

User Persona: Jessica Moore

"I'd rather find recipes that I could cook in one pot so there'd be no extra dish clean up."

Age: 39
Education: master's degree
Location: Cedar Park, TX
Occupation: Educ. Diagnostician
Family:

Home Cooked Meals:
Personally Cooks:
Food App Use:

Personality:
- Loyal
- Dedicated
- Nurturing
- Playful
- Disorganized
- Somewhat introverted

Values:
- Family
- Dependability
- Efficiency
- Respect
- Inclusivity
- Flexibility
- Growth
- Honesty
- Fairness

Weekly Meal Planning Hrs:
11 hrs ave, ~32.3% wkly free time (waking, non-work hours)

Definitive Habits:
- Parent with children at home, relies on leftovers for lunches
- Consolidates shopping and meal prepping to mostly once a week, may eat out as needed to pivot
- Prefers to grocery pick-up to save time
- Seeks mostly quick, but affordable and food sensitive options

What *is* Food?
- It's time and money
- It's fuel

Meal Planning Resources:
Chalkboard, notepad, smart phone photo album, cookbooks, Pinterest, Google searches, grocery store order apps, restaurant apps, food delivery apps, and text messages

Grocery Store Preference Rationale:
- A particular grocery store chain due to brand loyalty for the way they give back to her community, family-friendly meal kits, and quick and easy to use order pick-up app
- Geographic proximity along her typical daily route (work, daycare, and home)
- Grocery order pick-up curbside option and home delivery option available

Goals:
- Saving time and mental load, recovering time to just exist
- Quick preparation and cooking time recipe options, which work around kids events
- Shopping for staples which have flexible ingredients for pivoting for use in different recipes when too tired to use by planned date or for planned recipe
- Keeping the family's schedule and meal planning coordination for the week
- Freedom to move on routes for kids activities and between home, daycare, and work.
- Kid friendly options for lunches and snacks
- Recipes accommodating family members' food restrictions, preferences, and diets
- Stocking up when finding meal deals and 2-for-1 deals



Jessica in her natural habitat on the road and waiting for her plan to come together.

Skills and Capabilities:

- Tech savy, phone is full of various apps, including food-related apps
- Multi-tasker
- Family time-keeper
- Forgetful of remaining ingredients in pantry, fridge, or freezer
- Somewhat spatial object thinking challenged
- Online shopper over-spender

Relationships Affecting Meal Planning:

- Husband and children dietary restrictions and preferences
- Coordinating communication of order-pick up and ingredient needs with husband
- Kids' activities needing drop-offs, pick-ups, and event attendance
- Planning extra special meals for holidays

User Persona: Jessica Moore

Frustrations:

- Not enough time to just exist
- Having to reinvent the wheel each week as the grocery store app doesn't remember or offer list of staples she regularly orders to offer to pre-load her cart
- Grocery store app doesn't have a place to save her recipes that these ingredients was intended for
- Lack of consolidation of different single functionality apps and having to redundantly navigate between different apps on one phone screen is tiring with more to remember
- Lack of shared family schedule, meal plan, and shopping list in one-place to allow family to make updates together
- Knowing healthy in-screen alternatives to recipe ingredients for recipes to accommodate food restrictions, aversions, preferences, and diets of her family
- Not knowing what new or novel things are available in-store (e.g., end caps) by doing curbside pick-up.
- Boredom and need to mix up with typical recipe rotation
- Regretting not knowing what she has already in her pantry, fridge, or freezer, and potentially ordering more and over-spending on unnecessary food and causing food waste
- Misjudging the sizes of food from online pictures
- Overwhelm with app ads in the way of ingredient list

Problem Statement:

Jessica is a time-starved full-time working mom of three with full schedules and diverse dietary needs. She wants to reclaim some free time and mental load in meal planning and preparation activities, which already take a third of her free time, just to find time to "exist."

Hypothesis Statement:

If Jessica can efficiently find ways to meal plan around different scheduling and dietary demands, then she can free up time and mental load to find time to exist.



User Persona: Robert Wilson

"My food armory gives me security in the face of power outages, sharknado, or whatever."

