Cool Modüle is a refrigerator concept aimed to improve nutritional habits by challenging the behaviors of high capacity acquisition and consumption of processed food. The concept is functionally supported by improved and convenient physical and visual accessibility to reduce food waste and encourage the consumption of fresh food. The appearance and aesthetics of the Cool Modüle are developed to promote an improved interaction and awareness of how we as consumers select, store, and serve food.
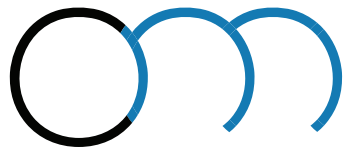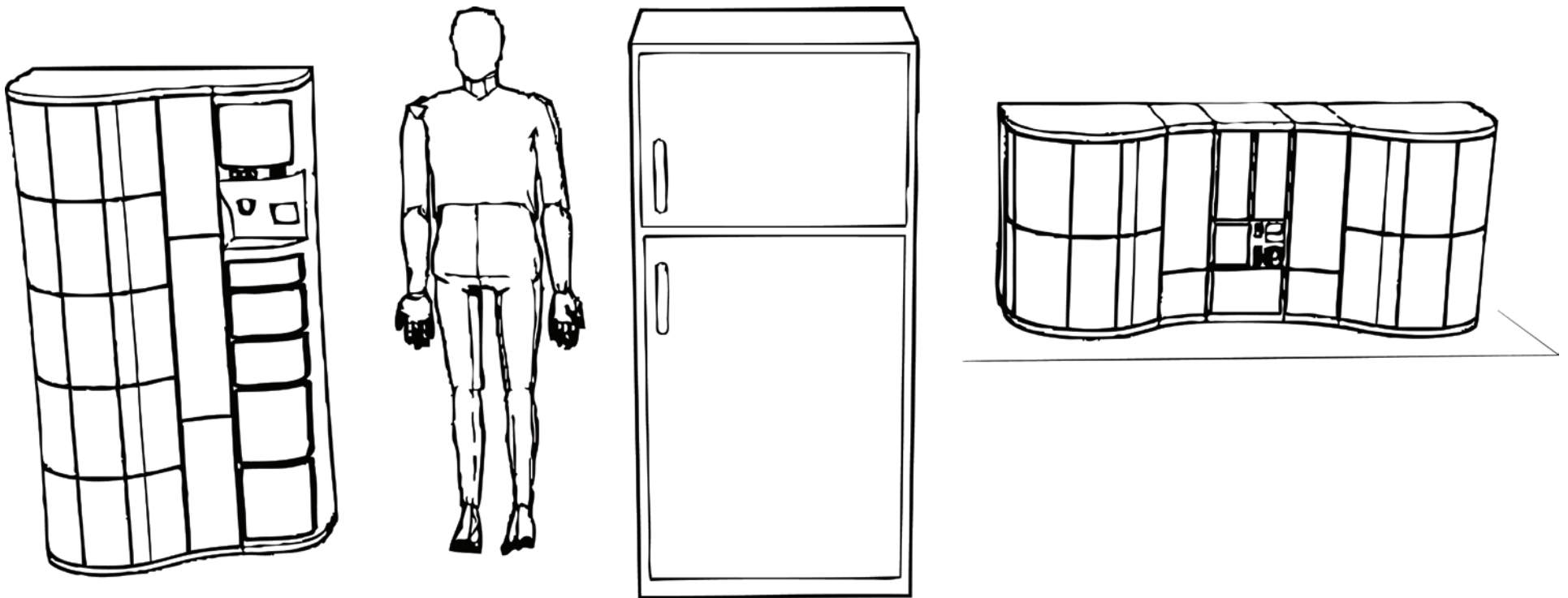

COOL MODÜLE

THE PROBLEM

Existing refrigerators offer high capacity storage in a hidden and covert way, supporting the issues of obesity, overconsumption, and poor nutrition. Food is not visible, accessible, or organized, contributing to alarming statistics regarding food waste. Refrigerators currently serve as middle men between grocer and consumer and are likely to support a diet that is best kept hidden.

