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Titolo	Amino Acid Metabolism [[electronic resource]]
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Edizione	[3rd ed.]
Descrizione fisica	1 online resource (480 p.)
Disciplina	572.65 572/.65
Soggetti	Amino acids - Metabolism Amino Acids, Peptides, and Proteins Metabolic Phenomena Drugs Metabolism Amino Acids
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	1.4.1 Purine synthesis 1.4.1.1 Phosphoribosyl pyrophosphate (PRPP) synthetase; 1.4.1.2 PRPP amidotransferase; 1.4.2 Purine catabolism and salvage; 1.4.2.1 Adenosine deaminase deficiency - severe combined immune deficiency; 1.4.2.2 Gout and hyperuricaemia; 1.4.2.3 HGPRT deficiency - the Lesch-Nyhan syndrome; 1.4.3 Pyrimidine synthesis; 1.4.3.1 Orotic aciduria; 1.4.4 Pyrimidine catabolism and salvage; 1.5 Deamination of amino acids; 1.5.1 Amino acid oxidases; 1.5.2 Amine oxidases; 1.5.3 Glutamate and alanine dehydrogenases; 1.5.4 Non-oxidative deamination of amino acids 1.5.5 Glutaminase and asparaginase 1.6 Excretion of nitrogenous waste; 1.6.1 Uricotelic and purinotelic species; 1.6.2 Ureotelic species; 1.6.2.1 Urea synthesis; 1.6.2.2 Inborn errors of metabolism affecting

	the urea synthesis cycle; 1.6.2.3 Entero-hepatic circulation of urea; 1.6.2.4 Canavanine; 1.7 Other nitrogenous compounds in human urine; 1.7.1 Aminoacidurias; Further reading; 2: Nitrogen Balance and Protein Turnover - Protein and Amino Acids in Human Nutrition; 2.1 Nitrogen balance and protein requirements; 2.1.1 Protein digestion and absorption 2.1.2 Protein digestibility and unavailable amino acids in dietary proteins 2.1.3 Obligatory nitrogen losses; 2.1.4 Dynamic equilibrium and tissue protein turnover; 2.1.5 Tissue protein catabolism; 2.1.5.1 Lysosomal autophagy; 2.1.5.2 Ubiquitin and the proteasome; 2.1.5.3 Active site proteolysis of apo-enzymes; 2.1.6 Whole body protein turnover; 2.1.6.1 The constant infusion, labelled precursor method; 2.1.6.2 The constant infusion, labelled end product method; 2.1.6.3 Rates of whole-body protein turnover; 2.1.6.4 The catabolic drive and amino acid oxidation 2.1.6.5 The energy cost of protein turnover
Sommario/riassunto	Amino Acid Metabolism, 3rd Edition covers all aspects of the biochemistry and nutritional biochemistry of the amino acids. Starting with an overview of nitrogen fixation and the incorporation of inorganic nitrogen into amino acids, the book then details other major nitrogenous compounds in micro-organisms, plants and animals. Contents include a discussion of the catabolism of amino acids and other nitrogenous compounds in animals, and the microbiological reactions involved in release of nitrogen gas back into the atmosphere. Mammalian (mainly human) protein and amino acid