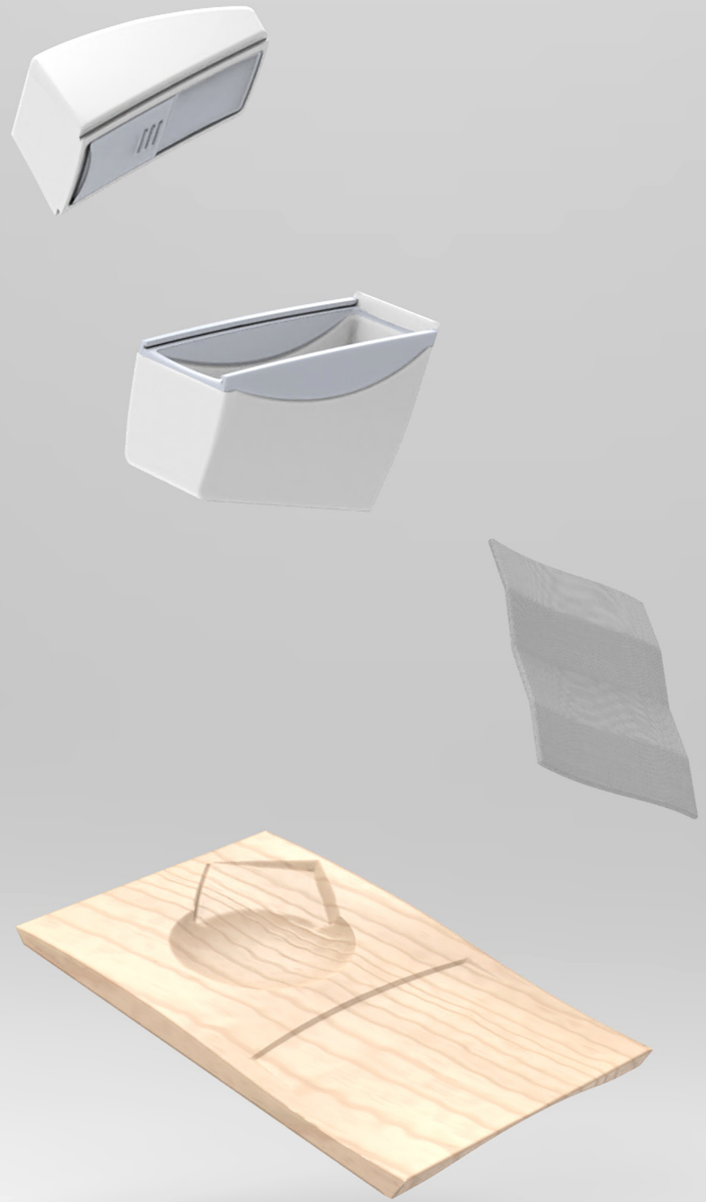


on-the-go
food experience

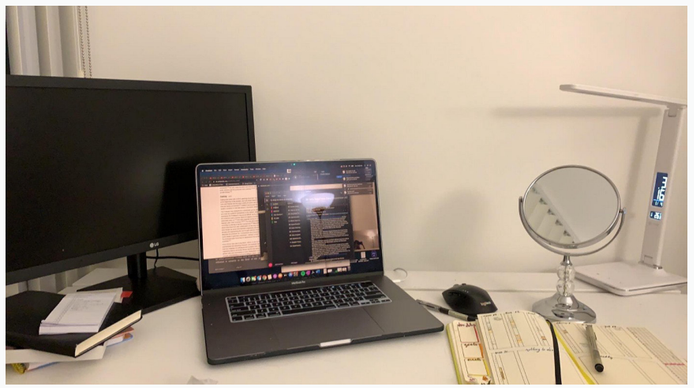
Improving snacking for students through a tactile eating experience.

