

CONTENTS

Introduction	ix
Contributors	xi

BASIC CONSIDERATIONS

1	On the Etiology of Diabetes Mellitus <i>Norbert Freinkel, M.D.</i>	1
2	Morphologic View of the Islets in Diabetes Mellitus <i>Philip M. LeCompte, M.D.</i>	7
3	Pathophysiology of Diabetes Mellitus <i>Robert S. Sherwin, M.D. and Philip Felig, M.D.</i>	17
4	Biosynthesis of Insulin <i>Arthur H. Rubenstein, M.D.</i>	27
5	Current Concepts of Insulin Secretion in Diabetes Mellitus <i>Jeffrey B. Halter, M.D. and Daniel Porte, Jr., M.D.</i>	33
6	Insulin—Glucagon—Somatostatin Interactions <i>Roger H. Unger, M.D.</i>	43
7	Glucoregulatory Effects of Neurogastrointestinal Peptides: The Diffuse Neuroendocrine System <i>Marvin R. Brown, M.D. and Wylie W. Vale, M.D.</i>	55
8	Insulin Receptors and Hyperglycemia <i>Jesse Roth, M.D. and Michele Muggeo, M.D.</i>	63
9	Genetics of Diabetes Mellitus <i>Carol E. Anderson, M.D., Jerome I. Rotter, M.D., and David L. Rimoin, M.D.</i>	79

10	The Epidemiology of Diabetes Mellitus <i>Peter H. Bennett, M.B., F.R.C.P., F.F.C.M.</i>	87
11	Classification of Diabetes Mellitus <i>Stefan S. Fajans, M.D.</i>	95

DIAGNOSIS AND TREATMENT

12	Diagnosis of Diabetes Mellitus <i>Kelly M. West, M.D.</i>	103
13	Diet and Diabetes <i>Ronald A. Arky, M.D.</i>	109
14	Clinical Use of Insulin <i>John A. Galloway, M.D. and John K. Davidson, M.D., Ph.D.</i>	117
15	Oral Hypoglycemic Agents <i>Fred W. Whitehouse, M.D. and Dorothy M. Kakkonen, M.D.</i>	129
16	Exercise in Diabetes: Clinical Implications <i>Veikko A. Koivisto, M.D. and Philip Felig, M.D.</i>	137
17	The Team Approach to Patient Education and Management <i>A. Denise Stevens, BSN, MAT and Robert F. Bradley, M.D.</i>	145

MANAGEMENT PROBLEMS IN DIABETES

18	The Child with Diabetes Mellitus <i>Allan L. Drash, M.D.</i>	153
19	Management of Diabetes and Pregnancy <i>Jay S. Skyler, M.D., Daniel H. Mintz, M.D., and Mary Jo O'Sullivan, M.D.</i>	161
20	The Infant of the Diabetic Mother <i>Richard K. Raker, M.D. and Lawrence M. Gartner, M.D.</i>	179
21	Diabetic Ketoacidosis <i>J. Denis McGarry, Ph.D. and Daniel W. Foster, M.D.</i>	185
22	Hyperosmolar Nonketotic Coma <i>Stephen Podolsky, M.D.</i>	195

23	Lactate Homeostasis and Lactic Acidosis <i>Robert A. Kreisberg, M.D.</i>	203
24	Infection in the Diabetic Patient <i>Stanley G. Rabinowitz, M.D.</i>	213
25	Host Defense Abnormalities in Diabetic Patients <i>Joan I. Casey, M.D., F.R.C.P. (C)</i>	219
26	Surgery in the Patient with Diabetes <i>Karl E. Sussman, M.D. and Orville G. Kolterman, M.D.</i>	225

LONG-TERM PROBLEMS

27	Control of Diabetes and Long-Term Complications <i>Harold Rifkin, M.D. and Herbert Ross, M.D.</i>	233
28	Clinical Significance of Glycosylated Hemoglobin <i>Kenneth H. Gabbay, M.D. and Rudolf Flückiger, Ph.D.</i>	241
29	Functional and Early Structural Changes in Diabetic Microangiopathy <i>Jørn Ditzel, M.D., Ph.D. and Donald E. McMillan, M.D.</i>	247
30	Diabetic Retinopathy <i>Paul Henkind, M.D., Ph.D. and Joseph B. Walsh, M.D.</i>	253
31	Diabetic Neuropathy <i>Max Ellenberg, M.D.</i>	259
32	Renal Impairment in Diabetes Mellitus <i>Philip D. Lief, M.D.</i>	265
33	Kidney Transplantation as Treatment for the Renal Complications of Diabetes <i>Frederick C. Goetz, M.D.</i>	269
34	Diabetic Peripheral Vascular Disease <i>Marvin E. Levin, M.D.</i>	281
35	The Foot in Diabetes Mellitus <i>Paul W. Brand, F.R.C.S.</i>	291
36	The Heart in Diabetes <i>Harvey C. Knowles, Jr., M.D.</i>	297
37	Gastrointestinal Manifestations of Diabetes Mellitus <i>William McBride, M.D., F.R.C.P. (C) and Howard M. Spiro, M.D.</i>	303

38	Skin Manifestations of Diabetes Mellitus <i>Robert S. Gilgor, M.D. and Gerald S. Lazarus, M.D., F.A.C.P.</i>	313
39	Dental Aspects of Diabetes Mellitus <i>Robert Gottsegen, D.D.S.</i>	323

SPECIAL PROBLEMS AND RELATED CLINICAL ISSUES

40	Adverse Drug Interactions of Clinical Importance to Diabetics <i>Holbrooke S. Seltzer, M.D.</i>	327
41	Employability of the Diabetic <i>Gerald J. Friedman, M.D., F.A.C.P.</i>	335
42	Insurability and Life Expectancy of Diabetics <i>Paul S. Entmacher, M.D. and Gurunanjappa S. Bale, Ph.D.</i>	341
43	Hyperlipidemias <i>Sheldon J. Bleicher, M.D.</i>	347
44	Hypoglycemia: Role of Counterregulatory Hormones, Pathophysiology and Diagnosis <i>R.A. Rizza, M.D. and J.E. Gerich, M.D.</i>	359
45	Transplants, Artificial Pancreas and New Pharmacologic Advances <i>Philip Raskin, M.D.</i>	367
46	The Future of Diabetes <i>George F. Cahill, Jr., M.D.</i>	375
	<i>Index</i>	379