

**Agustin Busta, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center and Albert Einstein College of Medicine, New York, NY, USA

Enrique Caballero, M.D. Joslin Diabetes Center, Harvard Medical School, Boston, MA 02215, USA

**Rochelle L. Chaiken, M.D.** VP Medical Affairs, Pfizer Inc., SUNY Downstate Medical Center, New York, State University of New York, Brooklyn, NY, USA

**Shadi Chamany, M.D., M.P.H.** New York City Department of Health and Mental Hygiene, New York, NY, USA

xiv Contributors

Russell L. Chin, M.D. Peripheral Neuropathy Center, Weill Cornell Medical College, New York, NY, USA

**Sara Choudhry, M.D.** Division of Endocrinology, Diabetes and Hypertension, Department of Medicine, State University of New York, Downstate Medical Center, Brooklyn, NY, USA

Ronald J. Christopher, Ph.D. Takeda San Diego, Inc., San Diego, CA, USA

**Theodore P. Ciaraldi, Ph.D.** Department of Medicine, VA San Diego Healthcare System, University of California, San Diego, CA, USA

Pejman Cohan, M.D. University of California at Los Angeles School of Medicine, Los Angeles, CA, USA

**Samantha DeMauro-Jablonski, M.D.** Division of Endocrinology and Metabolism, University of Pittsburgh Physicians, Pittsburgh, PA, USA

**Richard B. Devereux, M.D.** Laboratory of Echocardiography, New York Presbyterian Hospital, Weill Medical College of Cornell University, New York, NY, USA

Michael E. DiSanto, Ph.D. Department of Urology, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, USA

**Rosalia Doyle, RD, MS, CDE** Division of Endocrinology, Department of Medicine, Friedman Diabetes Institute, Beth Israel Medical Center, New York, NY, USA

**Alan Dubrow, M.D.** Division of Nephrology, Beth Israel Medical Center, Albert Einstein College of Medicine, New York, NY, USA

Faith Ebel, MPH, RD, MS Laparoscopic and Bariatric Surgery, Weill Medical College of Cornell University, New York, NY, USA

**Donald A. Feinfeld, M.D.\*** Department of Surgery, Division of Nephrology, Beth Israel Medical Center, Albert Einstein College of Medicine, New York, NY, USA

Yun Feng, M.D. Department of Medicine, Beth Israel Medical Center, New York, NY, USA

**Stephen J. Ferrando, M.D.** Division of Psychosomatic Medicine, Department of Psychiatry, Payne Whitney Clinic, New York-Presbyterian Hospital, Weill Cornell Medical College, New York, NY, USA

**Adrienne M. Fleckman, M.D.** Department of Medicine, Albert Einstein College of Medicine, Beth Israel Medical Center, New York, NY, USA

**Vivian Fonseca, M.D.** Section of Endocrinology, Tullis Tulane Alumni Chair in Diabetes and Tulane University Health Sciences Center, New Orleans, LA, USA

**Emily Jane Gallagher, M.D.** Division of Endocrinology, Diabetes & Bone Disease, Department of Medicine, Mount Sinai School of Medicine, New York, NY, USA

Om P. Ganda, M.D. Joslin Diabetes Center, Beth-Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA

Yana B. Garger, M.D. Department of Medicine, Beth Israel Medical Center, New York, NY, USA

**John E. Gerich, M.D.** Department of Medicine, University of Rochester School of Medicine, Rochester, NY 14642, USA

**George Grunberger, M.D., FACP, FACE** Grunberger Diabetes Institute, Wayne State University School of Medicine, Detroit, MI, USA

**Chiara Guglielmi, M.D.** Department of Endocrinology and Diabetes, University Campus Bio-Medico, Rome, Italy

Contributors xv

**Yuriy Gurevich, D.O.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

Nancy Habib, B.S. Department of Surgery, Beth Israel Medical Center, Albert Einstein College of Medicine, New York, NY, USA

**Nikolas B. Harbord, M.D.** Beth Israel Medical Center, Albert Einstein College of Medicine, New York, NY, USA

**Abhijith Hegde, M.D.** Attending, Pulmonary, Critical Care and Sleep Medicine, Danbury Office of Physician Services, Danbury Hospital, Danbury, CT, USA

Susan Herzlinger, M.D. Joslin Diabetes Center, Harvard Medical School, Boston, MA, USA

Edward S. Horton, M.D. Joslin Diabetes Center, Harvard Medical School, Boston, MA, USA

**Stanley Hsu, M.D.** Division of Gastroenterology and Liver Disease, Saint Luke's Roosevelt Hospital, Columbia University College of Physician and Surgeons, New York, NY, USA

William C. Hsu, M.D. Joslin Diabetes Center, Harvard Medical School, Boston, MA, USA, cmantzor@bidmc.harvard.edu

