

8 Metabolism, cell respiration and photosynthesis

8.1 Metabolism

An example of end-product inhibition

- in five reactions, amino acid threonine is converted to isoleucine
- as concentration of isoleucine increases, it binds to allosteric site of first enzyme in the chain (threonine deaminase) acting as a non-competitive inhibitor

Chemogenomics applied to malaria drugs

- databases are used to identify chemicals which bind to malarial proteins

8.2 Cell respiration

Mitochondrial membranes are dynamic

- development of new techniques can stimulate to look into new science
- electron tomography allows three-dimensional images of interior of mitochondria: cristae are not simple inholdings but invaginations, defining micro-compartments in the organelle