A sound understanding of physiology underpins good medical practice. This established textbook provides medical students and others in health-related disciplines with the essential information and learning tools necessary to understand human physiology.

The book adopts a student-friendly style with an emphasis on clarity, explanation and understanding, complemented by full-colour illustrations. It has a hierarchical organisation, beginning with aspects of cell and tissue function before proceeding to a consideration of the communication systems of the body, including the endocrine and nervous systems. The heart of the text concerns the physiology of the main body systems. Throughout, the relevance to clinical practice is stressed.

The third edition of Human Physiology contains new or revised material on osmolarity, osmotic pressure and tonicity; expanded treatment of epithelia; discussion of steroid and thyroid hormone receptors; iron absorption and its regulation by hepcidin; circadian rhythms and carbohydrate absorption in the small intestine.

There are also new feature boxes on Alzheimer’s disease, deep vein thrombosis, the Donnan effect, the stages of labour and the classification of heart failure, and new sections on autonomic failure, the renal handling of uric acid and multiple organ failure.