insulin resistance childhood precursors and adult disease contemporary endocrinology

#insulin resistance #childhood precursors #adult disease risk #contemporary endocrinology #metabolic health

This contemporary endocrinology review explores the critical connection between early childhood factors and the development of insulin resistance, outlining its profound implications for adult disease and long-term metabolic health outcomes.

Our collection serves as a valuable reference point for researchers and educators.

Insulin Resistance

Now in a revised and expanded second edition, this unique text presents topics related to insulin resistance in youth and its consequences across the lifespan. In the first section of the book examining epidemiology, the contributors review controversies over the definition of insulin resistance in children and what is known about how insulin resistance in youth differs from adults, the measurement of insulin resistance in youth in the research and clinical settings, and current knowledge regarding the epidemiology of insulin resistance in the pediatric population. The second section of the book explores pathophysiology, including current knowledge of the molecular, metabolic, and physiologic mechanisms of insulin resistance, the unique pathophysiology of pregnancy and puberty, the contributions of the prenatal and early childhood environment to the development of insulin resistance, and adipose and biochemical mediators. This section concludes with discussion of the relationship between insulin resistance and cardiovascular disease and liver disorders. A third section, new to this second edition, explores insulin resistance in unique models: intrauterine growth restriction and girls with polycystic ovary syndrome and metabolic syndrome. The final section of the book explores the concepts of treatment through medications directed at insulin sensitivity, as well as exercise, weight loss medications and consequences of bariatric surgery. Insulin Resistance: Childhood Precursors of Adult Disease, Second Edition provides up-to-date reviews of all of these areas, providing the reader with a current perspective on issues in insulin resistance in youth, an emerging risk factor for disease across the lifespan, that will spur continued interest in the topic on the part of clinicians and researchers, perhaps promoting new points of view and creative approaches to this daunting challenge.

Insulin Resistance

In the mid 1990s, Drs. Gerald Reaven identified a constellation of clinical findings, known variously as the metabolic syndrome, syndrome X, insulin resistance s- drome or insulin resistance-related disorders, that are associated with an increased risk of heart disease and diabetes. Interest in this topic grew rapidly, culminating in the publication by this series of the book, Insulin Resistance and the Metabolic Syndrome X, edited by Drs. Reaven and Laws in 1999. Since the original publication of that now classic volume, the world’s population has continued to become more obese and sedentary and the prevalence of disorders related to insulin resistance has continued to increase throughout the developed and developing world. Of great concern in the last decade is the extension of these deleterious lifestyle patterns to the pediatric population, leading to both obesity and the appearance of insulin resistance-related disorders in youth as well as adults. Today, about one in three children and adolescents in the United States is overweight or obese, and this prevalence approaches one in two among adolescents in certain minority groups. In addition, components of this cardiovascular risk constellation are now being recognized in young adults, adolescents, and even children. Youth

are increasingly developing type 2 diabetes, fatty liver disease, hypertriglyceridemia, hypertension, polycystic ovarian syndrome, sleep apnea, orthopedic and psychiatric complications, as well as other complications of obesity and insulin resistance.

Insulin Resistance

Gerald Reaven, the discoverer of Syndrome X, and a panel of world-class investigators thoughtfully summarize our current understanding of how insulin resistance and its compensating hyperinsulinemia play a major role in the pathogenesis and clinical course of high blood pressure and cardiovascular disease-the so-called diseases of Western civilization. These distinguished authorities detail, for the first time, the pathophysiological consequences and the clinical syndromes, excluding Type 2 diabetes, related to insulin resistance. They also examine the genetic and lifestyle factors that contribute to the wide differences in insulin action that exist in the population at large. Timely and authoritative, Insulin Resistance: The Metabolic Syndrome X illuminates the full importance of insulin resistance as a major cause of hypertension, heart disease, and polycystic ovary syndrome.

Insulin Resistance and Polycystic Ovarian Syndrome

Polycystic Ovarian Syndrome (PCOS) is the most common endocrinopathy in women of reproductive age. Providing a state-of-the-art analysis of the connection between insulin resistance and PCOS, this book comprehensively covers a range of topics. It provides an up-to-date and balanced overview of PCOS, with specific attention to the role of insulin resistance in its pathogenesis. It also examines diet and lifestyle factors in the aetiology and management of PCOS.