**Silvio E. Inzucchi, M.D.** Section of Endocrinology, Yale University School of Medicine, Yale Diabetes Center, Yale-New Haven Hospital, New Haven, CT, USA

Jennifer John-Kalarickal, M.D. Tulane University Health Science Center, New Orleans, LA, USA

Prajesh M. Joshi Department of Medicine, Beth Israel Medical Center, New York, NY, USA

Jeffrey S. Kirk, M.D. Department of Surgery, Beth Israel Medical Center, New York, NY, USA

Orville Kolterman, M.D. Amylin Pharmaceuticals, Inc., San Diego, CA, USA

**Donald P. Kotler, M.D.** Division of Gastroenterology and Liver Disease, Saint Luke's Roosevelt Hospital, Columbia University College of Physician and Surgeons, New York, NY, USA

**Jennifer L. Kraker, M.D., M.S.** Division of Psychosomatic Medicine, Department of Psychiatry, Payne Whitney Clinic, New York-Presbyterian Hospital, Weill Cornell Medical College, New York, NY, USA

**Marina Krymskaya, N.P.** Division of Endocrinology, Department of Medicine, Gerald J. Friedman Diabetes Institute, Beth Israel Medical Center, New York, NY, USA

**Ketan Laud, M.D.** Vitreoretinal Fellow, Vitreous Retina Macula Consultants of New York/Columbia University, New York, NY, USA

**Ho Won Lee, D.V.M., Ph.D.** Division of Endocrinology, Diabetes and Hypertension, Department of Medicine, State University of New York, Downstate Medical Center, Brooklyn, NY, USA

Bumsup Lee, D.V.M., Ph.D. Takeda San Diego, Inc., San Diego, CA, USA

**Derek LeRoith, M.D., Ph.D.** Division of Endocrinology, Diabetes & Bone Disease, Department of Medicine, Mount Sinai School of Medicine, New York, NY, USA

**James P. Leu, M.D.** Division of Endocrinology and Metabolism, Department of Medicine, Montefiore Medical Center and Albert Einstein College of Medicine, Bronx, NY, USA

**Albert C. Leung, M.D.** Department of Urology, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, USA

**Emilia Pauline Liao, M.D.** Division of Endocrinology and Metabolism, Albert Einstein College of Medicine, Beth Israel Medical Center, New York, NY, USA

xvi Contributors

Omar H. Llaguna, M.D., M.P.T. Department of Surgery, Beth Israel Medical Center, New York, NY, USA

**Christos S. Mantzoros, M.D., D.Sc.** Division of Endocrinology, Diabetes, and Metabolism, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA

Ellen S. Marmur, M.D. Department of Dermatology, The Mount Sinai Medical Center, New York, NY, USA

**Paulo José Forcina Martins, Ph.D.** Department of Psychiatry, Obesity Research Center, University of Cincinnati, Cincinnati, OH 45237, USA

**Barry M. Mason, M.D.** Department of Urology, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, USA

Samy I. McFarlane, M.D., M.P.H., M.B.A. Division of Endocrinology, Diabetes and Hypertension, State University of New York, Downstate Medical Center and Kings County Hospital Center, Brooklyn, NY, USA

**Graham T. McMahon, M.D., M.M.Sc.** Division of Endocrinology, Diabetes and Hypertension, Brigham and Women's Hospital, Boston, MA 02115, USA

**Arnold Melman, M.D.** Department of Urology, Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, USA

Maria A. Mendoza, R.N. Jacobi Medical Center, City University of New York, New York, NY, USA

**Douglas Meyer, M.D.\*** Division of Digestive Diseases, Beth Israel Medical Center, Albert Einstein College of Medicine, New York, NY, USA

**Kathleen Mulligan, Ph.D.** Division of Endocrinology and Metabolism, University of California, San Francisco, CA, USA

**Ruslan Novosyadlyy, M.D., Ph.D.** Division of Endocrinology, Diabetes & Bone Disease, Department of Medicine, Mount Sinai School of Medicine, New York, NY, USA

**Silvana Obici, M.D.** Department of Psychiatry, Obesity Research Center, University of Cincinnati, Cincinnati, OH 45237, USA

Ashutosh S. Pareek, D.O. Department of Medicine, Beth Israel Medical Center, New York, NY, USA

**Grishma Parikh, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

**Parini Patel, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

Anne L. Peters, M.D., CDE University of Southern California Keck School of Medicine, Los Angeles, CA, USA

**Leonid Poretsky**, M.D. Division of Endocrinology and Metabolism, Albert Einstein College of Medicine, Beth Israel Medical Center, New York, NY, USA

**Paolo Pozzilli, M.B.B.S., M.D.** Department of Endocrinology and Diabetes, University Campus Bio-Medico, Rome, Italy; Centre for Diabetes and Metabolic Medicine, Barts and The London School of Medicine and Dentistry, London, UK

