

Electron Transport Drives the Synthesis of the Majority of the ATP in Most Cells

- Describe the path of electrons in the electron transport chain include complexes and mobile carriers and energy changes (fig 14-26 & 29)
- Describe ATP Synthase, its importance and how it generates ATP (fig 14-15 & 19)

Figures from Chapter 14

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Amino Acids and Nucleotides Are Part of the Nitrogen Cycle

- Atmospheric Nitrogen
 - Chemically unreactive gas
 - Nitrogen fixation
 - Microorganisms
 - Lightning
 - Majority recycled
- Breakdown of aa
 - Energy
 - CO₂, H₂O
 - Urea

THE ESSENTIAL AMINO ACIDS

THREONINE
METHIONINE
LYSINE
VALINE
LEUCINE
ISOLEUCINE
HISTIDINE
PHENYLALANINE
TRYPTOPHAN

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Metabolism Is Organized and Regulated

- A few other metabolic pathways
 - Cell types
 - Tissues
- Control mechanisms allow survival of cells
 - Starvation
 - Disease
 - Mutation

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