1. Record Nr. UNISALENTO991002726339707536

Titolo	Parola e spirito: studi in onore di Settimio Cipriani : estratto
Pubbl/distr/stampa	Brescia : Paideia, [1982?]
Descrizione fisica	1 v. ; 24 cm
Altri autori (Persone)	Cipriani, Settimio
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910794269503321

Autore	Sietsema Kathy E
Titolo	Wasserman & Whipp's Principles of exercise testing and interpretation [[electronic resource] /] / Kathy E. Sietsema ... [et al.]
Pubbl/distr/stampa	Philadelphia, : Wolters Kluwer, 2021
ISBN	1-9751-3646-2 1-9751-3645-4
Edizione	[6th ed.]
Descrizione fisica	1 online resource (1183 pages)
Disciplina	616.120754
Soggetti	Exercise Test Physical Exertion - physiology Exercise tests Heart function tests Pulmonary function tests
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Preface -- Acknowledgments -- Contributors -- 1 Exercise Testing and Interpretation -- WHAT IS CARDIOPULMONARY EXERCISE TESTING? -- CELL RESPIRATION AND BIOENERGETICS -- NORMAL COUPLING OF EXTERNAL TO CELLULAR RESPIRATION -- WHY MEASURE

GAS EXCHANGE TO EVALUATE CARDIORESPIRATORY FUNCTION AND CELLULAR RESPIRATION? -- CARDIAC STRESS TESTS AND PULMONARY STRESS TESTS -- PATTERNS OF CHANGE IN EXTERNAL RESPIRATION (VO2 AND VCO2) AS RELATED TO FUNCTION, FITNESS, AND DISEASE -- FACTORS LIMITING EXERCISE -- Fatigue -- Dyspnea -- Pain -- EVIDENCE OF SYSTEMIC DYSFUNCTION UNIQUELY REVEALED BY INTEGRATIVE CARDIOPULMONARY EXERCISE TESTING -- Diagnosis of Exercise Intolerance, Especially Exertional Dyspnea and Myocardial Ischemia -- Cardiopulmonary Exercise Testing and Prognosis in Patients With Known Disorders -- Cardiopulmonary Exercise Testing and Preoperative Assessment -- SUMMARY -- 2 Physiology of Exercise -- SKELETAL MUSCLE: MECHANICAL PROPERTIES AND FIBER TYPES -- BIOENERGETICS -- Sources of High-Energy Phosphate and Cellular Respiration -- Phosphocreatine Breakdown -- Substrate Utilization -- Carbohydrates -- Lipids -- Amino Acids -- OXYGEN COST OF WORK -- VO2 Steady State and Work Efficiency -- VO2 Nonsteady State -- ARTERIAL LACTATE INCREASE -- Arterial Lactate Increase as a Function of Work Rate -- Arterial Lactate Increase as a Function of Time -- Mechanisms of Arterial Lactate Increase -- Increasing Glycolytic Flux and Exercise Intensity -- Sequential Recruitment of Type II Muscle Fibers -- Pyruvate Dehydrogenase Activity -- Change in Cytosolic Redox State Limiting Mitochondrial Proton Shuttles -- Lactate Production and Clearance -- Oxygen Supply and Critical Capillary PO2 -- pH Change and Oxyhemoglobin Dissociation Above the Anaerobic Threshold -- BUFFERING THE EXERCISE-INDUCED LACTIC ACIDOSIS.
CARDIOVASCULAR RESPONSES TO EXERCISE -- Cardiac Output -- Oxygen Pulse -- Distribution of Peripheral Blood Flow -- Arterial PO2 -- Oxyhemoglobin Dissociation -- Hemoglobin Concentration -- Arterial Oxygen Content -- GAS EXCHANGE KINETICS -- Oxygen Uptake Kinetics -- Moderate Exercise -- Supra-AT Exercise -- Mean Response Time -- Oxygen Deficit -- Oxygen Debt -- Carbon Dioxide Output Kinetics -- Moderate Exercise -- Supra-AT Exercise -- Power-Duration Curve and Critical Power -- VENTILATORY RESPONSES TO EXERCISE -- Arterial and Venous PCO2 and Carbon Dioxide Content -- Ventilatory Determinants -- Carbon Dioxide and H+ Elimination -- Alveolar Ventilation -- Dead Space Ventilation -- Total (or Expired) Ventilation -- Breathing Pattern -- Ventilatory Control -- Moderate Exercise -- Supra-AT Exercise -- SUMMARY -- 3 Measurements During Integrative Cardiopulmonary Exercise Testing -- measurements -- Electrocardiographic Changes With Exercise -- Maximal and Peak Oxygen Uptake -- Oxygen Uptake and Work Rate -- Normal Subjects -- Upward Displacement of VO2 as a Function of Work Rate in Obesity -- Slope of VO2 as a Function of Work Rate (VO2/WR) -- Linearity of VO2 as a Function of Work Rate -- Can VO2 or METs Be Predicted From the Work Rate? -- Cardiac Output and Stroke Volume -- Cardiac Output Measurement -- Indirect Fick Method Using VCO2 and Estimated CVCO2 -- Direct Fick Method -- Noninvasive Cardiac Output and Stroke Volume by the Fick Principle -- Oxygen Pulse and Stroke Volume -- Anaerobic (Lactate, Lactic Acidosis) Threshold -- Methods of Measurement -- V-Slope Method -- Ventilatory Equivalent Method -- Improving Estimation of the Anaerobic Threshold -- False Positives -- Heart Rate-Oxygen Uptake Relationship and Heart Rate Reserve -- Arterial Blood Pressure -- Breathing Reserve -- Expiratory Flow Pattern -- Inspiratory Capacity.
Tests of Uneven VA/Q -- Wasted Ventilation and Dead Space-Tidal Volume Ratio -- Arterial PO2 and Alveolar-Arterial PO2 Difference -- Arterial-End-Tidal PCO2 Difference -- Ventilatory Equivalents as

