Thesis analysis

Rhea Sarma

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Table of Contents

This document will have the analysis part for the MS thesis.

1. Load libraries

library(haven)  
library(dplyr)

##   
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':  
##   
## filter, lag

## The following objects are masked from 'package:base':  
##   
## intersect, setdiff, setequal, union

library(tidyverse)

## ── Attaching core tidyverse packages ──────────────────────── tidyverse 2.0.0 ──  
## ✔ forcats 1.0.0 ✔ readr 2.1.5  
## ✔ ggplot2 3.5.1 ✔ stringr 1.5.1  
## ✔ lubridate 1.9.3 ✔ tibble 3.2.1  
## ✔ purrr 1.0.2 ✔ tidyr 1.3.1

## ── Conflicts ────────────────────────────────────────── tidyverse\_conflicts() ──  
## ✖ dplyr::filter() masks stats::filter()  
## ✖ dplyr::lag() masks stats::lag()  
## ℹ Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors

library(psych)

##   
## Attaching package: 'psych'  
##   
## The following objects are masked from 'package:ggplot2':  
##   
## %+%, alpha

library(gtsummary)

1. Load the cleaned and complied dataset

getwd()

## [1] "/Users/rheasarma/Desktop/Rhea MS thesis/MS\_thesis/code"

thesis\_data<- read.csv("~/Desktop/Rhea MS thesis/MS\_thesis/data/data\_compiled.csv")

