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Autore	Cotes J. E
Titolo	Lung function [[electronic resource] ] : physiology, measurement and application in medicine / / J.E. Cotes, D.J. Chinn, M.R. Miller
Pubbl/distr/stampa	Malden, Mass. ; ; Oxford, : Blackwell Pub., 2006
ISBN	1-282-11824-2 9786612118241 0-470-79023-7 1-4443-1282-0 1-4443-1283-9
Edizione	[6th ed.]
Descrizione fisica	1 online resource (648 p.)
Altri autori (Persone)	ChinnD. J (David J.) MillerM. R <1949-> (Martin Raymond)
Disciplina	616.2/40754 616.240754
Soggetti	Pulmonary function tests Lungs - Physiology Respiration
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Early developments and future prospects -- Getting started -- Development and functional anatomy of the respiratory system -- Body size and anthropometric measurements -- Numerical interpretation of physiological variables -- Basic terminology and gas laws -- Basic equipment and measurement techniques -- Respiratory surveys -- Thoracic cage and respiratory muscles -- Lung volumes -- Lung and chest wall elasticity -- Forced ventilatory volumes and flows (ventilatory capacity) -- Determinants of maximal flows (flow limitation) -- Theory and measurement of respiratory resistance (including whole body plethysmography) -- Control of airway calibre and assessment of changes -- Distribution of ventilation -- Distribution and measurement of pulmonary blood flow -- Inter-relations between lung ventilation and perfusion -- Transfer of gases into blood in alveolar capillaries -- Transfer factor (diffusing capacity) for carbon monoxide and nitric oxide (Tl,co, Tl,no, Dm and Vc) -- The

oxygenation of blood -- Gas exchange for carbon dioxide and acid-base balance -- Control of respiration -- Newborn babies, infants and young children (ages 0-6 years) -- Normal lung function from childhood to old age -- Reference values for lung function in white (caucasian) children and adults -- Genetic diversity : reference values in non-caucasians -- Physiology of exercise and changes resulting from lung disease -- Exercise testing and interpretation, including reference values -- Assessment of exercise limitation, disability and residual ability -- Exercise in children -- Investigation and physiology of breathing during sleep -- Assessment and treatment of sleep related breathing disorders -- Hypobaria : high altitude and aviation physiology and medicine -- Immersion in water, hyperbaria and hyperoxia including O<sub>2</sub> therapy -- Cold, heat and the lungs -- Airborne respiratory hazards : features, protective mechanisms and consequences -- Patterns of abnormal function in lung disease -- Strategies for assessment -- Lung function in asthman, COPD, emphysema and diffuse lung fibrosis -- How individual diseases affect lung function (compendium) -- Lung function in relation to general anaesthesia and artificial ventilation -- Lung function in relation to surgery -- Pulmonary rehabilitation.

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### Sommario/riassunto

The only text to cover lung function assessment from first principles including methodology, reference values and interpretation New for this edition:- More illustrations to convey concepts clearly to the busy physician - Text completely re-written in a contemporary style: includes user-friendly equations and more diagrams - New material covering the latest advances in the treatment of lung function, including more on sleep-related disorders, a stronger clinical and practical bias and more on new techniques and equipment - Uses the standard

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