

# Meat from plant

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**In news**— Recently plant based segment has been attracting celebrity endorsement.

## What is plant based meat?

- Plant-based” refers to products that bio-mimic or replicate meat, seafood, eggs, and milk derived from animals by looking, smelling, and tasting like them.
- Like animal-based meat, plant-based meat is composed of protein, fat, vitamins, minerals, and water.
- Beyond Meat’s patties, apart from **using coconut oil to copy the melty beef fat of a real hamburger**, apparently even bleed as they cook the “blood” coming from a beetroot juice-based liquid.
- **Plant-based dairy products include ice-cream** that isn’t simply frozen dessert that replaces milk fat with vegetable oil.
- Even the proteins and other solids-not-fat ingredients are sourced from plants.

## How are these made?

- Animal meat contains protein, fat, vitamins, minerals, and water, just like plants. This biochemical similarity allows for **finding analogues in the plant kingdom or making them through mechanical, chemical,** or biological treatment of such ingredients.
- The **challenge lies in replicating muscle tissue that plants don’t have.** The **unique spatial arrangement of proteins in these tissues is what creates the distinct texture of animal meat.**
- That’s why **plant-based mutton samosas, kebabs or keema, having a simpler texture, are easier to make** than larger whole cuts of animal meat such as chicken breasts and pork chops.

- **As for plant-based dairy, the main products are milk from oats, almond, soyabean, coconut, and rice. Among these, oat milk is considered the closest** to regular milk in taste and texture.
- It is also thicker and creamier, as oats absorb more water than nuts or rice during soaking, and more of the grain gets strained for incorporation into the final product.