1. Changing integer variables to numeric to maintain variable consistency

* str(thesis\_data)
* ## 'data.frame': 179 obs. of 113 variables:  
  ## $ study : chr "reach" "reach" "reach" "reach" ...  
  ## $ participant\_id : chr "sub-001" "sub-002" "sub-003" "sub-004" ...  
  ## $ sex : chr "Female" "Male" "Male" "Female" ...  
  ## $ age\_yr : num 8.3 9.6 9.8 7.3 8.5 8.8 8.1 8 7.6 9.4 ...  
  ## $ risk\_status\_maternal : chr "high-risk" "low-risk" "low-risk" "high-risk" ...  
  ## $ child\_bmi\_z : num 0.05 0.24 -0.21 -0.87 0.33 0.43 -1.16 0.03 -0.43 -1.23 ...  
  ## $ child\_bmi : num 16 16.9 16.1 14.3 16.5 ...  
  ## $ child\_bmi\_p : num 51.9 59.4 41.9 19.1 63.1 ...  
  ## $ parent1\_sex : chr "Female" "Female" "Female" "Female" ...  
  ## $ income : int 5 5 4 5 5 4 5 5 5 5 ...  
  ## $ ethnicity : chr "NOT Hispanic or Latino" "NOT Hispanic or Latino" "NOT Hispanic or Latino" "NOT Hispanic or Latino" ...  
  ## $ race : chr "White" "White" "White" "White" ...  
  ## $ cebq\_sr : num 3.4 3.6 2.4 3.8 2.6 2.6 2.6 3 3 2.8 ...  
  ## $ cebq\_fr : num 3.4 2.2 3.2 2.6 2 1.8 2.4 2.6 2.2 3 ...  
  ## $ cebq\_ff : num 2.83 3.83 3.33 3.83 2.67 ...  
  ## $ cebq\_avoid : num 3.47 3.26 2.9 3.68 2.84 ...  
  ## $ cebq\_eue : num 4 2.75 3.25 3 3.5 2.75 3 2.5 3 3 ...  
  ## $ cebq\_se : num 4 2.5 2.5 4 2.75 2.5 2.5 2.5 2.25 2.25 ...  
  ## $ bis : num 3.86 2.29 3.29 3 2.57 ...  
  ## $ bas : num 3.62 2.85 3.08 2.62 3 ...  
  ## $ bas\_funseeking : num 3.25 2.5 2.75 2.25 3.25 3.5 2.5 3 2.5 2.5 ...  
  ## $ bas\_drive : num 3.5 3 2.5 2 2.5 3.25 2.5 3 3 2.5 ...  
  ## $ bas\_rewardresp : num 4 3 3.8 3.4 3.2 4 3.2 3.4 3.8 3.6 ...  
  ## $ pre\_meal\_fullness : int 44 43 21 81 54 16 32 46 11 43 ...  
  ## $ pre\_eah\_fullness : num 82 78 75 143 37 115 83 73 89 82 ...  
  ## $ meal\_grams\_consumed : num 214.3 222.4 223.7 32.9 361.8 ...  
  ## $ meal\_grams\_consumed\_inc\_water : num 315 367 476 35 449 ...  
  ## $ meal\_kcal\_consumed : num 518 767 674 135 845 ...  
  ## $ eah\_grams\_consumed\_foodonly : num 62.1 118.6 24.8 53.7 98.6 ...  
  ## $ eah\_grams\_consumed\_inc\_water : num 62.1 118.6 24.8 53.7 98.6 ...  
  ## $ eah\_kcal\_consumed : num 183.3 429.6 73.4 219.2 361.3 ...  
  ## $ total\_grams\_consumed : num 276.4 341.1 248.4 86.6 460.4 ...  
  ## $ total\_grams\_consumed\_inc\_water : num 377.3 485.3 501.1 88.7 547.3 ...  
  ## $ total\_kcal\_consumed : num 701 1197 748 354 1206 ...  
  ## $ fb\_meal\_consumed\_applesauce\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_applesauce\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_carrot\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_carrot\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cheese\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cheese\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cookies\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cookies\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ham\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ham\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_milk\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_milk\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_pbj\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_pbj\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_potatochip\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_potatochip\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_turkey\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_turkey\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ketchup\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ketchup\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mayo\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mayo\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mustard\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mustard\_kcal : int NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_brownies\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_brownies\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_cornchips\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_cornchips\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_hersheys\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_hersheys\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_icecream\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_icecream\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_oreos\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_oreos\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_popcorn\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_popcorn\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_pretzels\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_pretzels\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_skittles\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_skittles\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_starbursts\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_starbursts\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_water\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ reach\_meal\_grilled\_cheese\_grams\_consumed: num 45.6 172.3 108.5 20.9 116.9 ...  
  ## $ reach\_meal\_grilled\_cheese\_kcal\_consumed : num 153.1 583.8 366.1 72.6 392.9 ...  
  ## $ reach\_meal\_tender\_grams\_consumed : num 114.58 1.54 52.9 1.22 91.97 ...  
  ## $ reach\_meal\_tender\_kcal\_consumed : num 271.67 3.65 125.43 2.89 218.06 ...  
  ## $ reach\_meal\_carrot\_grams\_consumed : num 0 0 31.8 0 24.3 ...  
  ## $ reach\_meal\_carrot\_kcal\_consumed : num 0 0 11.23 0 8.58 ...  
  ## $ reach\_meal\_chips\_grams\_consumed : num 8.58 30.03 30.01 10.35 28.11 ...  
  ## $ reach\_meal\_chips\_kcal\_consumed : num 49 171.6 171.5 59.1 160.6 ...  
  ## $ reach\_meal\_fruit\_grams\_consumed : num 12.56 18.53 0.43 0.5 71.32 ...  
  ## $ reach\_meal\_fruit\_kcal\_consumed : num 5.363 7.912 0.184 0.213 30.454 ...  
  ## $ reach\_meal\_water\_grams\_consumed : num 100.86 144.26 252.63 2.05 86.84 ...  
  ## $ reach\_meal\_water\_kcal\_consumed : int 0 0 0 0 0 0 0 0 0 0 ...  
  ## $ reach\_meal\_ranch\_grams\_consumed : num 0 0 0 0 0 ...  
  ## $ reach\_meal\_ranch\_kcal\_consumed : num 0 0 0 0 0 ...  
  ## $ reach\_meal\_ketchup\_grams\_consumed : num 33 0 0 0 29.2 ...  
  ## $ reach\_meal\_ketchup\_kcal\_consumed : num 38.8 0 0 0 34.3 ...  
  ## $ reach\_eah\_brownie\_grams\_consumed : num 0 13.58 0.09 28.32 40.64 ...  
  ## $ reach\_eah\_brownie\_kcal\_consumed : num 0 59.25 0.393 123.56 177.312 ...  
  ## $ reach\_eah\_corn\_chip\_grams\_consumed : num 0.13 0 0 0 0 ...  
  ## $ reach\_eah\_corn\_chip\_kcal\_consumed : num 0.743 0 0 0 0 ...  
  ## $ reach\_eah\_kiss\_grams\_consumed : num 4.56 9.29 0 4.61 0 ...  
  ## $ reach\_eah\_kiss\_kcal\_consumed : num 22.8 46.5 0 23 0 ...  
  ## [list output truncated]
* thesis\_data$income<-as.numeric(thesis\_data$income)  
  thesis\_data$pre\_meal\_fullness<-as.numeric(thesis\_data$pre\_meal\_fullness)  
  thesis\_data$fb\_meal\_consumed\_mustard\_kcal<-as.numeric(thesis\_data$fb\_meal\_consumed\_mustard\_kcal)  
  thesis\_data$reach\_meal\_water\_kcal\_consumed<-as.numeric(thesis\_data$reach\_meal\_water\_kcal\_consumed)  
  str(thesis\_data)
* ## 'data.frame': 179 obs. of 113 variables:  
  ## $ study : chr "reach" "reach" "reach" "reach" ...  
  ## $ participant\_id : chr "sub-001" "sub-002" "sub-003" "sub-004" ...  
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  ## $ cebq\_ff : num 2.83 3.83 3.33 3.83 2.67 ...  
  ## $ cebq\_avoid : num 3.47 3.26 2.9 3.68 2.84 ...  
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  ## $ bas : num 3.62 2.85 3.08 2.62 3 ...  
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  ## $ pre\_meal\_fullness : num 44 43 21 81 54 16 32 46 11 43 ...  
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  ## $ fb\_meal\_consumed\_applesauce\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_applesauce\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_carrot\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_carrot\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cheese\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cheese\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cookies\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_cookies\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ham\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ham\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_milk\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_milk\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_pbj\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_pbj\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_potatochip\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_potatochip\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_turkey\_sndwch