Indices of Uneven VA/Q -- Differentiating Uneven Ventilation From Uneven Perfusion as the Cause of Uneven VA/Q -- Other Measures of Uneven VA/Q -- Arterial Bicarbonate and Acid-Base Response -- Tidal Volume/Inspiratory Capacity Ratio -- Measurements Unique to Constant Work Rate Exercise Testing -- VO2 Response in Phase I -- VO2 Response in Phase II -- VO2 Response Above the Anaerobic Threshold -- The Power-Duration Relationship and Endurance Time -- Noninvasive Estimation of Metabolic Acidosis Buffering -- Carotid Body Contribution to Ventilation -- Detecting Exercise-Induced Bronchospasm -- SUMMARY -- 4 Pathophysiology of Disorders Limiting Exercise -- OBESITY -- PATTERNS OF EXERCISE GAS EXCHANGE COMMON TO CARDIOVASCULAR DISEASES -- VO2 Response to Increasing Work Rate (VO2/WR) in Patients With Cardiovascular Abnormalities -- Why Do Cardiovascular Disorders Impair Gas Transport? -- HEART DISEASES -- Coronary Artery Disease -- Myopathic Heart Disease (Heart Failure) -- Valvular Heart Disease -- Congenital Heart Disease -- PULMONARY VASCULAR DISEASES -- Causes of Increased Ventilation -- Exercise Arterial Hypoxemia -- Effect on Systemic Hemodynamics -- PERIPHERAL ARTERIAL DISEASES -- VENTILATORY DISORDERS -- Obstructive Lung Diseases -- Ventilatory Capacity-Ventilatory Requirement Imbalance -- Oxygen Transport-Oxygen Requirement Imbalance -- Physiological Markers of Inadequate Oxygen Transport -- Restrictive Lung Diseases -- Chest Wall (Respiratory Pump) Disorders -- DEFECTS IN HEMOGLOBIN CONTENT AND QUALITY -- Anemia -- Left-Shifted Oxyhemoglobin Dissociation Curve -- Carboxyhemoglobinemia and Cigarette Smoking -- CHRONIC METABOLIC ACIDOSIS.
METABOLIC MUSCLE DISORDERS -- Disorders of Carbohydrate Metabolism -- Disorders of Lipid Metabolism -- Disorders of Mitochondrial Electron Transport Chain -- Toxin- or Drug-Induced Muscle Impairment -- Endocrine Disorders -- NONMETABOLIC CAUSES OF EXERCISE LIMITATION AND DYSPNEA -- Anxiety Reactions -- Poor Effort and Manipulated Exercise Performance -- COMBINATIONS OF DEFECTS -- SUMMARY -- 5 Performance of Clinical Cardiopulmonary Exercise Testing -- EXERCISE LABORATORY AND EQUIPMENT -- General Laboratory Environment -- Gas Exchange Measurement -- Mixing Chambers -- Breath-by-Breath Systems -- Measurement of Volume, Flow Rate, and Ventilation -- Breathing Valves, Mouthpieces, and Masks -- Gas Analyzers -- Elevated Inspired Fractional Oxygen Concentration -- Ergometers: Treadmills and Cycles -- Treadmill -- Cycle Ergometer -- Cycle Versus Treadmill -- Work and Work Rate (Power) -- Electrocardiogram and Systemic Blood Pressure -- Exercise Electrocardiogram -- Systemic Blood Pressure -- Oximetry, Blood Sampling, and Arterial Catheters -- Pulse Oximetry -- Single Samples of Arterial Blood by Puncture -- Multiple Samples of Arterial Blood by Catheterization -- Free-Flowing Ear Capillary Blood -- Invasive Cardiopulmonary Exercise Testing With Pulmonary Artery Catheter -- Data Sampling and Computation -- Quality Control, Validation, and Maintenance -- PREPARING FOR THE EXERCISE TEST -- Requesting the Test and Notifying the Patient -- The Patient in the Exercise Laboratory -- Preliminary Tests -- Physician Evaluation -- Equipment Familiarization -- Ending the Exercise -- Arterial Blood Sampling and Use of Catheter -- PERFORMING THE EXERCISE TEST -- Incremental Exercise Test to Symptom-Limited Maximum -- Selecting the Rate of Work Rate Increase -- Resting Measures -- Unloaded Exercise and Cycling Rate -- Incremental Exercise -- Recovery.
Postexercise Questioning and Review -- Incremental Tests -- Constant Work Rate Exercise Tests -- Treadmill Test for Detecting Myocardial

