Table of contents

rig. 1:	Section of normal numan pancieas
	Differences in staining properties and arrange-
	ment are readily apparent between the enzyme-
	producing acinar cells and the central clump
	of islet cells (island of Langerhans) Variation

in the nuclei indicates that the islets are composed of several types of cell, one of which produces insulin. (Hematoxylin and eosin stain)

I .	Diabetes Mellitus and the Normal Metabolic Pathways =	0
	Definition	6
	Digestion and absorption	8
	Metabolism in the cell	12
	Intermediary metabolism of glucose	15
	The synthesis of fally acids	18
	Ketone production	19
2	The Diabetic State and the Action of Insulin	21
	Insulin and glucose transport	22
	Insulin and lipid metabolism	25
	Insulin and protein metabolism	27
	The site of insulin action	28
	Other endocrine influences	32
	The pancreas and native insulin	33
	Orinase and native insulin release	40
	Similarity of effects of native insulin and Orinase	46
	Insulin production in the diabetic	50
3	Symptomatology Diagnosis and Complications of Diabetes	52
		2
	Etiology	52 53
	Presenting symptoms and signs	54
	Laboratory diagnosis Complications or sequellae	57
4	Treatment of Diabetes Mellitus	60
	Treatment principles	60
	Factors affecting insulin requirements	61
	Dietary treatment	65
	Treatment with insulin	70
	Establishing the dose	70
	Insulin reactions: symptoms and treatment	73
	Complications of insulin therapy	74
	Treatment with oral antidiabetic agents	73
	The sulfonylureas	75
	Results of clinical trials with tolbutamide, Upjohn-Orinase	
	Advantages of Orinase over insulin	70
	Initiation of therapy with Orinase	78
	Transfer from treatment with insulin to Orinase	79
	Maintenance dose of Orinase	79
	Combined insulin and Orinase in treatment	79
	Other oral antidiabetic agents	8.
	Biguanides in the treatment of diabetics	8-
	Treatment with combined oral antidiabetic agents Treatment of ketoacidosis and diabetic coma	80 80
5	Pathology of Diabetes and Diabetic Angiopathy	90
9		
	General pathologic changes in diabetes	90
	Abnormal glycogen deposition	90
	Pathologic changes in the pancreas	91
	Diabetic neuropathy	90
	Diabetic retinopathy	97
	Diabetic nephropathy	10.
	Effect of new treatments on complications	109
	Looking forward	110
	The History of Diabetes	112
	Bibliography	116
	Acknowledgments and Index of Illustrations	116
	Metabolic Interrelationships: Supplement	(#) T (