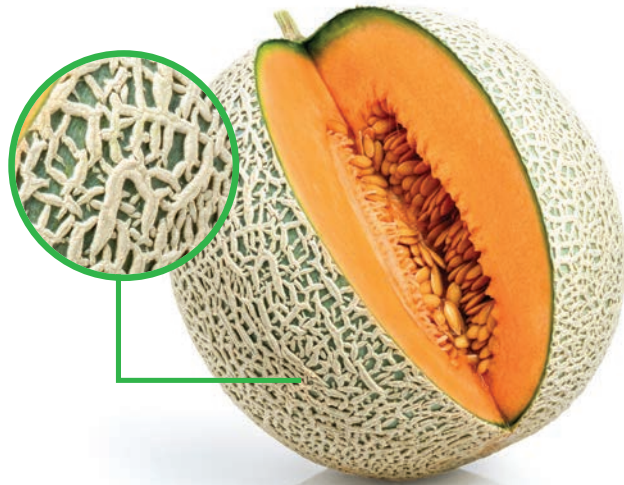


## Background

Food borne illness attributed to fresh produce is increasing internationally. Melons and in particular netted melons have some characteristics that can increase the potential risk of food borne illness. High profile international outbreaks of Listeria and Salmonella linked to netted melons have resulted in serious illnesses and death.

The underlying reasons for increased risks with netted melons include the high sugar and low acid levels in the flesh, the rough netted skin surface in which pathogens can lodge and the potential for contamination entering through the stem scar.

Pathogens can enter the harvested melon through the stem scar, especially if there is a significant temperature difference between the melon flesh and any wash water used in either a dump tank or spray wash system.



Cracks and punctures to the melon skin are also potential pathogen entry points for both netted and smooth skinned melons. In addition, production and post-harvest management methods may increase the risks associated with melons.

## Closing Comments

Melons have been linked to major food borne illness outbreaks internationally. Growers and packers are advised to review hygiene and handling practices to minimise those potential risks associated with netted melons.

## Further Sources of Information

**Melon Food Safety a Best Practice Guide for Rock melons and Specialty melons: First edition (2019) NSW DPI (Australia)** [https://www.dpi.nsw.gov.au/\\_data/assets/pdf\\_file/0020/1179011/Melon-food-safety-best-practice-guide.pdf](https://www.dpi.nsw.gov.au/_data/assets/pdf_file/0020/1179011/Melon-food-safety-best-practice-guide.pdf)

**Commodity Specific Food Safety Guidelines for the Melon Supply Chain: March 29, 2013 Version 1.1 (United States)** <https://www.fda.gov/files/food/published/Commodity-Specific-Food-Safety-Guidelines-for-Cantaloupes-and-Netted-Melons-%28PDF%29.pdf>

**Melon food safety toolbox. Practical resources for implementing best practice. First edition (2019) NSW DPI (Australia)** <https://fpsc-anz.com/wp-content/uploads/2019/09/Melon-food-safety-toolbox.pdf>

## Questions or Queries

### Contact Vegetables NZ

Name Antony Heywood

Phone 04 494 9987

Email [Antony.heywood@hortnz.co.nz](mailto:Antony.heywood@hortnz.co.nz)

# Melon Food Safety Production and Packing Advisory Code of Practice

VERSION 1.0 OCTOBER 2021





## Production and Harvesting Practices for Melons

- Field grown netted melons are preferably grown on polythene
- Do not harvest if the crop is wet and muddy.
- Reject any fruit with signs of animal or bird damage including bird droppings.
- Reject any fruit with cracking, bruising or damage where pathogens can enter the fruit.
- Minimise stem end damage as much as possible.
- If melons are being brushed or wiped clean during field packing, Use clean brushes or cloths, disposable or washable. A disposal or re-washing programme for the cleaning materials is needed to reduce risks.
- Rinse harvesting tools and equipment regularly. Ideally use an approved food grade cleaner/sanitiser to clean the equipment.

## Packhouse Management and Controls for Melons

- GAP and NPI practices should be followed.
- The packhouse cleaning programme needs to include a pre-season and post-season deep clean.
- Clean plant and equipment thoroughly before, during and after the harvest season. This includes picking bins and coolstores including the walls and floors.
- Discourage bird access.
- Clean and sanitise the packhouse and all fruit contact surfaces daily. Pay particular attention to pack line brushes and belts and repairs or repair patches to the conveyor belt.
- Pack line brushes should be removable and be cleaned and sanitised regularly.
- A weekly deep clean of the pack line and packhouse should be scheduled and undertaken.

## Netted Melons Washed and Graded in a Packhouse

- Melons should be pre-cooled between harvest and washing. Ideally the temperature of the water should be 5°C higher than the melon flesh temperature. This reduces the risk of water entering the melon via osmosis. This is especially important if wet dumping is used.
- Melon wash water must be to drinking water standard (potable).
- Dry dumping is a preferred option to wet dumping from a food safety risk perspective.
- Use potable fresh water for wet brushing and include a food grade sanitiser.
- If dump tanks are used, the water needs to be regularly monitored (and preferably automatically) for sanitiser levels, pH and turbidity. Sanitiser levels need to be maintained especially if there are high soil loads coming in from the field.
- Dump tank water needs to be replaced on a scheduled and regular basis and the dump tank cleaned thoroughly.
- Commonly available approved food grade sanitisers such as Chlorine, Peracetic acid, (and Ozone) should be used.