Ischemia -- Comment -- Treadmill Tests With Even Increments in Work Rate -- Arm Ergometry -- Critique -- Other Tests Suitable for Fitness or Serial Evaluations -- Harvard Step Test and Modifications -- 600-Yard Run-Walk -- 12-Minute Field Test -- 12-Minute Walk Test -- 6-Minute Walk Test -- Incremental Shuttle Walk Test and Endurance Shuttle Walk Tests -- SUMMARY -- 6 Approaches to Data Summary and Interpretation -- CONSIDERATIONS IN FORMATTING AND SUMMARIZING DATA -- Averaging Breath-by-Breath Data -- Formatting Data for Viewing During and After Testing -- Quantifying Peak Values -- Characterizing Submaximal Exercise Patterns -- ORGANIZING DATA: APPROACH TO REVIEW OF A NINE-PANEL GRAPHICAL DISPLAY -- Data Reflecting Cardiovascular and Metabolic Responses -- Cardiovascular and Metabolic Variables: Summary -- Data Reflecting Ventilation Responses to Exercise -- Ventilatory Variables: Summary -- Data Reflecting Efficiency of Pulmonary Gas Exchange -- Pulmonary Gas Exchange Efficiency: Summary -- Graphing Strategies to Facilitate Data Analysis -- Summarizing Key Variables -- EXAMPLES OF FINDINGS IN THE NINE-PANEL DISPLAY IN SELECTED CARDIORESPIRATORY DISORDERS -- Panel 1: VO2, VCO2, and Work Rate as Related to Time -- Panel 3: Heart Rate and Carbon Dioxide Output as a Function of Oxygen Uptake -- Panel 2: Heart Rate and Oxygen Pulse as a Function of Time -- Panel 9: Tidal Volume as a Function of Exercise Minute Ventilation -- Panel 6: Exercise Minute Ventilation as a Function of Carbon Dioxide Output -- Panel 4: Ventilatory Equivalents for Oxygen and Carbon Dioxide Versus Time -- Panel 7: End-Tidal Oxygen and Carbon Dioxide Tensions Versus Time -- Panel 5: Minute Ventilation as a Function of Time.
Panel 8: Respiratory Exchange Ratio at Rest, Increasing Work Rate Exercise, and Recovery.