Type 2 Diabetes Mellitus:

In this practical book, the authors of each chapter have synthesized the currently available evidence regarding specific issues in diabetes care. The chapters have been written by an interdisciplinary team of scientists and medical professionals. Such an approach emphasizes the need for collaboration in the care of any individual with diabetes and in the effort to find new therapies for the disease. This reference provides practical guidance in a single resource.

Insulin Resistance

Insulin resistance, defined as a reduced biological action of insulin, has emerged as a major factor in the development and progression of a number of common non-communicable diseases in man. The role of insulin resistance in the aetiology of type 2 diabetes is particularly well-established. However, insulin resistance has also come to be regarded as a key component of a broader syndrome of common metabolic defects that conspire to increase the risk of atherosclerotic coronary heart disease. The ramifications of insulin resistance now embrace many different medical specialties. The objective of this book is to summarize the current state of knowledge about insulin resistance. Section 1 (Patho-physiology of Insulin Resistance) considers the development of current concepts of insulin resistance. This is followed by a critical review of techniques for the assessment of insulin action in humans. The section concludes with an outline of current hypotheses concerning the molecular defects responsible for insulin resistance. Section 2 (Insulin Resistance in Clinical Medicine) broadens the discussion to include physiological and pathological conditions with which insulin resistance is associated; the effects of drug treatment on insulin sensitivity are also considered. Section 3 (Management of Insulin Resistance and Associated Conditions) focuses on the avoidance and treatment of insulin resistance in its clinical manifestations. A discussion of the potential benefits of non-pharmacological measures prefaces a review of the range of drugs used in the treatment of type 2 diabetes and related disorders. References are confined to key articles at the end of each section. Improved nutrition allied to increased levels of physical exercise are of crucial importance in the battle to stem the increasing incidence and prevalence of insulin resistance; however, translation of such advice into action has proved difficult in practice. Thus, other approaches have been explored. Recent years have witnessed considerable progress in the pharmacological management of insulin resistance. In particular, the thiazolidinediones (and other insulin-sensitizing drugs) appear to provide a more specific assault on insulin-resistance. Clinical experience with these agents remains relatively limited and serious hepatotoxicity has clouded the first agent in this class - troglitazone. With its introduction into the USA in 1995 and driven by the publication of the United Kingdom Prospective Diabetes Study, metformin has enjoyed a renaissance. This well-established agent is finding application for new clinical indications. In parallel, the development of anti-obesity drugs continues apace. The molecular and genetic mechanisms underlying some

forms of insulin resistance are being revealed. Original intellectual concepts such as the fetal origins hypothesis are challenging traditional views about the aetiology of insulin resistance and its clinical sequelae. These exciting scientific advances notwithstanding, the evolving global epidemic of obesity and type 2 diabetes represents an enormous public health challenge. Now more than ever, research must focus on identifying solutions that are applicable on the level of entire populations. By definition, these must also be practical and cost-effective.

Type 2 Diabetes

The emergence of type 2 diabetes as a global pandemic is one of the major challenges to health care in the 21st century. This book contains chapters covering the newest scientific concepts in the pathogenesis of type 2 diabetes, and the complications and approaches in diagnosis and glycemic control. Part of the book is dedicated to the effect of diabetes on the mental functions and treatment strategies to prevent cognitive decline. Glucose monitoring, using cutting-edge technologies, is outlined, as well as the role of health information technologies in diabetes management. Updates on glucose lowering therapy are presented, and the new emerging class of SGLT2 inhibitors is discussed in detail. The purpose of this book is to disseminate knowledge on type 2 diabetes and to contribute to the professional development of physicians, internists, endocrinologists, medical students, and research scientists in diabetes.