Product Design Studio III Fall 2020
Janet Peng

Research + Key Insights

I researched the problem space by conducting interviews and task analyses on students attending school and work remotely. Through these research methods, I discovered these concerns and habits:

- Students enjoyed eating meals and snacks, while attending classes that did not require their cameras to be on
- They had concerns about losing focus when eating or having to get up to get something while working
- Synchronous classes collided with their eating schedule
- Asynchronous classes made eating less of a routine so eating could happen sporadically
- They lacked separation between work, eating, and entertainment spaces in their small apartment



Persona: Chris

22 years old

Remote student and research assistant living in a small apartment

Eat meals efficiently, snacks while working

Chris is a young adult finishing up their final years at university through online classes while participating in part-time remote work. Spending most of their time in their small apartment, **organization, cleanliness, and compactness** is important. Chris uses multiple desks to help organize their belongings. **They worry they will lack separation between the tasks.**

Chris loves efficiency and staying focused. As a busy student, they prepare and consume meals quickly so that they can go on to do other work or activities. Chris snacks while they work or attend lecture. **They worry about creating spills and crumbs, and having to get up during class to grab items.**

Pain Points

- Focused on avoiding messes
- Participating in activities remotely makes them miss the structure their old day-to-day life used to provide
- With their small kitchen, food preparation and storage is often a challenge—they get creative with their solutions

Project Criteria

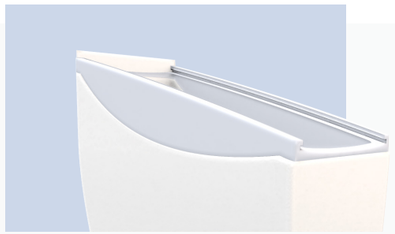
1. Creates a distinct sense of space, elevates the experience beyond just a bowl
2. Efficient use of space while on the desk, in use, in transport, and in storage
3. Easy to maintain: easy to fill, use, and clean
4. Limits crumbs and messes
5. Enhances main activity or work—does not act as a distraction

Function + Features

Granola dispenser

Material: plastic

Shaped to scoop granola out of a bag. Friction fit lid includes sliding door to spill granola onto the tray. Lid contains grips for thumb and a slight indent to help remove lid for cleaning and refilling.



Blueberry container

Material: plastic, silicon

Silicon rim flexes when reaching in to grab blueberries and different material temperatures indicate to user where the opening is without looking.

Napkin

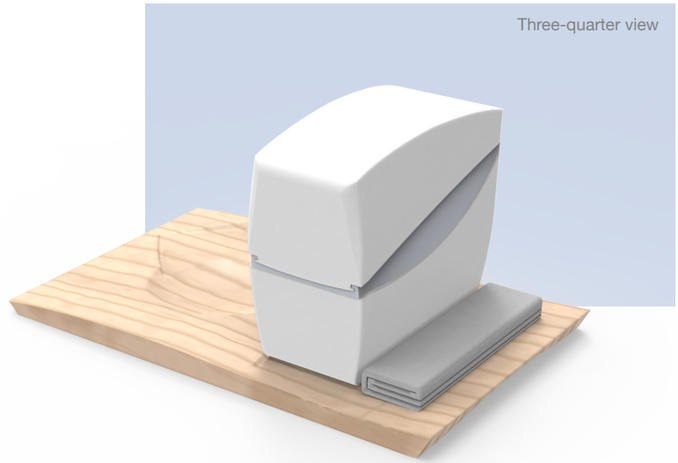
Material: cloth

Fits width of container. Used to dry container and hands while eating.

Eating tray

Material: wood

Tray used to transport food to desk and hold containers. Indentations indicate where to place both parts of the container, Includes a domed concavity at the mouth of the granola dispenser which acts as a bowl and prevent granola from spilling off the tray. Having the granola out on a surface helps the user touch the food to locate it. Cut on the right side of the tray acts as a gripping area when transporting.



Style

This form is inspired by Brita water pitchers since they're commonly used by the persona to drink water while in class. This form is also inspired by the simple geometries found in the MacBook Pro. These forms contain many slight curves giving simple rectilinear geometries slight details, elegance, and movement.