Age: 42
Education: master's degree
Location: Ft. Lauderdale, FL
Occupation: Archaeologist
Family:

Home Cooked Meals:
Personally Cooks:
Food App Use:

Definitive Habits:
- Single person with a tight budget
- Minimalist shopping and same day food prep in which he needs something, but bulks up on food on mark-down days
- Prefers to in-store shopping for best deals, choosing quality produce, and social opportunities
- Seeks affordable and food sensitive options
- Meal planning complicated by health reasons and available cooking options and recipes when travelling for work
- Uses wide variety of apps, but food-related apps serve for grocery store coupon and rebate redemption purposes

What *is* Food?
- It's survival
- It's security
- It's nutrition

Meal Planning Resources: Notepad, coupons, YouTube, grocery store app, restaurant pick-up app, recipe search apps, cooking websites, Instagram, TikTok, and Pinterest

Personality:
- Gregarious
- Curious
- Practical
- Organized
- Detail-oriented
- Ambivert
- Agreeable
- Considerate

Values:
- Truth
- Integrity
- Autonomy
- Fairness
- Self-sufficiency
- Knowledge
- Self-control & health
- Efficiency

Weekly Meal Planning Hrs:
6.8 hrs ave, ~20% wkly free time (waking, non-work hours)

Grocery Store Preference Rationale:
- Affordability
- Stores which carry his specialty items and staples when available with reduced prices, special stickers, clearance items, and rebates or coupons are available.
- What is accessible around work or on a work trip, on occasion
- Has had to rely on food bank or on his own fishing or garden

Goals:
- Staying within budget
- Finding recipes and ingredients which meet dietary restriction needs
- Finding recipes with minimal ingredients and without much hassle to prepare and fits typical meal rotation
- Thrill of the hunt for the best value and bargain seeker, yet health food conscious, to stock up on because of future precarity
- Knowing what ingredients are in his pantry
- Finding an opportunity to help others, feel seen, and a chance to socialize with strangers at the store
- Finding recipes which have ingredients available locally to his location and options he can enjoy while on the road



Robert in his natural habitat, assessing the day's needs with the stock of his "food armament."

Skills and Capabilities:

- Tech savy, phone is full of various apps
- Neurodiverse, good spatial thinker affecting judgement of online products, fit of products in vehicle, pantry capacity, and remembering how much and what is still in-stock
- Prefers demonstration videos for cooking

Relationships Affecting Meal Planning:

- Work colleagues' impromptu lunch invitations
- Work trips sending him out of town
- Game nights
- Date nights

User Persona: Robert Wilson

Frustrations:

- Lack of one-stop-shop for his meal planning process and having to resort to so many single functionality apps
- Apps and recipe websites which don't think about
- limitations of what is locally available for ingredients
- food substitution options for dietary purposes
- recipe options when on the road or staying in a hotel
- Boredom with meal rotation, but overwhelm in terms of the learning curve needed to adopt something new into meal rotation
- Finding the best deals when they're available for his sta-

Scenario:

As a new career professional who invests a lot of time into building my craft and who travels a lot for work with a tight budget and special dietary needs, I want to be able to simply find recipes I can make without access to a full kitchen, without breaking the bank, compromising my health, and without out sacrificing precious time with a learning curve from adding something new to my meal routine. This way, I can feel secure in having what and when I need to eat, and can devote my mental energy to higher pursuits.

Problem Statement:

Robert is a new career professional who spends significant time honing his craft and frequently travels for work. With a tight budget and special dietary needs, he needs a straightforward way to find recipes he can make without access to a full kitchen—while staying within budget, maintaining his health, and minimizing the time spent adapting to new meal routines. This will allow him to feel secure about his meals and focus his mental energy on his professional growth and higher pursuits.

Hypothesis Statement:

If Robert can find affordable recipes that align with his available kitchen equipment and dietary needs, without requiring a steep learning curve, he will feel prepared and confident about his meals, allowing him to dedicate more mental energy to his professional and personal growth.



User Persona: Lisa Andersen

"I like to know where my food comes from, go for what looks good, and what's good for everyone."

Age: 60
Education: bachelor's degree
Location: Missoula, MT
Occupation: Nurse
Family:

Home Cooked Meals:
Personally Cooks:
Food App Use:

Personality:
- Creative
- Workaholic
- Down-to-earth
- Risk-adverse
- Somewhat extroverted
- Nurturing

Values:
- Family
- Self-reliance
- Dependability
- Loyalty
- Courtesy
- Health
- Nurture
- Comfort
- Quality
- Justice
- Flexibility

Weekly Meal Planning Hrs:
8.3 hrs ave, ~24.4% wkly free time (waking, non-work hrs)

Definitive Habits:
- Empty nesters, usually eat small portions and twice a day
- Shops as needed, often for the current day it is needed
- Prefers to shop in-person, for quality & value consumption
- Seeks novel, aesthetically-pleasing, healthy, DYI options
- Mostly uses food-apps as a source of recipe inspiration

What *is* Food?
- It's medicine or poison.
- It's a way to bond and be remembered.
- It's freedom and self-reliance.