Insulin Resistance in Children and Adolescents

Insulin resistance is a simple concept with complex ramifications. The notion that insulin action differs in different people and under different circumstances has been known for a considerable period of time. For example, it has long been recognised that young children with type 1 diabetes are 'sensitive' to small changes in insulin dosage, while obese adults with type 2 diabetes may require huge doses of insulin to establish metabolic control. What is more recent is the finding that insulin action differs in a number of different and very common conditions and may in fact be a central contributor to the pathogenesis of some or all of these, including obesity, atherogenesis, type 2 diabetes, the metabolic syndrome, hypertension, hyperandrogenism, polycystic ovarian syndrome and perhaps some types of malignancy. The increasing burden of obesity and its ramifications has firmly and increasingly focused the spotlight on insulin resistance in recent years. Yet most of this attention has been paid to adults and much less to the consequences and causes of insulin resistance in children and teens. insulin resistance, such as obesity, type 2 diabetes, atherosclerosis, have their origins in childhood. Furthermore, insulin resistance has long been documented in certain circumstances in children and teens with type 1 diabetes (e.g. at disease onset, with episodes of ketoacidosis or poor metabolic control), and is likely an adaptive response contributing to the growth spurt of puberty. More recently, in utero contributions to programming of insulin resistance and its consequences have been brought to light, initially by Barker and his colleagues who have championed the field of 'foetal origins of adult disease'. Given the rapid explosion in research in insulin resistance and its increasing importance throughout the life span, we felt it timely to bring together in one place a thorough analysis of the field. The objectives of this book are two-fold: first, to educate the reader about the importance and spectrum of insulin resistance in the childhood population, and, second, to help stimulate and focus further investigation in this exciting area. insulin resistance in the paediatric population. The sequence of the chapters moves from basic mechanisms, to measurement of insulin sensitivity, to description of specific disorders, to prevention and management.

Endocrinology Adult and Pediatric: Diabetes Mellitus and Obesity E-Book

Meet the growing challenges of diabetes and obesity management with Endocrinology: Adult and Pediatric: Diabetes Mellitus and Obesity - a new diabetes and obesity eBook from the same expert endocrinologists responsible for the highly acclaimed two-volume Endocrinology clinical reference. With all of the latest advances loaded on your favorite eReader, you'll be able to put today's best practices to work for your patients. Stay abreast of the newest knowledge and advances in diabetes mellitus and obesity, including today's increased focus on controlling autoimmunity and preserving or replenishing beta-cell mass in the management of type 1 diabetes; complications of diabetes and their pathogenesis, morbidity, and treatment; new findings and treatments for obesity; and much more. Count on all the authority that has made Endocrinology, 6th Edition, edited by Drs. Jameson and DeGroot, the go-to clinical reference for endocrinologists worldwide. Consult this title on your favorite e-reader,

conduct rapid searches, and adjust font sizes for optimal readability. Compatible with Kindle®, nook®, and other popular devices.

Epidemiology of Pediatric and Adolescent Diabetes

As the incidence of childhood obesity continues to dramatically increase, the emergence of type 2 and the increasing incidence of type 1 diabetes in young people demonstrate that childhood diabetes, like adult onset diabetes, is a complex and heterogeneous condition presenting new obstacles to the practicing clinician. Epidemiology of Pediatric and Adolescent Diabetes is the first source on the market to address this critical paradigm shift and offer insights and recommendations as to how clinicians can better care for this growing patient population. Epidemiology of Pediatric and Adolescent Diabetes: is the first book devoted specifically to the epidemiology of diabetes in children and adolescents examines the prevalence and clinical manifestations of both type 1 and type 2 diabetes in children and adolescents reviews clinical trials and outcomes, risk factors, complications, and interventions includes practical discussions pertaining to environmental and behavioral risk factors, genetics, screening, treatment and prevention, and how they relate to the type 1 and 2 diabetes in adolescents

The Metabolic Syndrome

This book covers the most important clinical and bench science aspects of metabolic syndrome. It will be of value to all of those seeking a comprehensive update on the metabolic syndrome. Furthermore, it will provide a broad basis for advancing research in the multiple intersecting disciplines encompassed by the metabolic syndrome.

