



Proper Manual Sampling of Whole Cantaloupe Using a MicroTally® Mitt Sampler



Introduction

The **MicroTally® Mitt Sampler** (Catalog Number: MT-M100) is a manual sampling device (MSD) and specifically designed for direct surface sampling of food matrices, including beef, poultry, fruits, and produce. After sample collection, the Mitt Sampler facilitates downstream microbiological analysis for pathogen detection and indicator testing, providing an efficient alternative to direct food product testing. Accurate and reliable sampling results depend on strict adherence to standard manual sampling protocols. This user manual focuses on the proper sampling procedures for whole cantaloupe using a MicroTally® Mitt Sampler. For additional instructions and applications for the Mitt Sampler, please contact FREMONTA Corp or visit www.MicroTally.com. Training videos can also be found on FREMONTA's YouTube channel.

Important Notices

- The MicroTally® Mitt Sampler is sterile and packaged in plastic overwrap. After sampling, place the used sampler in the separately provided sterile sample bag.
- Use one MicroTally® Mitt Sampler on a single hand for sampling.
- The MicroTally® Mitt Sampler needs to be pre-moistened with a compatible buffer or water before sampling the surface of melons.
- Apply a vigorous, aggressive scrubbing technique to ensure effective sampling of the melons.
- Perform sampling over the entire surface of the melon or of each melon for aggregated samples. For a single melon sample for at least 30 seconds, dedicating at least 15 seconds to each side of the Mitt. If sampling more melons with the same sampler, ensure that the entire surface of each melon is sampled.
- A common mistake is insufficient scrubbing pressure during sample collection. Ensure the scrubbing is firm and thorough to effectively transfer organisms from the melon onto the cloth sampler.

Preparation

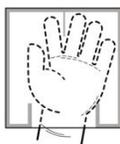
Prior to entering the production floor, prepare the Mitt Sampler as follows:



1. Put on gloves and sanitize them properly. Also, sanitize the exterior of the sampler overwrap.
2. In a designated sample preparation area, remove the perforated top from the MicroTally® Mitt sample bag, open the bag, and place it on a sanitized surface.
3. Tear open the Mitt overwrap and aseptically transfer the Mitt Sampler into the sample bag.
4. Moisten the Mitt Sampler with 25 mL of sterile water, phosphate-buffered saline (PBS), buffered peptone water (BPW), or an equivalent solution. Gently massage the bag to ensure the Mitt is evenly moistened.
5. Fold the bag closed and secure it using the side tabs.
6. This procedure may be completed in advance for all Mitt Samplers needed for the day. Prepared samples should be stored under refrigeration until use.



Sampling Procedure



1. Assemble the appropriate sampling supplies.
2. Select 1, 5 or 10 melons for sampling depending on the testing objective. Place them on a sanitized surface or into a sanitized container or bin.
3. Wear plastic sleeves and gloves. Sanitize gloves appropriately using an alcohol-based sanitizer **without** quaternary ammonium compounds (e.g., Alpet D2 **Quat-Free**; Best Sanitizers, Penn Valley, CA).



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4. Ensure there is no excess sanitizer on the gloves before handling the Mitt Sampler.
5. Take the Mitt Sampler from the sample bag and place it on the gloved hand. Avoid touching anything with the sampler except for the melon or melons to be sampled.
6. **Sampling details:**
 - **Single Cantaloupe:** Vigorously scrub the entire surface of the melon using both sides of the Mitt Sampler—15 seconds per side—for a total of at least 30 seconds.
 - **Group of Five Cantaloupes:** Thoroughly scrub the entire surface of all five melons using one side of the Mitt. Then, turn the Mitt over and repeat the process on all five melons. Total sampling time should be at least one minute.
 - **Group of Ten Cantaloupes:** Scrub the entire surface of the first five melons using one side of the Mitt. Then, turn the Mitt over and scrub the remaining five melons. Total sampling time should be at least two minutes.
7. After collecting the sample, fold the MicroTally® Mitt Sampler into quarters, then fold it in half once more. Place the folded Mitt back into the sample bag, positioning it as close to the bottom of the bag as possible. Securely close the bag using the sealing strip at the top and fold it over. Label the bag according to company procedures.
8. Repeat the above steps for each additional sampling target. Use a new MicroTally® Mitt Sampler for each target to prevent cross-contamination. Be sure to change gloves and re-sanitize sleeves after each sampling event to maintain hygiene and avoid contamination.
9. Melons may be returned to the lot or to production after sampling.
10. Send the collected samples to the laboratory in accordance with standard company procedures.

Sample Testing

1. Weigh the sample bag upon arrival at the lab [This may be used as a verification procedure. A sample weight baseline can be set up so any employees collecting samples with weights consistently below baseline would receive additional training].
2. For presence/absence pathogen testing, enrich the MicroTally® Mitt sampler by adding 200 mL of the appropriate nutrient broth. Stomach (homogenize) the sample for at least 30 seconds, ensuring the Mitt sampler is fully submerged at the bottom of the bag.
3. For indicator enumeration and pathogen testing, remove aliquots as needed. Incubate the remaining sample following the standard procedures of your pathogen detection test platform, including recommended incubation times and temperatures.
4. For microbial enumeration-only testing, you may either extract microorganisms using 100 mL and homogenize thoroughly or follow your laboratory's established standard procedures.

Technical Support

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