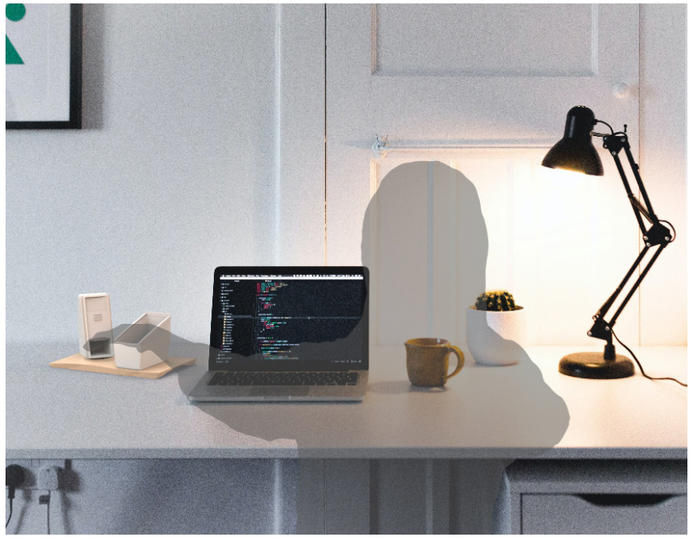
Top

Back

Side

Front

Context + Experience



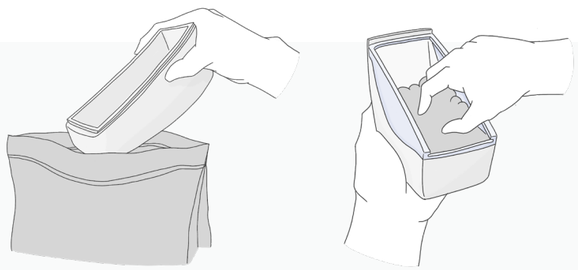
In use on desk

Stored in kitchen

Filled with granola and blueberries

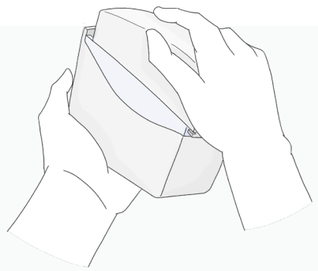
This product can be used during work or school. It allows the user to snack without paying full attention by relying on touching the food and container to understand what they are reaching for. The tray can be carried with one hand so that the user may carry a cup or bottle of water with them as well.

The product is designed to take up as little space as possible and stores on its side. It is designed to accommodate granola and blueberries



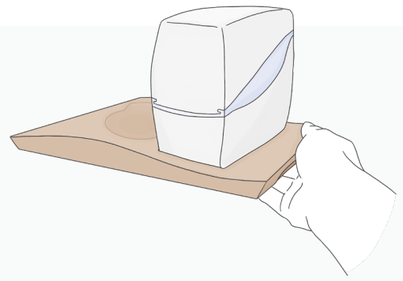
1. **Fill containers**

   Top container scoops granola, nuts, cereal straight from a bag. Small fruit can be stored and washed in the bottom container.



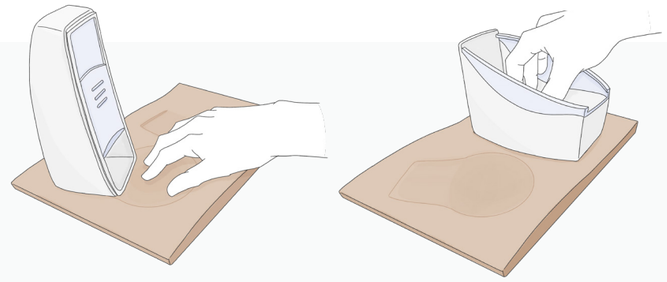
2. **Snap containers together**

   Lid for top container snaps in place. Top and bottom slide together to store when filled or to transport.



3. **Transport**

   Assembled containers fit into an indentation on the tray to carry around.



4. **Eat**

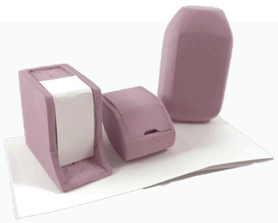
   At the working location, the containers slide apart and are placed on separate indentations on the tray. Food is consumed throughout the process of working.