Insulin Resistance

Insulin resistance is defined as an impaired biological response to either exogenous or endogenous insulin. It is an increasingly prevalent disorder in the developed countries and is known as a high risk factor for both cardiovascular diseases and malignancies. This book describes the endocrine disorders that are associated with changes in insulin sensitivity, often resulting in clinical consequences such as impaired glucose tolerance or secondary diabetes mellitus. The main components of a pathological condition known as metabolic syndrome (MS) or syndrome X is also described, including insulin resistance, type II diabetes, hypertension, central obesity, dyslipidemia, and nephropathy. The treatment of type II diabetes is examined, including the adjustments to changes in insulin resistance and secretion and to variations in basal and prandial glucose along the diabetes continuum. The prevalence of insulin resistance among children and adolescents is also looked at, including insulin resistance in childhood cancer survivors. In addition, the association between insulin resistance and oral cancer risk (i.e. smoking) is addressed, as well as the roles of insulin resistance and sympathetic nerve activity in obesity, hypertension, Turner syndrome and liver disease. The association between non-alcoholic fatty liver disease (NAFLD) and insulin resistance, and the pathogenetic and therapeutic implications are also addressed.

Type 2 Diabetes in Children and Adolescents

The management of type 2 diabetes in children and adolescents is complex and poses a range of unique challenges. Treatment may involve weight reduction, lifestyle modification, exercise programs, and medications to treat hyperglycemia. However, few of the drugs used in the treatment of type 2 diabetes and even fewer of those used to reduce the risk of cardiovascular disease have been licensed for use in children and adolescents. A state-of-the-art resource, this book provides a comprehensive review of current research and developments. International experts address the interrelationship of diabetes, obesity, insulin resistance and the metabolic syndrome; the spectrum of clinical features and diagnostic issues; the epidemiology, pathophysiologic basis, genetics of this disorder; and its treatment in children and adolescents.

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Type 2 Diabetes in Children and Adolescents

As a consequence of the obesity epidemic, the prevalence of type 2 diabetes in children and adolescents is increasing. For medical trend watchers and health care professionals alike, this groundbreaking book covers epidemiology of type 2 diabetes in youth; pathophysiology of type 2 in youth; case-finding criteria; early recognition of risk factors; prevention of obesity in this population; and more.

Insulin Resistance

Diabetes is now one of the major causes of morbidity worldwide. In many cases, the onset of diabetes is progressive, developing via a condition of insulin resistance. This book considers the development of this condition, its consequences and clinical and therapeutic aspects. The book reviews the normal biology of insulin action on glucose, lipids and proteins. It considers the pathological basis for insulin resistance in animal models and humans, and discusses the influence of heredity, dietary factors and exercise. Clinical consequences including dyslipidaemia, hypertension and polycystic ovary syndrome, and therapeutic strategies for treatment are also examined. * Provides an expert review of the phenomenon of insulin resistance * Brings together a host of recent research for the first time * Written by leading experts in biological and clinical research

Diabetes Mellitus in Children

The field of androgen excess disorders has advanced substantially since the original publication of this book. The Androgen Excess Society (AES) was founded to bring together investigators in the field. A better understanding of the screening, progression, and molecular genetics of nonclassic adrenal hyperplasia (NCAH) has improved the clinical care and diagnostic accuracy of these patients. New criteria for the diagnosis of the polycystic ovary syndrome (PCOS) were proposed in Rotterdam, criteria that have resulted in controversy and, hopefully, initiation of new studies. The association of insulin resistance with PCOS has been strengthened, and the role of metformin in tre- ing the infertility of the PCOS has been validated. Risks for diabetes and, more cont- versially, cardiovascular disease in women with PCOS have received substantial investigation. Our understanding of the epidemiology and economic impact of these disorders has expanded, emphasizing their critical importance. These are but a few highlights of how the terrain has changed in a relatively brief period of time. In keeping with these advances, the title of this book has been revised to reflect the growing importance of PCOS as the most prevalent androgen excess disorder in women, and arguably, as the one that might have the most serious adverse consequences for general health. There are fewer chapters to provide a more focused elucidation of the area. Several chapters were penned by new (and young) authors who are conducting cutting-edge research in the field.

Androgen Excess Disorders in Women

Now in its second edition, the Oxford Textbook of Endocrinology and Diabetes is a fully comprehensive, evidence-based, and highly-valued reference work combining basic science with clinical guidance, and providing first rate advice on diagnosis and treatment.

