



Checklist: Bee Biology and Hive Products

Quick Reference Guide: Debunking the "Bee Milk" Myth

Use this checklist to verify your knowledge and distinguish between the various glandular and collected products of a healthy honey bee colony.

1. Primary Hive Secretions (Glandular)

- **Royal Jelly:** A nutrient-dense, opaque white secretion from the hypopharyngeal and mandibular glands.
 - *Purpose:* Exclusively for larval development and queen nutrition.
- **Beeswax:** Secreted from abdominal plates of young workers.
 - *Purpose:* Structural foundation of the hive (comb building).

2. Foraged and Fermented Products

- **Honey:** High-carb syrup made from dehydrated floral nectar.
 - *Purpose:* Long-term energy storage for the winter.
- **Bee Pollen:** Microscopic grains collected from flowers, packed with protein.
 - *Purpose:* The primary source of protein for the colony.
- **Propolis:** Resin collected from tree buds, mixed with wax and enzymes.
 - *Purpose:* Natural antibiotic to disinfect the hive.

3. Fact-Checking Checklist (Myth vs. Reality)

- **Does it contain lactose?** No. Bee "milk" is strictly a protein-hormone complex.
- **Is it produced by mammary glands?** No. Insects lack mammary glands; all secretions are glandular.



- [] **Is there a "Milk Bee"?** No. All nurse bees produce royal jelly as part of their lifecycle stage.
- [] **Is it always a white liquid?** Only royal jelly is white. If the product is golden or transparent, it is honey.

4. Usage and Safety Notes

- [] **Purity Check:** Ensure propolis or royal jelly supplements are free from synthetic fillers.
- [] **Dosage:** Always consult a specialist; royal jelly is highly potent and hormone-active.
- [] **Storage:** Keep away from direct sunlight to prevent enzymatic degradation.