The New Jersey Department of Agriculture's Recommended Good Management Practices (GMP's) for Harvesting Honey

Honey Facts

- Safe, low risk, raw food.
- Bees convert flower nectar, which is sucrose, into honey by adding enzymes that break it down into fructose and glucose.
- Bees add an enzyme (glucose oxidase) that converts some of the glucose into hydrogen peroxide.
 - This step increases the acidity of the honey and lowers its pH, creating a food source that will never spoil.
- Honey is hygroscopic and kills all microorganisms by dehydrating them.
 - Honey exerts osmotic pressure on microorganism cells which causes transport of water out of microorganism cells through osmosis.
- Specifically, honey's high sugar content, it's lack of moisture, its low pH, and because it contains hydrogen peroxide are what makes it **an inhospitable environment for microorganisms** and why no matter its age, honey will never go bad and is always safe to eat.

Definitions:

Raw Honey

Raw honey is defined as a pure, natural product that bees produce from plants and flowers. It does not require any type of processing to be safely consumed. Raw honey can be identified as Liquid, Creamed, Comb, or Liquid with Honeycomb Chunks, and is always 100% honey *without* any additional ingredients.

Processed and/or Infused Honey

Processed and/or infused honey is defined as a product that contains honey <u>and</u> additional ingredients including but not limited to, vegetables, fruits, herbs, spices, and nuts. It is prepared in a manner that requires the honey to be altered in some way. Processed and/or infused honey can be identified as any product that contains honey <u>and</u> additional ingredient(s).

1) Prepare the Honey Harvesting Space

- Maintain a pure, clean product
- Harvest honey in a clean space
 - O Clean = location where nothing can contaminate/get into the honey
- Clean all harvesting equipment before using them with hot water
- Use honey-dedicated equipment, (buckets, jars, etc.)
- Use food-grade equipment, i.e. buckets/jars
- Wash hands frequently and keep hands clean
- Wear a hat
- Keep pets out of the space

2) The Harvesting Process

- All equipment can be purchased from beekeeping supply companies
- Must be done in an insect-proof environment (Indoors)
- Wash hands frequently and keep hands clean
- Scrape wax cappings to expose the honey with specific tool, i.e. capping knife, scratcher, etc.
- Extractor = stainless steel or food grade plastic
- Strain honey to remove any wax/bee debris
- Store honey in food-grade 5 gallon buckets with air tight lids

3) Honey Bottling Process

- Honey poured from 5 gallon bucket into a bottling tank
- Bottles should be specifically for honey, and can be purchased from beekeeping supply companies
- Fill bottles and cap with air-tight lids
- Put label on, which should include:
 - o The word "honey" must be visible on the label
 - o The net weight, both in pounds/ounces and in metric weight (grams)
 - Your contact information
 - Your location (City & State)

4) Clean-Up

- Honey comes off easily with hot water
- Rinse larger equipment, like extractors and uncapping tanks, thoroughly with hot water
- Smaller items, like buckets, uncapping forks, and hot knives, can be washed with soapy water then rinsed clean with hot water
- Surfaces sticky with honey wiped with warm wet cloths