**Madhu N. Rao, M.D.** Division of Endocrinology and Metabolism, University of California, San Francisco, CA, USA

Elliot J. Rayfield, M.D. Mount Sinai School of Medicine, New York, NY, USA

Carla M. Romero, M.D. Department of Medicine, Beth Israel Medical Center, New York, NY, USA

Contributors xvii

**Michael Rubin, M.D.** Electromyography Laboratory, Department of Neurology, Weill Cornell Medical College, New York Presbyterian Hospital, New York, NY, USA

**Steve H. Salzman, M.D.** Division of Pulmonary and Critical Care Medicine, Winthrop-University Hospital, Mineola, NY, USA

**Morris Schambelan, M.D.** Division of Endocrinology and Metabolism, University of California, San Francisco, CA, USA

**Adina E. Schneider, M.D.** Division of Endocrinology and Metabolism, Mount Sinai School of Medicine, New York, NY, USA

**Stephen H. Schneider, M.D.** Division of Endocrinology, Metabolism and Nutrition, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, NJ, USA

Brock E. Schroeder, Ph.D. Amylin Pharmaceuticals, Inc., San Diego, CA, USA

Amit K. Seth, M.D. Beth Israel Medical Center, New York, NY, USA

Uri Shabto, M.D. Department of Ophthalmology, The New York Eye and Ear Infirmary, New York, NY, USA

**Dennis Shavelson, D.P.M.** Beth Israel Medical Center and Weill Medical College of Cornell University, New York, NY, USA

Muhammad Z. Shrayyef, M.D. Dalhousie University, Moncton Hospital, Moncton, NB, Canada

**Anil Shrestha, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

**Alan R. Shuldiner, M.D.** Division of Endocrinology, Diabetes and Nutrition, University of Maryland School of Medicine, Baltimore, MD, USA; Geriatric Research and Education Clinical Center, Veterans Administration Medical Center, Baltimore, MD, USA

**John S. Steinberg, DPM** Department of Plastic Surgery, Georgetown University School of Medicine, Washington, DC, USA

**Markus Stoffel, M.D.** Institute of Molecular Systems Biology, Swiss Federal Institute of Technology, Zurich 8093, Switzerland

**Gladys Witt Strain, Ph.D., RD** Laparoscopic and Bariatric Surgery, Weill Medical College of Cornell University, New York, NY, USA

**Gary E. Striker, M.D.** Division of Nephrology, Departments of Medicine and Geriatrics, Mount Sinai School of Medicine, New York, NY, USA

**Marina Strizhevsky, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

**Jennifer K. Svahn, M.D.** Department of Surgery, Division of Vascular Surgery, Beth Israel Medical Center, New York, NY, USA

Bahman P. Tabaei, M.P.H. New York City Department of Health and Mental Hygiene, New York, NY, USA

**Koji Takeuchi, Ph.D.** Pharmacology Research Laboratories, Takeda Pharmaceutical Company Limited, Osaka, Japan

**Marsha C. Tolentino, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

**Mathew C. Varghese, M.D., M.P.H.** Department of Dermatology, New York Presbyterian Hospital, Weill Medical College of Cornell University, New York, NY, USA

xviii Contributors

**George I. Varghese, M.D.** School of Medicine, State University of New York at Stony Brook, Stony Brook, NY. USA

**Sefton Vergano, M.D.** Division of Endocrinology, Metabolism and Nutrition, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, NJ, USA

**Helen Vlassara, M.D.** Division of Experimental Diabetes and Aging, Division of Geriatrics, Mount Sinai School of Medicine, New York, NY, USA

**Monique Welbeck, N.P.** Division of Endocrinology and Metabolism, Friedman Diabetes Institute, Beth Israel Medical Center, New York, NY, USA

**James F. Winchester, M.D., FRCP (Glas), FACP** Division of Nephrology and Hypertension, Department of Medicine, Beth Israel Medical Center, Albert Einstein College of Medicine, New York, NY, USA

**Nathaniel Winer, M.D.** Division of Endocrinology, Diabetes and Hypertension, Department of Medicine, State University of New York, Downstate Medical Center, Brooklyn, NY, USA

**Shoshana Yakar, M.D.** Division of Endocrinology, Diabetes & Bone Disease, Department of Medicine, Mount Sinai School of Medicine, New York, NY, USA

Vincent Yen, M.D. Saint Vincent's Medical Center, New York Medical College, New York, NY, USA

**Jacek Zajac, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

**Joel Zonszein, M.D.** Division of Endocrinology and Metabolism, Department of Medicine, Montefiore Medical Center and Albert Einstein College of Medicine, Bronx, NY, USA

**Susan B. Zweig, M.D.** Division of Endocrinology and Metabolism, Beth Israel Medical Center, New York, NY, USA

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