Oxford Textbook of Endocrinology and Diabetes

This volume, written by renowned experts, provides complete coverage of the main genetic conditions associated with diabetes. Divided into five sections, it offers insights into genetic defects involving the pancreatic beta cell, extreme insulin resistance, ciliopathies, obesity and glucose metabolism, chromosomal defects, and other genetic conditions associated with increased susceptibility to diabetes. Other topics include the various subtypes of monogenic diabetes, such as the neonatal form and the Wolfram syndrome, as well as chromosomal defects leading to complex conditions affiliated with diabetes, like Trisomy 21 or Prader-Willi syndrome. There are also chapters dedicated to the poorly explored relationships between metabolism and neurodegenerative disorders like Friedreich’s ataxia and muscular dystrophy. This book is a reference for every pediatric and adult endocrinologist

and diabetologist, even experienced ones, with an interest in the intricacies and protean aspects of disorders of glucose metabolism secondary to genetic diseases.

Diabetes Associated with Single Gene Defects and Chromosomal Abnormalities

Hyperandrogenism profoundly affects women’s lives from lowering self-esteem to changing cognition and affective motivation. The polycystic ovary syndrome (PCOS) is the most common androgen excess disorder worldwide. While it is not the focus of this book, some aspects are discussed. The aim of this book is to improve understanding of androgen excess and its impact on several conditions. Topics include development of adipose tissue in females, insulin sensitivity, congenital adrenal hyperplasia, and Cushing’s disease/syndrome. There is also a discussion of PCOS with emphasis on in utero origins and specific genetic and epigenetic factors. This book provides a wealth of relevant information for every endocrinologist and gynecologist who wants to broaden their knowledge of androgens in various conditions.

Hyperandrogenism in Women

This New Edition is today's most comprehensive, definitive reference in the field, incorporating all of today's explosive discoveries in basic and clinical endocrinology. Its reliable, cutting-edge guidance for a full range of problems is combined with a wealth of information on the physiological, biochemical, and genetic basis at the molecular biological level. Dr. Mark A. Sperling and 33 contributing experts bring readers the benefits of discovery at the bench and its application at the bedside. New chapters, extensive revisions, and compelling updates will keep readers at the forefront of the diagnosis and management of endocrine disease in children. Incorporates the explosive growth in molecular biology as it relates to developmental and pediatric endocrinology. Extensively revised and updated chapters throughout reflect the latest information. Coverage of up-to-the-minute topics in the field, including molecular, biochemical, and clinical basis of hyperinsulinemic hypoglycemia of infancy and childhood diabetes mellitus energy balance/obesity growth hormone paradigms of mechanisms of hormone action, and others Contributions from new authors from distinguished institutions Numerous brand-new illustrations depict the most current information, particularly the basic science/genetic basis of certain entities

The British National Bibliography

The Textbook of Nephro-Endocrinology is the definitive translational reference in the field of nephro-endocrinology, investigating both the endocrine functions of the kidneys and how the kidney acts as a target for hormones from other organ systems. It offers researchers and clinicians expert, gold-standard analyses of nephro-endocrine research and translation into the treatment of diseases such as anemia, chronic kidney disease (CKD), rickets, osteoporosis, and, hypoparathyroidism. Investigates both the endocrine functions of the kidneys and how the kidney acts as a target for hormones from other organ systems Presents a uniquely comprehensive and cross-disciplinary look at all aspects of nephro-endocrine disorders in one reference work Clear translational presentations by the top endocrinologists and nephrologists in each specific hormone or functional/systems field

Pediatric Endocrinology

Diabetes mellitus is a very common disease which affects approximately 150,000,000 worldwide. With its prevalence rising rapidly, diabetes continues to mystify and fascinate both practitioners and investigators by its elusive causes and multitude of This textbook is written for endocrinologists, specialists in other disciplines who treat diabetic patients, primary care physicians, housestaff and medical students. It covers, in a concise and clear manner, all aspects of the disease, from its pathogenesis on the molecular and cellular levels to its most modern therapy.

Textbook of Nephro-Endocrinology

This text covers the basic principles of mitochondrial dynamics in cardiovascular medicine, with particular emphasis on their functional roles in physiology and disease. The book will include articles pertaining to mitochondrial fitness on a global basis, providing therefore an update on the progress made in several aspects in the field. Thus, it will assist scientists and clinicians alike in furthering basic and translational research. Organized in sections focusing on: basic science, mitochondrial dysfunction in cardiac disorders, in vascular disorders, in metabolic disorders, in kidney disease, therapeutic

challenges and options, this essential volume fills imperative gaps in understanding and potentially treating several cardiovascular disorders.

