

Problem: Food Waste

The pandemic has brought a new mindset when it comes to food consumption at home. Users may not know the ideal conditions to store their produce. Wasting food can casue grave environmental and economic consequences. Busy schedules and lack of food management practices in the home can lead to a **neglect and increase of food waste**.

Mittee provides a simple and controlled way of **reducing produce waste by increasing longevity**.

“An estimated 43 percent of food waste is due to in-home practices — as opposed to waste that happens in restaurants, grocery stores and on the farm — making individuals the biggest contributors.”

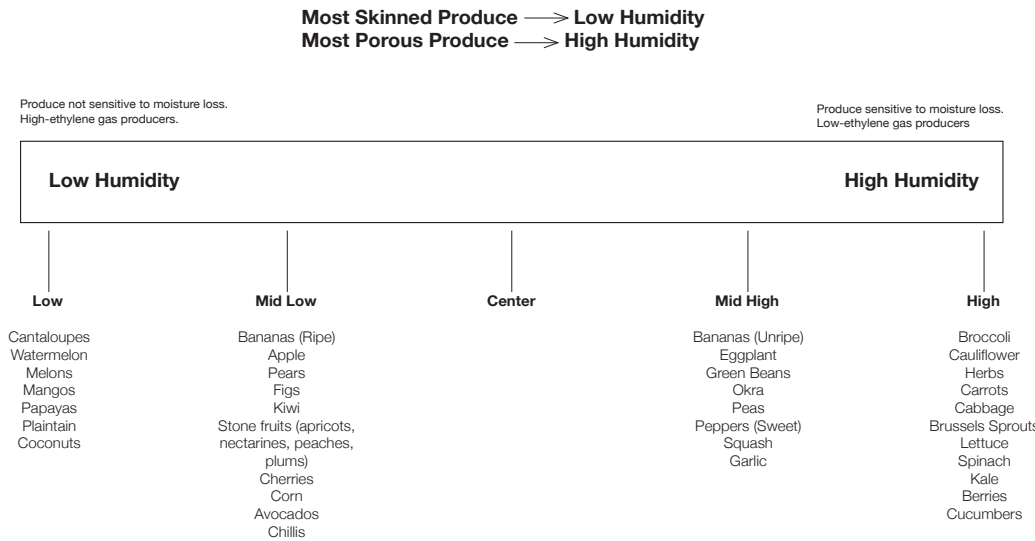
“Survey participants thought they would eat 94 percent of their vegetables but consumed just 44 percent. They projected they’d eat about 71 percent of the fruit and 84 percent of the dairy, but finished off just 40 percent and 42 percent, respectively.”

O’Neill, M. (2019, August 29). Food-Waste Study Reveals Much Fridge Food ‘Goes There to Die.’
 SciTechDaily. <https://scitechdaily.com/food-waste-study-reveals-much-fridge-food-goes-there-to-die/>

Ethylene gas control and air flow control are essential for the longevity for produce.

This is especially important since fridges tend to dry produce.

This chart shows the ideal conditions different kinds of produce should be kept in.



Households of Users Observed



Terra Cotta to Create Moisture

Terra cotta pots have been used for centuries in India as natural AC in hot places by spreading a cool mist in the environment the pot is in. The mist can also be created by using warm water in colder conditions. By using water between 70-90 degrees with the terra cotta tiles in Mittee, a small amount of mist is created in order help the storage conditions of the produce. This should help increase lifespan by

Market

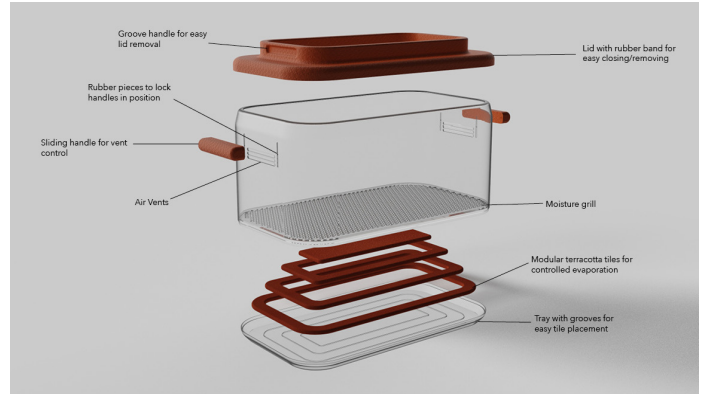
The market has multiple products that claim to increase longevity. But, all the existing products are solving this issue through simple air release, which isn’t effective most of the time.

Mittee मिट्टी

Sainath Krishnamurthy | Solution Proposal | INDS 3501 | January-March 2021
A produce container which provides a simple and controlled way of reducing produce waste by increasing longevity.



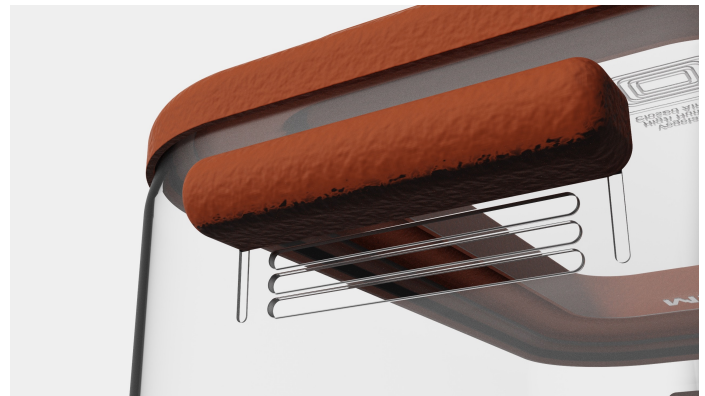
The texture and color ties into the cultural and material inspiration.



Modular terra cotta tiles on the base of the container allow for precise mist control.



The graphic on the lid informs user on the specific amount of tiles needed for certain kinds of produce.



The handles on the sides can slide to close or open air vents.



Having the graphics on the lid makes the interaction of the user with Mittee easier.



The container is designed for storage in most standard fridge sizes.