

Decarboxylation - Genesis of biogenic amines

Decarboxylation is the removal of a carboxyl group. Only some amino acids undergo this process.

The result is the formation of so-called biogenic amines (monoamines), which exhibit a **broad spectrum of functions** in the human body.

Basic overview of biogenic amines: 1) **Tyr** → catecholamines (DOPA → dopamine → noradrenaline → adrenaline)

2) **Trp** → serotonin (5-hydroxytryptamine)

3) **Glu** → γ-aminobutyrate (GABA)

4) **His** → histamine

5) **Ser** → ethanolamine → choline → acetylcholine

6) **Cys** → cysteamine

7) **Asp** → β-alanine