Meal Planning Resources:
Chalkboard, notepad, smart phone photo album, well-illustrated cookbooks, word-of-mouth recommendations, Pinterest, and YouTube

Grocery Store Preference Rationale:
- Quality/freshness and intriguing specialty items available
- Geographic proximity to her route between work and home
- Minimal Traffic exposure
- Company is kind and respectful to employees & customers

Goals:
- Creating memories with loved-ones, using sensorially pleasing and novel foods while being inclusive of every-one's food preferences.
- Using well-liked, reliable, homemade recipes everyone will love.
- Choosing recipes around seasonally ripe produce from own garden and hunted game, or using farmer's market or World Market picks as inspiration for dishes.
- Needs flexible yet reliable ingredients that can work in a variety of seasonal dishes, prepared variously, and to avoid extra store trips.
- Occasionally grocery store shop with husband or shop at the farmer's market producers just for the social experi-ence.
- Support the local community with her consumer choices.



Lisa in her natural habitat, excited to see something new while seeking to "make a feast for her family's eyes."

Skills and Capabilities:

- Expert in her profession
- Text heavy content is hard to hard to read
- Not very tech savy
- Creative in using up pantry items
- Health consciousness, awareness of hidden ingredients and what this means for family food restrictions
- Accidental over spender when in-store

Relationships Affecting Meal Planning:

- Husband dietary restrictions and preferences
- Pets health and need for healthier ingredients, even making her own homemade pet food
- Grandchildren kid-friendly foods and food restrictions
- Holidays and visits or co-operation with the neighbors

User Persona: Lisa Andersen

Frustrations:

- Cookbooks without consistent illustrations of the finished recipe or a visualized set of ingredients
- Finding reasonably small portion sizes, having adjusted as an empty-nester and limited freezer space
- Lack of accountability from stores or food delivery services for poor ingredient quality
- Fear of missing out on rare deals, novel things, and new things, if entirely shopping online.
- Uncertainty about data privacy of apps and safety from identity theft
- High learning curves with little pay-off of learning new apps or the risk of new recipes without recommendations
- Traffic on roads and store aisles
- Easier to navigate app navigation like web-browsers
- Additives, preservatives, GMOs, and invisibility of label ingredients on some grocery store shopping apps
- Advertising obstructing recipe on recipe websites and Pinterest
- Foods waste from failure to use certain seasonal produce ingredients in some recipe, and need for inspiration of how to build a recipe around these ingredients

Problem Statement:

Lisa, an empty nester with limited tech-savviness and a preference for visual over text-heavy content, enjoys entertaining guests with novel, aesthetically pleasing dishes made from her garden vegetables. She seeks recipes that visually present ingredients and include step-by-step video instructions. This allows her to take pride in the source of her food and create memorable, visually stunning dining experiences for her guests.

Hypothesis Statement:

If Lisa has access to visually rich, user-friendly recipes that align with the ingredients available from her garden, she will feel confident in preparing inspiring, delightful dishes for her guests and take pride in the origins of her food.



Non-human User Persona: Mirage Lake

"Well, I'm just a lake, ain't got much to say,
But I've seen it all, day by day.
They drain me for their needs, commercial and grand,
While I watch my shores shrink, like shifting sand.

Residential lawns, oh, they're the worst,
Drinkin' up my waters, like they're dyin' of thirst.
I've got herbicides runnin' through my veins,
Plastic trash floatin' by, causin' me pains.

But you know, I ain't givin' up the fight,
I'll keep flowin', day and night.
So listen up, folks, from the heart of this lake,
Let's clean up our act, for goodness' sake."

Age: 60
Location: Texas
Non-human Actant Type: Water body
Relationship to Users: Direct

Definitive Habits and Capabilities: Mirage Lake is a large artificial lake or reservoir fed by a river and its basin's run off. Mirage Lake is depended on for: flood control; water supply of a large municipal area and rural communities; agricultural irrigation; hydroelectric power; environmental release for plant and wildlife; and recreation purposes.

