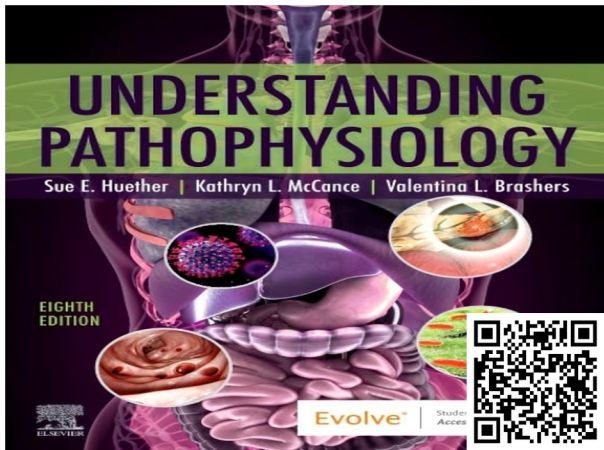


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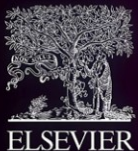
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UNDERSTANDING PATHOPHYSIOLOGY

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Understanding Pathophysiology

EIGHTH EDITION

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ABOUT THE COVER



Molecules, Cells and Organ Systems. The cover image presents the concept that disease begins at the molecular level (genes and products) and progresses to cellular alterations with disruption of tissue and organ structure and function. Driving forces include internal and external stresses, metabolic alterations, and/or the presence of pathogens. The image in the bottom left circle shows colonic diverticula, which are outpouchings of the wall

of the colon. The image in the top left circle is the virus called SARS-CoV-2, which enters cells, reproduces, and spreads to other cells, causing tissue disruption and organ damage. The top right circle is a malignant tumor in the tail of the pancreas, which often goes undetected until it metastasizes to other organs. The bottom right circle shows pathogenic *Escherichia coli*, which invades host cells, overcomes host defenses, reproduces, and produces toxins that injure cells and tissues.

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