Principles of Diabetes Mellitus

Physical inactivity is a key determinant of health across the lifespan. A lack of activity increases the risk of heart disease, colon and breast cancer, diabetes mellitus, hypertension, osteoporosis, anxiety and depression and others diseases. Emerging literature has suggested that in terms of mortality, the global population health burden of physical inactivity approaches that of cigarette smoking. The prevalence and substantial disease risk associated with physical inactivity has been described as a pandemic. The prevalence, health impact, and evidence of changeability all have resulted in calls for action to increase physical activity across the lifespan. In response to the need to find ways to make physical activity a health priority for youth, the Institute of Medicine's Committee on Physical Activity and Physical Education in the School Environment was formed. Its purpose was to review the current status of physical activity and physical education in the school environment, including before, during, and after school, and examine the influences of physical activity and physical education on the short and long term physical, cognitive and brain, and psychosocial health and development of children and adolescents. Educating the Student Body makes recommendations about approaches for strengthening and improving programs and policies for physical activity and physical education in the school environment. This report lays out a set of guiding principles to guide its work on these tasks. These included: recognizing the benefits of instilling life-long physical activity habits in children; the value of using systems thinking in improving physical activity and physical education in the school environment; the recognition of current disparities in opportunities and the need to achieve equity in physical activity and physical education; the importance of considering all types of school environments; the need to take into consideration the diversity of students as recommendations are developed. This report will be of interest to local and national policymakers, school officials, teachers, and the education community, researchers, professional organizations, and parents interested in physical activity, physical education, and health for school-aged children and adolescents.

Mitochondrial Dynamics in Cardiovascular Medicine

This revised new edition reviews the substantial advances in our understanding of the vital role of growth hormone (GH) in maintaining adult health, and the resulting disorders from GH deficiency. The first edition, published in 1996, provided a pioneering overview of the subject; this new edition provides an even more comprehensive account, fully updated with the latest research, clinical applications, and references. The therapeutic benefits of GH treatment in GH deficiency are thoroughly evaluated, including effects on metabolism, cardiac function, exercise performance, psychosocial aspects, and aging and gender-specific effects. This compilation by the world's leading experts covers clinical investigation, diagnosis and treatment issues, and encompasses new knowledge of the control and action of GH secretion. This volume is the most authoritative, comprehensive, and detailed account available and will be an essential source of reference for all endocrinologists.

Educating the Student Body

More than 18 million people in the United States have diabetes mellitus, and about 90% of these have the type 2 form of the disease. This book attempts to dissect the complexity of the molecular mechanisms of insulin action with a special emphasis on those features of the system that are subject to alteration in type 2 diabetes and other insulin resistant states. It explores insulin action at the most basic levels, through complex systems.

Growth Hormone in Adults

o history of endocrinology can be written without reference N to Sir Humphry Davy Rolleston, whose monumental study of the subject appeared in 1936 under the modest subtitle: The Endocrine Organs in Health and Disease with an Historical Review. It was based on the author's Fitzpatrick Lectures at the Royal College of Physicians of London in 1933 and 1934. The lectureship, which dates from 1901, is devoted to the History of Medicine. Rolleston's work as regards scholarship and delivery cannot be surpassed and will remain the solid basis for any further study. It is of interest to note that Rolleston gave the Fitzpatrick Lectures when he was 71 years of age and had his book published when he was 74. By that time he had achieved most of his professional aims and all the honours a distinguished

medical career can offer (see Section II). He perceived clearly that endocrinology was "an enormous subject in a most active stage of growth\