\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_turkey\_sndwch\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ketchup\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_ketchup\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mayo\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mayo\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mustard\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_meal\_consumed\_mustard\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_brownies\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_brownies\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_cornchips\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_cornchips\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_hersheys\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_hersheys\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_icecream\_g : num NA NA NA NA NA NA NA NA NA NA ...  
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  ## $ fb\_eah\_consumed\_oreos\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_popcorn\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_popcorn\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
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  ## $ fb\_eah\_consumed\_pretzels\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_skittles\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_skittles\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_starbursts\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_starbursts\_kcal : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ fb\_eah\_consumed\_water\_g : num NA NA NA NA NA NA NA NA NA NA ...  
  ## $ reach\_meal\_grilled\_cheese\_grams\_consumed: num 45.6 172.3 108.5 20.9 116.9 ...  
  ## $ reach\_meal\_grilled\_cheese\_kcal\_consumed : num 153.1 583.8 366.1 72.6 392.9 ...  
  ## $ reach\_meal\_tender\_grams\_consumed : num 114.58 1.54 52.9 1.22 91.97 ...  
  ## $ reach\_meal\_tender\_kcal\_consumed : num 271.67 3.65 125.43 2.89 218.06 ...  
  ## $ reach\_meal\_carrot\_grams\_consumed : num 0 0 31.8 0 24.3 ...  
  ## $ reach\_meal\_carrot\_kcal\_consumed : num 0 0 11.23 0 8.58 ...  
  ## $ reach\_meal\_chips\_grams\_consumed : num 8.58 30.03 30.01 10.35 28.11 ...  
  ## $ reach\_meal\_chips\_kcal\_consumed : num 49 171.6 171.5 59.1 160.6 ...  
  ## $ reach\_meal\_fruit\_grams\_consumed : num 12.56 18.53 0.43 0.5 71.32 ...  
  ## $ reach\_meal\_fruit\_kcal\_consumed : num 5.363 7.912 0.184 0.213 30.454 ...  
  ## $ reach\_meal\_water\_grams\_consumed : num 100.86 144.26 252.63 2.05 86.84 ...  
  ## $ reach\_meal\_water\_kcal\_consumed : num 0 0 0 0 0 0 0 0 0 0 ...  
  ## $ reach\_meal\_ranch\_grams\_consumed : num 0 0 0 0 0 ...  
  ## $ reach\_meal\_ranch\_kcal\_consumed : num 0 0 0 0 0 ...  
  ## $ reach\_meal\_ketchup\_grams\_consumed : num 33 0 0 0 29.2 ...  
  ## $ reach\_meal\_ketchup\_kcal\_consumed : num 38.8 0 0 0 34.3 ...  
  ## $ reach\_eah\_brownie\_grams\_consumed : num 0 13.58 0.09 28.32 40.64 ...  
  ## $ reach\_eah\_brownie\_kcal\_consumed : num 0 59.25 0.393 123.56 177.312 ...  
  ## $ reach\_eah\_corn\_chip\_grams\_consumed : num 0.13 0 0 0 0 ...  
  ## $ reach\_eah\_corn\_chip\_kcal\_consumed : num 0.743 0 0 0 0 ...  
  ## $ reach\_eah\_kiss\_grams\_consumed : num 4.56 9.29 0 4.61 0 ...  
  ## $ reach\_eah\_kiss\_kcal\_consumed : num 22.8 46.5 0 23 0 ...  
  ## [list output truncated]
* # Making the dataset presentable  
  colnames(thesis\_data)[colnames(thesis\_data) == "parent1\_sex"] <- "Measured Parent"  
  colnames(thesis\_data)[colnames(thesis\_data) == "study"] <- "Study"  
  thesis\_data$Study<-toupper(thesis\_data$Study)  
  colnames(thesis\_data)[colnames(thesis\_data) == "age\_yr"] <- "Age in years"  
  colnames(thesis\_data)[colnames(thesis\_data) == "risk\_status\_maternal"] <- "Maternal risk status"  
  colnames(thesis\_data)[colnames(thesis\_data) == "sex"] <- "Sex"  
  colnames(thesis\_data)[colnames(thesis\_data) == "child\_bmi"] <- "Child BMI"  
  colnames(thesis\_data)[colnames(thesis\_data) == "child\_bmi\_z"] <- "Child BMI z-score"  
  colnames(thesis\_data)[colnames(thesis\_data) == "child\_bmi\_p"] <- "Child BMI percentile"  
  colnames(thesis\_data)[colnames(thesis\_data) == "ethnicity"] <- "Ethinicity"  
  colnames(thesis\_data)[colnames(thesis\_data) == "race"] <- "Race"  
  colnames(thesis\_data)[colnames(thesis\_data) == "income"] <- "Income"  
    