WORLD: 1/3 of food produced for human consumption is lost.
In industrialized nations much of this loss occurs at the retail and consumer level, opposed to postharvest and processing in developing nations.[1]

U.S.: 40% of food goes uneaten (up 50% since the 1970's) costing $165 billion per year.[2]

cool
modüle

This alternative configuration accommodates the elderly and disabled. It eliminates bending down to reach bottom shelves and is wheelchair accessible.

In addition to providing filtered water and ice, the Cool Modüle features a juicer for fruits and vegetables. This alternative method of consumption encourages users, and especially children, to maintain a healthy and balanced diet by providing an opportunity to supplement meals with fresh, vitamin rich juices.

ROTARY SHELVING

This feature offers the user a chance to see their food before opening the door. With a viewing window and the ability to turn each shelf, the user is equipped to make use of their food before it spoils and never has to deal with hard to reach items.

The shelves have the option of being removed so users can take out a whole tray of food when doing prep work or having company over.
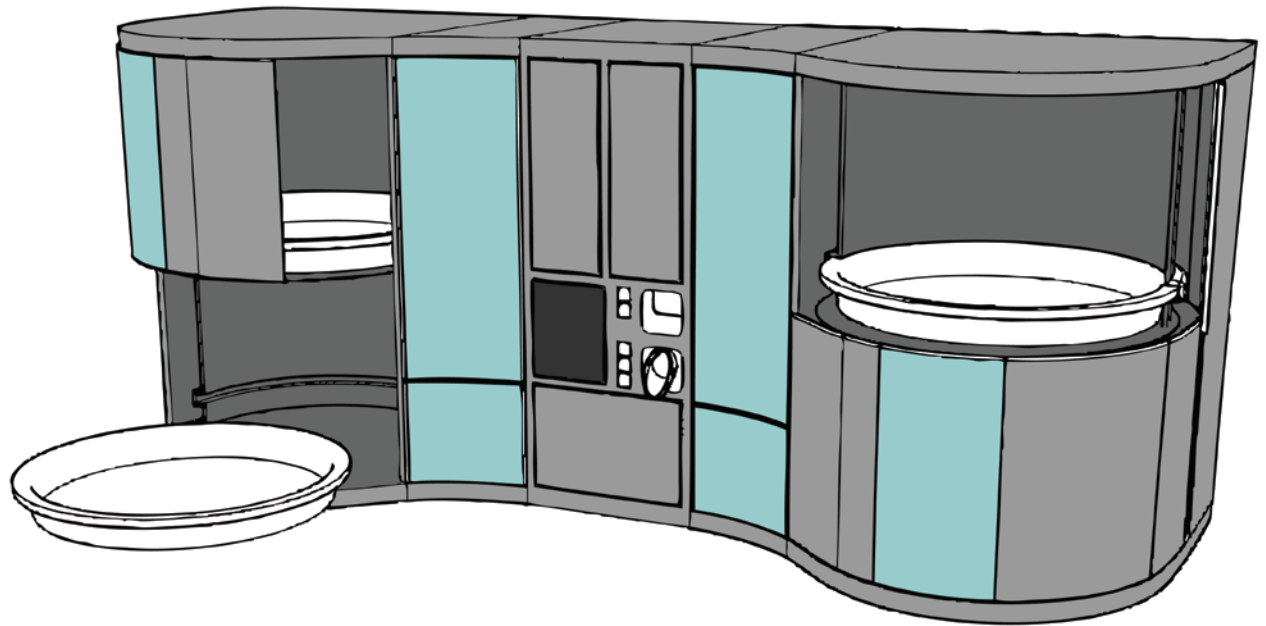
GARDEN TRAY

