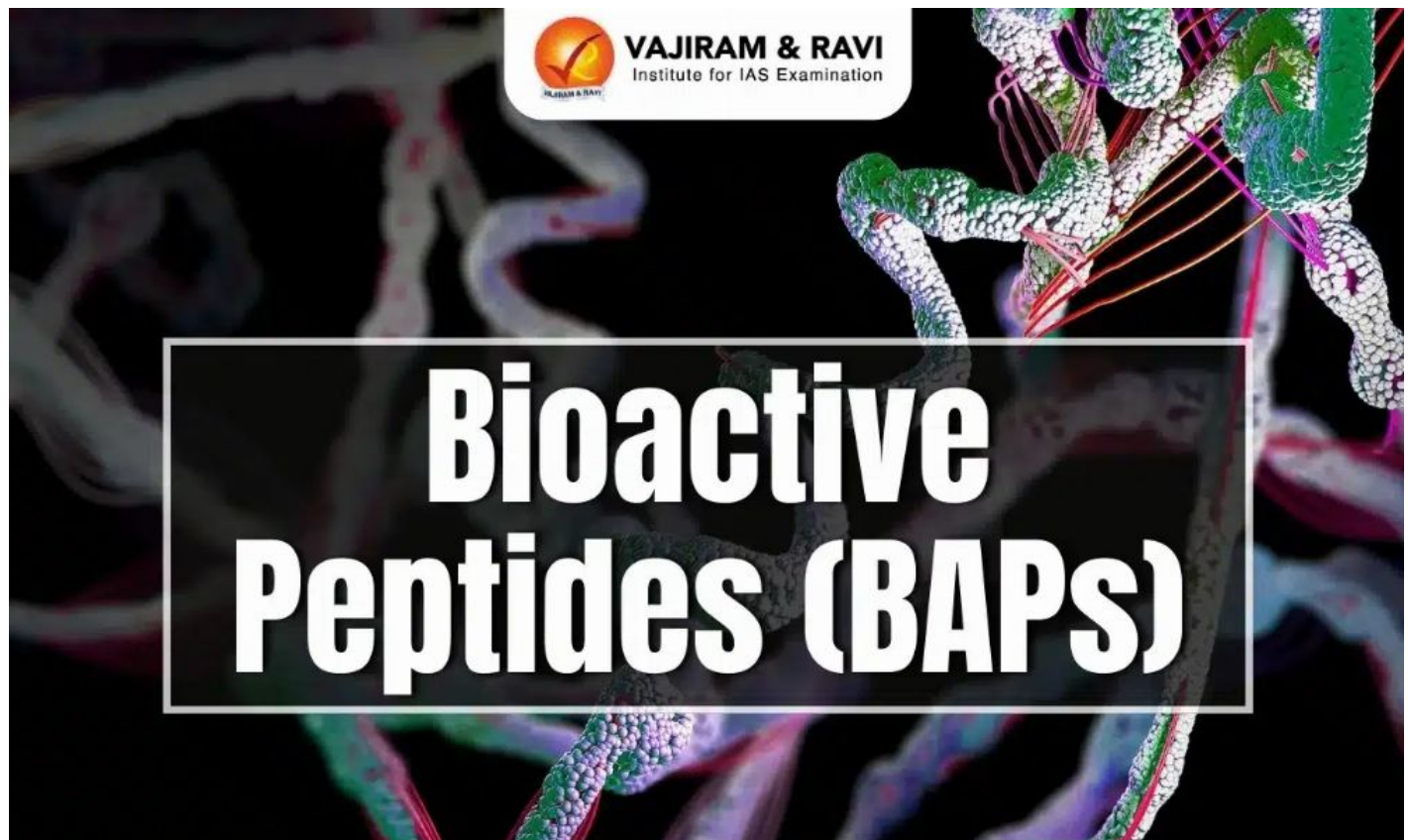


Bioactive Peptides (BAPs)

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Bioactive Peptides Latest News

A study of population-specific responses to fermented food shows that the health effect of the bioactive peptides they contain, differ across populations and can personalise nutrition for India's diverse population.

About Bioactive Peptides

- **Peptides** are **strings of molecules called amino acids**, which are the “building blocks” of proteins.
- The amino acids are joined by **covalent bonds** known as **amide or peptide bonds**.
- **For a peptide to be considered bioactive**, it should have a **physiological effect in a positive manner**.
- Although **some BAPs exist free in their natural source**, the vast **majority** of known **BAPs** are **encrypted in the structure of the parent proteins** and are **released mainly by enzymatic processes**.
- **Most** of the **BAPs** are **derived from plants and animals**.

- The **source** of BAPs includes **milk, cheese, pickles** (fermented fruits and vegetables), **plants, egg, fish, meat, and soybean products**.
- **Some BAPs** have been **prepared by chemical synthesis**.
- BAPs play a significant role in human health by **affecting the digestive, endocrine, cardiovascular, immune, and nervous systems**.
- BAPs are considered the **new generation of biologically active regulators**; they can **prevent oxidation and microbial degradation in foods** and also **improve the treatment of various diseases and disorders**, thus increasing the quality of life.

Peptides vs. Proteins

- **Both peptides and proteins** are **made up of strings of amino acids** that are held together by peptide bonds.
- The main difference is that **peptides are shorter strings of amino acids than proteins**, although the terms aren't used precisely.
- Most scientists refer to **chains with over 100 amino acids as proteins**.
- In addition, **peptides tend to be less well defined in structure than proteins**, which can adopt complex conformations known as secondary, tertiary, and quaternary structures.

Source: PIB

Source: <https://vajiramandravi.com/current-affairs/bioactive-peptides-baps/>

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