Mechanisms of Insulin Action

The International Textbook of Diabetes Mellitus has been a successful, well-respected medical textbook for almost 20 years, over 3 editions. Encyclopaedic and international in scope, the textbook covers all aspects of diabetes ensuring a truly multidisciplinary and global approach. Sections covered include epidemiology, diagnosis, pathogenesis, management and complications of diabetes and public health issues worldwide. It incorporates a vast amount of new data regarding the scientific understanding and clinical management of this disease, with each new edition always reflecting the substantial advances in the field. Whereas other diabetes textbooks are primarily clinical with less focus on the basic science behind diabetes, ITDM's primary philosophy has always been to comprehensively cover the basic science of metabolism, linking this closely to the pathophysiology and clinical aspects of the disease. Edited by four world-famous diabetes specialists, the book is divided into 13 sections, each section edited by a section editor of major international prominence. As well as covering all aspects of diabetes, from epidemiology and pathophysiology to the management of the condition and the complications that arise, this fourth edition also includes two new sections on NAFLD, NASH and non-traditional associations with diabetes, and clinical trial evidence in diabetes. This fourth edition of an internationally recognised textbook will once again provide all those involved in diabetes research and development, as well as diabetes specialists with the most comprehensive scientific reference book on diabetes available.

Endocrine Frailty in the Elderly

Now in its fifth edition, the Textbook of Diabetes has established itself as the modern, well-illustrated, international guide to diabetes. Sensibly organized and easy to navigate, with exceptional illustrations, the Textbook hosts an unrivalled blend of clinical and scientific content. Highly-experienced editors from across the globe assemble an outstanding set of international contributors who provide insight on new developments in diabetes care and information on the latest treatment modalities used around the world. The fifth edition features an array of brand new chapters, on topics including: Ischaemic Heart Disease Glucagon in Islet Regulation Microbiome and Diabetes Diabetes and Non-Alcoholic Fatty Liver Disease Diabetes and Cancer End of Life Care in Diabetes as well as a new section on Psychosocial aspects of diabetes. In addition, all existing chapters are fully revised with the very latest developments, including the most recent guidelines from the ADA, EASD, DUK and NICE. Includes free access to the Wiley Digital Edition providing search across the book, the full reference list with web links, illustrations and photographs, and post-publication updates Via the companion website, readers can access a host of additional online materials such as: 200 interactive MCQ's to allow readers to self-assess their clinical knowledge every figure from the book, available to download into presentations fully searchable chapter pdfs Once again, Textbook of Diabetes provides endocrinologists and diabetologists with a fresh, comprehensive and multi-media clinical resource to consult time and time again.

A History of Endocrinology

A working group of sixteen experts from seven countries re-evaluated the evidence of the carcinogenicity of betel-quid and areca-nut chewing and some areca-nut related nitrosamines. Betel-quid and areca-nut chewing are widely practised in many parts of Asia and in Asian-migrant communities elsewhere in the world. There are hundreds of millions of users worldwide. They evaluated betel quid with tobacco as carcinogenic to humans (Group 1) on the basis of sufficient evidence of an increased risk of cancer of the oral cavity, pharynx and oesophagus. The working group reviewed epidemiological studies of human cancer, mainly studies from India, Pakistan and Taiwan (China). Studies on betel quid with tobacco and areca nut with tobacco in experimental animals now also provide sufficient evidence of carcinogenicity. The working group also evaluated betel quid without tobacco as carcinogenic to humans (Group 1), on the basis of sufficient evidence of an increased risk of oral cancer. Studies on betel quid without tobacco and areca nut without tobacco in experimental animals now also provide sufficient evidence of carcinogenicity. Areca nut, a common ingredient of betel quid and many different chewing preparations, including those available commercially, has been observed to cause oral submucous fibrosis

International Textbook of Diabetes Mellitus, 2 Volume Set

Drug Discovery and Evaluation has become a more and more difficult, expensive and time-consuming process. The effect of a new compound has to be detected by in vitro and in vivo methods of pharmacology. The activity spectrum and the potency compared to existing drugs have to be determined. As these processes can be divided up stepwise we have designed a book series "Drug Discovery and Evaluation" in the form of a recommendation document. The methods to detect drug targets are described in the first volume of this series "Pharmacological Assays" comprising classical methods as well as new technologies. Before going to man, the most suitable compound has to be selected by pharmacokinetic studies and experiments in toxicology. These preclinical methods are described in the second volume „Safety and Pharmacokinetic Assays". Only then are first studies in human beings allowed. Special rules are established for Phase I studies. Clinical pharmacokinetics are performed in parallel with human studies on tolerability and therapeutic effects. Special studies according to various populations and different therapeutic indications are necessary. These items are covered in the third volume: „Methods in Clinical Pharmacology".