This optional use of the rotary shelves as hydroponic grow systems promotes an increase in the consumption of fruits and vegetables by providing access to the freshest produce possible. The encouragement of growing some of your own food acts as a tool for teaching kids to be aware of the processes involved in the production and distribution of the items they consume.
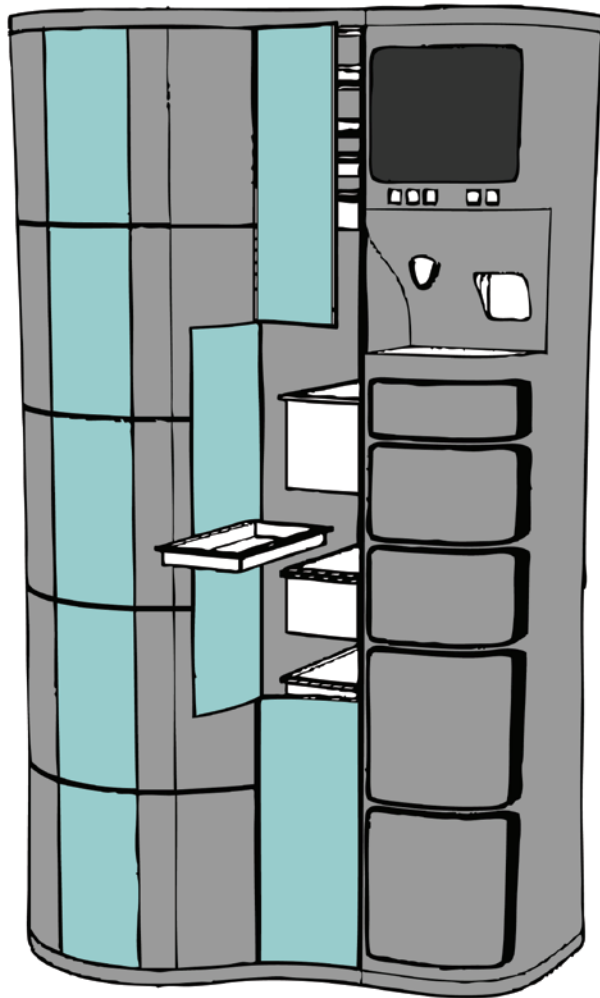
DISHES

Store, heat, and serve your food in the same dish. The center section is recommended for the storage of leftovers, eliminating the need for Tupperware, plastic wrap, tin foil, and plastic bags. Dishes and lids slide into the slotted walls, accommodating the storage of a wide range of food items in a rearrangeable system.

COOLER DRAWERS

Integrated storage drawers, primarily for frozen foods, allow the user the option to remove and carry the drawers as coolers.