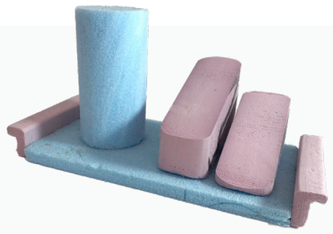
Process

Physical models

Volumetric studies

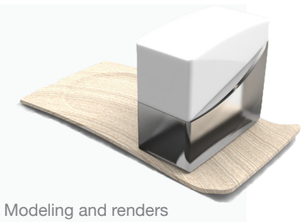
Model making and rapid prototyping





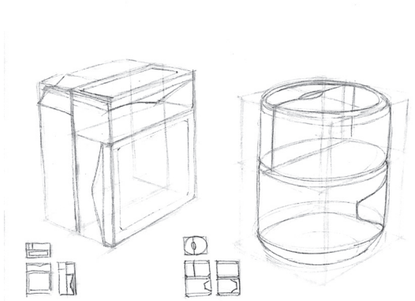
Functional model

Form model

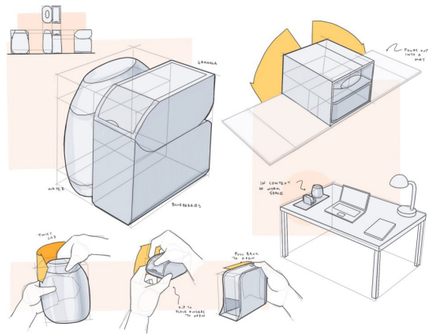


Modeling and renders

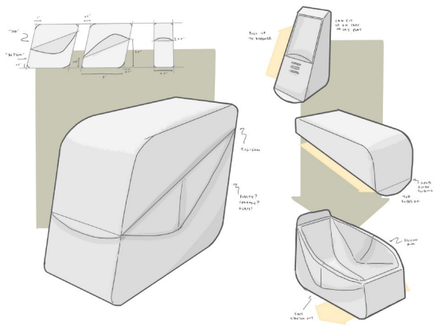
Sketches

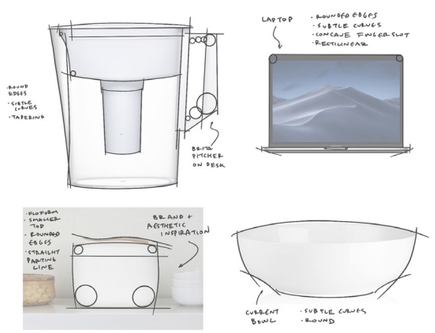


Tracing paper studies

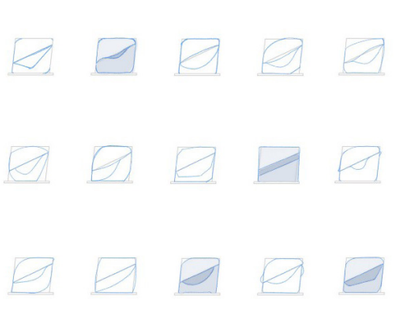


Interaction ideation and exploration





Style inspiration



Styling exploration

Phase 1: User Research + Analysis

I conducted task analyses and interviews with students to better understand their current on-the-go meal experiences. This helped me locate a problem space around remote students and how snacking could become a more organized, designed, and enjoyable part of consuming food throughout the day during remote activities. These research methods helped me create a persona which I used to inform design decisions throughout the project such as food choice, aesthetic preferences, and context.

Phase 2: Conceptualization

Using the foods my persona enjoyed snacking on, I created volumetric studies to play with how different pieces of the food could be composed relative to one another. These studies were then translated into rough designs through rapid model making and overlay sketching. Iterating on ideas using model making and sketching to help guide my exploration, I settled on a concept for my interactions and general experience of the product. I then created a functioning prototype out of bristol paper and foam core to present the idea.

Phase 3: Development + Styling

From the concept, I returned to my persona to analyze their aesthetic preferences as well as the current objects that would be involved in the context of this snacking experience. Drawing inspiration from products the persona enjoyed and context items, I iterated on different forms my product could take on. I settled on an overall form for the product and then created a form model out of grey foam to present the idea.

Phase 4: 2D/3D/4D Refinement

With the general form decided, I modeled the body in SolidWorks and began refining some of the smaller features and details of the product such as the rim's sliding mechanism and dips and extrusions on the lid to make it more user friendly. Using KeyShot and sketching, I explored materials and colors that fit my persona's aesthetic preferences and made sense with the interactions of the product.