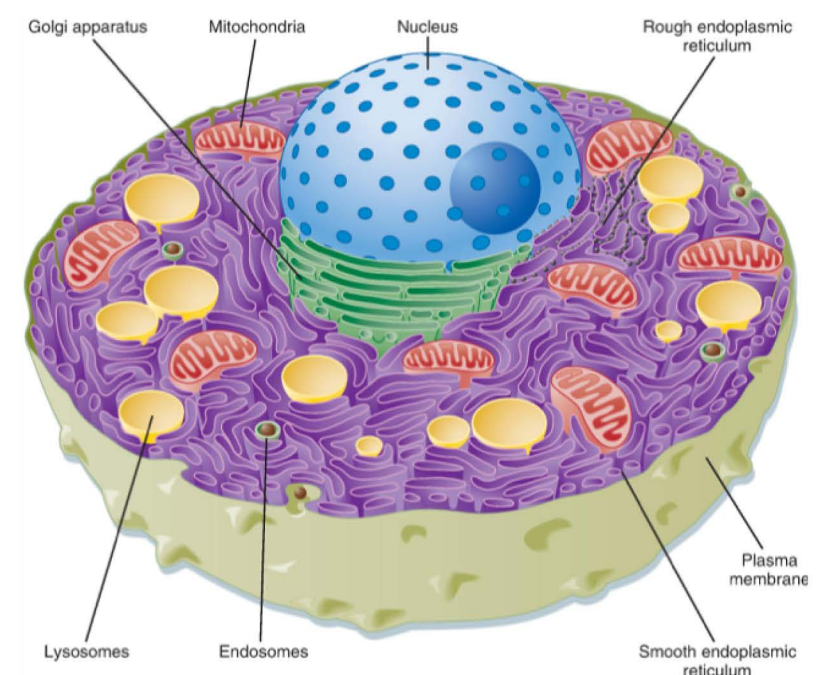
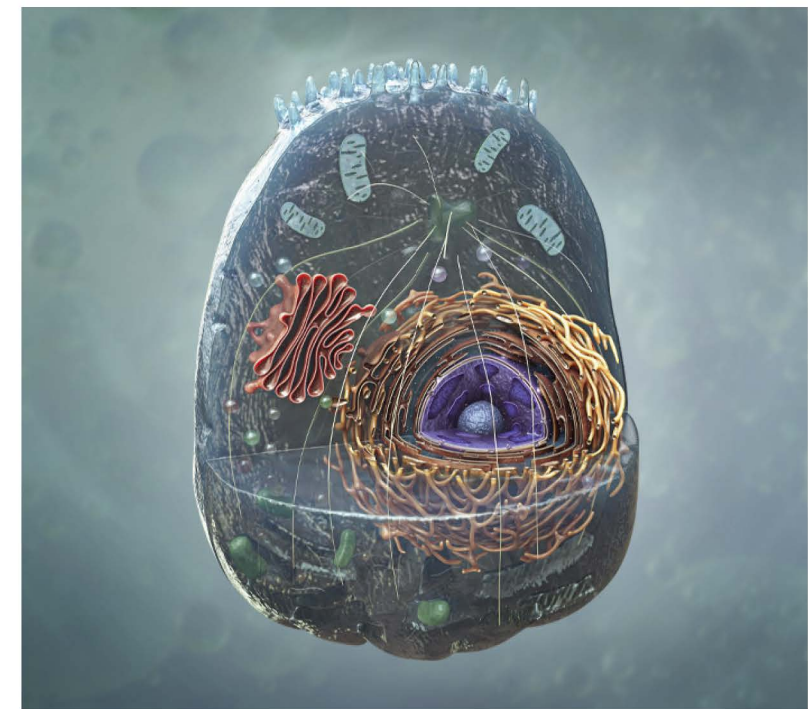
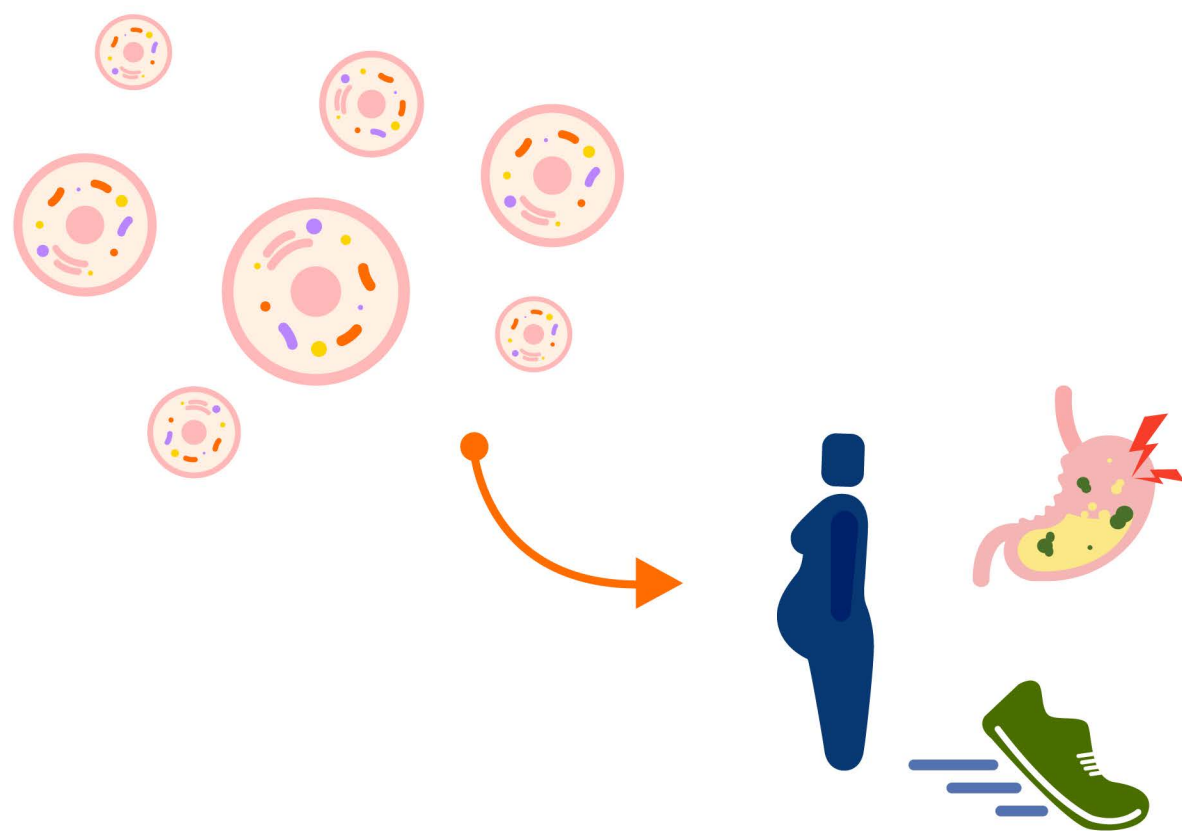


CONTINUAL ENERGY SUPPLY AND DEMAND: THE CHALLENGE



There are an estimated **40 trillion cells** in the human body... All these cells must continually perform work to **stay alive**.

Additional work is **required of cells** when the human body is engaged in a **variety of activities**, including; manual labor, exercise, and outdoor play; body growth spurt and maturation of the reproductive systems at puberty; pregnancy and breast-feeding; combating an infection or cancer; and the healing of damaged tissues/organs.



The Eukaryotic Cell in 3D from the renal corpuscle 3D detailed model in [Complete Anatomy](#)



Source: *Berne & Levy Physiology, Eighth Edition*
by Bruce Koeppen
Available in print and on [ClinicalKey](#) Student