Temperature & Humidity Control

Search Fridge	My Fridge	+ New Item

On Off

Standard
Freezer
Fruits
Vegetables
Dairy
Garden
Custom
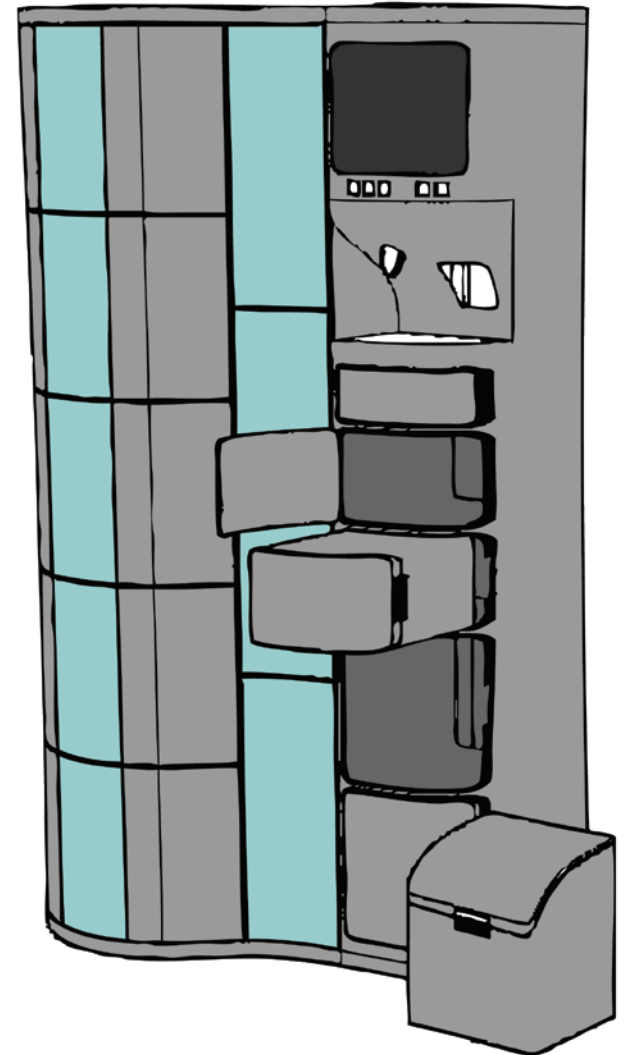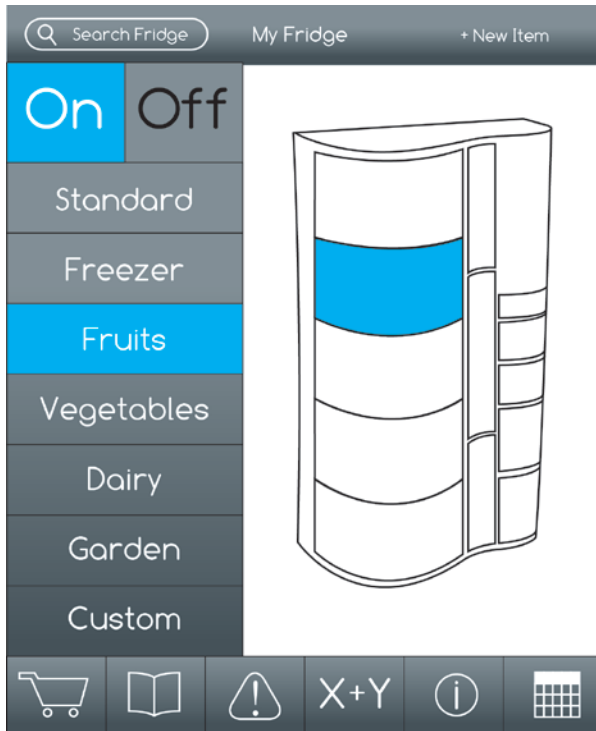
Temperature & Humidity Control

Each unit of the fridge has an option for changing temperature and humidity, allowing the consumer to turn off sections if they are going out of town or want a section of freezer space to double as a refrigerator storage unit. In addition, this option encourages the refrigeration of some leftovers and the freezing of others, optimizing the chance that they will be eaten before going bad.

Search Fridge	My Fridge	+ New Item

Items	Expires
2% Milk	TODAY
Eggs	TODAY
Tomatoes	TODAY
Pasta Sauce	Tomorrow
Orange Juice	2 days
Raspberries	2 days
Pasta Leftover	3 days
Lettuce	3 days
Chicken	4 days
Guacamole dip	4 days

Expiration Alerts

The interface includes a food catalog updated through barcode scan or manual entry to help keep track of expiration dates. The menu bar shows notifications to alert the user when certain foods are about to go bad.

Search Fridge	My Fridge	+ New Item

Ingredients	Find Recipe
▶ Fruits	Brocolli
▶ Vegetables	Spinach
▼ Grains	Lemon
Brown Rice	Spaghetti
Couscous	
Oatmeal	
Spaghetti	
▶ Protein	
▶ Dairy	
▶ Oils	

Recipe Finder

The catalog can be used to select ingredients to aid the user in planning a sufficient meal. It includes nutritional facts for each ingredient, encouraging smarter food choices and an increase in home cooking.