Relation to Human Users:

- 90% of research interview participants' food shopping decisions are shaped by the perceived quality, healthiness, safety, or knowledge of where their food comes from.
- Mirage Lake directly affects the quality and safety of produce and meat provided at the local farmer's market, grocery stores, restaurants, grocery store's, and shoppers' users food and drinking water.
- Consumers are seldom are aware of their water quality, let alone the water quality of water sources used by Producers in growing their food.
- Producers may not consider how their agricultural techniques affect soil health, replenishment of water supplies, and pollutants they introduce into the water supply.
- Consumers and grocery store chains are seldom aware of how their consumption habits with its packaging or product materials are unsustainable and pollutes their own food chain and adversely affects their own health and the health of the ecosystem.

Problem Statement:
Mirage, a non-human stakeholder lake, plays a vital role in supporting and being impacted by its human users, who prioritize quality and safe food. Mirage needs to help its human users make informed, eco-friendly shopping choices, ensuring the lake remains a thriving resource. By empowering humans to protect its waters from run-off, pollutants, and eutrophication, Mirage can remain a vibrant, accessible environment for both people and non-human life to enjoy.

Hypothesis Statement:
If app users are provided with eco-friendly reminders and transparent information about their environmental and food quality choices, they will be empowered to make informed, sustainable decisions. This, in turn, will help preserve Mirage's waters as a thriving, healthy resource for both current and future generations to enjoy.



Mirage Lake choked up by a thousand thoughtless design, consumer, and disposal decisions, silently returning the favor to its imbibers.

Contaminant Sources Related to Producer, Grocery Stores, and Shoppers:

Bisphenols: from plastic food packaging, like BPA lined cans; receipts; plastic water bottles; plastic mulch from litter being mowed or leaching from landfill

Other Plasticizers: from plastic wraps; jar gaskets; grocery bags; vinyl gloves in processing; plastic water bottles; plastic mulch from litter being mowed or leaching from landfill

Fertilizers: Industrial agricultural effluence waste (ammonia nitrate) dumping, spraying, or leaching, such as commercial poultry farms and livestock feed lots; also, residential lawns**.** Industrial agricultural phosphate soil amendment run-off

Herbicides and Pesticides: Industrial agricultural monoagriculture fields and pastures, and residential lawn cumulative run-off and bioaccumulation in plant/animals.

Non-human User Persona: Mirage Lake

Goals:

- Support biodiversity and to avoid eutrophication
- Be replenishable to all users and to avoid drying up
- Be respected, transparency, and see accountability

Frustrations:

- Single-use food packaging, plastic water bottles, and plastic bags litter in the water basin or leaching microplastics, BPA, PFAS, etc. into Mirage Lake directly or carried into Mirage Lake via storm water run-off because of poor soil health.
- Upstream producer's tillage practices don't allow healthy soil to build up aggregates and roots to hold soil in place and allow water to filtered slowly and safely into Mirage Lake, causing run off of silt and pollutants
- Choked up by silt run off causing water treatment system to be ineffective after storm events and resulting in late water boil notices to drinking water community
- Run off pollutants into Mirage Lake, some of which can not be treated by water treatment center
- Commercial water waste from inefficient and leaky irrigation system and residential water waste on lawns
- Texas' really lax regulatory system makes permits easy to obtain from polluting facilities; makes it really hard to get violators fined; and hides the extent its pollutants and its visibility from the public

Contaminant Impacts to Human Users:

- Bisphenols and plasticizers are endocrine disrupters causing: diabetes, obesity, cardiovascular disease, certain cancers, birth defects, premature birth, neurodevelopmental disorders, and infertility.
- Excess fertilizer run off causes unsafe recreational use due to creating an environment for deadly algal blooms
- Herbicides and pesticides run off risks neurodevelopmental disorders, neurological disorders, and cancers.

Contaminant Impacts to Non-Human Users:

- Macroplastics are choking and trapping many animals
- Microplastics are causing animals to live shorter lives, changing the number and sex of offspring, causing slower swimming, changing genetic expression, decreasing fertility, toxic to a variety of healthy soil microbes, and bioaccumulate up the food chain to their human consumers
- Herbicides and pesticides run off can shorten the life of many species, cause developmental deformities, poison many plant and marine animal species, and injure plants.