Textbook of Diabetes

Hormonal dysfunction can have a major and often complex impact on all key components of the metabolic syndrome. This book comprises state-of-the-art reviews on the subject written by recognized experts in the field of endocrinology. Each chapter covers specific manifestations associated with the metabolic syndrome in classic endocrine diseases. Compelling questions are highlighted and future directions presented. The topics covered include hypopituitarism, adrenal insufficiency, acromegaly, glucocorticoid excess, androgen excess, hypogonadism, prolactin, and thyroid and parathyroid hormone abnormalities. This book is meant to inspire subsequent research related to metabolic complications in endocrine diseases, thus enabling early detection as well as prompt and appropriate management.

Betel-quid and Areca-nut Chewing and Some Areca-nut-derived Nitrosamines

Paediatrics at a Glance provides an introduction to paediatrics and the problems encountered in child health as they present in primary, community and secondary care, from birth through to adolescence. Thoroughly updated to reflect changes in understanding of childhood illness over the last 5 years, the 4th edition of this best-selling textbook diagrammatically summarises the main differential diagnoses for each presenting symptom, while accompanying text covers important disorders and conditions as well as management information. Paediatrics at a Glance: • Is an accessible, user-friendly guide to the entire paediatric curriculum • Features expanded coverage of psychological issues and ethics in child health • Includes more on advances in genetics, screening and therapy of childhood illness • Contains new videos of procedures and concepts on the companion website • Includes a brand new chapter on Palliative Care - an emerging area in the specialty • Features full colour artwork throughout • Includes a companion website at www.ataglanceseries.com/paediatrics featuring interactive self-assessment case studies, MCQs, videos of the procedures and concepts covered in the book, and links to online resources Paediatrics at a Glance is the ideal companion for anyone about to start a paediatric attachment or module and will appeal to medical students, junior doctors and GP trainees as well as nursing students and other health professionals.

Drug Discovery and Evaluation: Methods in Clinical Pharmacology

This book provides case studies accompanied by questions and commentaries for the specialist registrar in diabetes and endocrinology, to assist with problem-based learning during their training. The case studies range from the everyday to the rare and complicated, presenting a strong foundation for the specialist trainee to prepare them for their qualifying exams and, more importantly, for their future clinical consultations.

Metabolic Syndrome Consequent to Endocrine Disorders

It has been known for over 40 years that GH-deficient-children benefit from replacement with the hormone. But GH, essential for longitudinal growth, also plays a role after completion of final height. With the introduction of biosynthetic human GH 20 years ago, the use of GH was no longer restricted to severe growth retardation in hypopituitary children. This book will take the reader behind the myths of GH and into the real world of clinical endocrinology. The contributions stem from recognized clinicians and scientists who have been working in the field for decades. The contents encompass traditional end points of GH therapy such as body composition, bone biology and physical performance. Attention is also devoted to diagnostic aspects and side effects. Additional features range from clinical epidemiology

to quality of life, and novel areas such as the impact of traumatic brain injury on pituitary function are also covered. The present volume of Frontiers of Hormone Research is essential reading for health care professionals interested in clinical endocrinology and GH.

Paediatrics at a Glance

Diabetes, obesity and their related diseases make up one of the greatest challenges to human health in the 21st century. In A Modern Epidemic: Expert Perspectives on Obesity and Diabetes, a diverse group of researchers and clinicians from the University of Sydney has joined forces to discuss how to tackle these major health challenges. Obesity and diabetes are not just problems for the individual. They pose risks to the environmental, psychological and economic stability of the entire world. The solutions, therefore, need to be equally wide-ranging and accessible to all. Acknowledging this, the authors write in an engaging style about the causes and consequences of obesity and diabetes, as well as prevention and treatment: how to identify and mitigate the risk factors, deliver targeted and effective healthcare, and formulate global strategies to ultimately turn the tide on the 21st century's most devastating diseases.

Endocrinology and Diabetes

Growth Hormone Deficiency in Adults