  # replace factor values with labels that match food and brain   
  thesis\_data$Income<-factor(thesis\_data$Income,levels=0:5,labels = c("<$20,000","$20,000-$35,000","$36,000-$50,000","$51,000-$75,000","$76,000-$100,000",">$100,000"))  
    
  #### Export data. This is the dataset we will be using for all the analysis ####  
  write.csv(thesis\_data,"~/Desktop/Rhea MS thesis/MS\_thesis/data/thesis\_data.csv", row.names = FALSE)

1. Inspecting dataset

head(thesis\_data)

## Study participant\_id Sex Age in years Maternal risk status  
## 1 REACH sub-001 Female 8.3 high-risk  
## 2 REACH sub-002 Male 9.6 low-risk  
## 3 REACH sub-003 Male 9.8 low-risk  
## 4 REACH sub-004 Female 7.3 high-risk  
## 5 REACH sub-005 Male 8.5 low-risk  
## 6 REACH sub-006 Male 8.8 low-risk  
## Child BMI z-score Child BMI Child BMI percentile Measured Parent  
## 1 0.05 16.03 51.85 Female  
## 2 0.24 16.85 59.43 Female  
## 3 -0.21 16.09 41.85 Female  
## 4 -0.87 14.27 19.12 Female  
## 5 0.33 16.51 63.08 Female  
## 6 0.43 16.90 66.70 Male  
## Income Ethinicity Race cebq\_sr cebq\_fr cebq\_ff  
## 1 >$100,000 NOT Hispanic or Latino White 3.4 3.4 2.833  
## 2 >$100,000 NOT Hispanic or Latino White 3.6 2.2 3.833  
## 3 $76,000-$100,000 NOT Hispanic or Latino White 2.4 3.2 3.333  
## 4 >$100,000 NOT Hispanic or Latino White 3.8 2.6 3.833  
## 5 >$100,000 NOT Hispanic or Latino White 2.6 2.0 2.667  
## 6 $76,000-$100,000 NOT Hispanic or Latino Asian 2.6 1.8 3.000  
## cebq\_avoid cebq\_eue cebq\_se bis bas bas\_funseeking bas\_drive  
## 1 3.474 4.00 4.00 3.857 3.615 3.25 3.50  
## 2 3.263 2.75 2.50 2.286 2.846 2.50 3.00  
## 3 2.895 3.25 2.50 3.286 3.077 2.75 2.50  
## 4 3.684 3.00 4.00 3.000 2.615 2.25 2.00  
## 5 2.842 3.50 2.75 2.571 3.000 3.25 2.50  
## 6 2.737 2.75 2.50 2.714 3.615 3.50 3.25  
## bas\_rewardresp pre\_meal\_fullness pre\_eah\_fullness meal\_grams\_consumed  
## 1 4.0 44 82 214.31  
## 2 3.0 43 78 222.42  
## 3 3.8 21 75 223.65  
## 4 3.4 81 143 32.94  
## 5 3.2 54 37 361.84  
## 6 4.0 16 115 523.76  
## meal\_grams\_consumed\_inc\_water meal\_kcal\_consumed eah\_grams\_consumed\_foodonly  
## 1 315.17 517.9896 62.10  
## 2 366.68 767.0027 118.63  
## 3 476.28 674.4526 24.77  
## 4 34.99 134.8385 53.70  
## 5 448.68 844.9049 98.60  
## 6 763.92 1044.0396 18.92  
## eah\_grams\_consumed\_inc\_water eah\_kcal\_consumed total\_grams\_consumed  
## 1 62.10 183.28277 276.41  
## 2 118.63 429.64616 341.05  
## 3 24.77 73.40790 248.42  
## 4 53.70 219.15900 86.64  
## 5 98.60 361.29768 460.44  
## 6 18.92 85.36805 542.68  
## total\_grams\_consumed\_inc\_water total\_kcal\_consumed  
## 1 377.27 701.2724  
## 2 485.31 1196.6489  
## 3 501.05 747.8605  
## 4 88.69 353.9975  
## 5 547.28 1206.2026  
## 6 782.84 1129.4077  
## fb\_meal\_consumed\_applesauce\_g fb\_meal\_consumed\_applesauce\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_carrot\_g fb\_meal\_consumed\_carrot\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_cheese\_sndwch\_g fb\_meal\_consumed\_cheese\_sndwch\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_cookies\_g fb\_meal\_consumed\_cookies\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_ham\_sndwch\_g fb\_meal\_consumed\_ham\_sndwch\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_milk\_g fb\_meal\_consumed\_milk\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_pbj\_sndwch\_g fb\_meal\_consumed\_pbj\_sndwch\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_potatochip\_g fb\_meal\_consumed\_potatochip\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_turkey\_sndwch\_g fb\_meal\_consumed\_turkey\_sndwch\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_ketchup\_g fb\_meal\_consumed\_ketchup\_kcal  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_meal\_consumed\_mayo\_g fb\_meal\_consumed\_mayo\_kcal fb\_meal\_consumed\_mustard\_g  
## 1 NA NA NA  
## 2 NA NA NA  
## 3 NA NA NA  
## 4 NA NA NA  
## 5 NA NA NA  
## 6 NA NA NA  
## fb\_meal\_consumed\_mustard\_kcal fb\_eah\_consumed\_brownies\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_brownies\_kcal fb\_eah\_consumed\_cornchips\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_cornchips\_kcal fb\_eah\_consumed\_hersheys\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_hersheys\_kcal fb\_eah\_consumed\_icecream\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_icecream\_kcal fb\_eah\_consumed\_oreos\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_oreos\_kcal fb\_eah\_consumed\_popcorn\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_popcorn\_kcal fb\_eah\_consumed\_pretzels\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_pretzels\_kcal fb\_eah\_consumed\_skittles\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_skittles\_kcal fb\_eah\_consumed\_starbursts\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## fb\_eah\_consumed\_starbursts\_kcal fb\_eah\_consumed\_water\_g  
## 1 NA NA  
## 2 NA NA  
## 3 NA NA  
## 4 NA NA  
## 5 NA NA  
## 6 NA NA  
## reach\_meal\_grilled\_cheese\_grams\_consumed  
## 1 45.56  
## 2 172.32  
## 3 108.50  
## 4 20.87  
## 5 116.93  
## 6 106.16  
## reach\_meal\_grilled\_cheese\_kcal\_consumed reach\_meal\_tender\_grams\_consumed  
## 1 153.08795 114.58  
## 2 583.84768 1.54  
## 3 366.13702 52.90  
## 4 72.59245 1.22  
## 5 392.85748 91.97  
## 6 361.71109 103.12  
## reach\_meal\_tender\_kcal\_consumed reach\_meal\_carrot\_grams\_consumed  
## 1 271.66918 0.00  
## 2 3.65134 0.00  
## 3 125.42590 31.81  
## 4 2.89262 0.00  
## 5 218.06087 24.32  
## 6 244.49752 101.14  
## reach\_meal\_carrot\_kcal\_consumed reach\_meal\_chips\_grams\_consumed  
## 1 0.00000 8.58  
## 2 0.00000 30.03  
## 3 11.22893 30.01  
## 4 0.00000 10.35  
## 5 8.58496 28.11  
## 6 35.70242 30.23  
## reach\_meal\_chips\_kcal\_consumed reach\_meal\_fruit\_grams\_consumed  
## 1 49.02612 12.56  
## 2 171.59142 18.53  
## 3 171.47714 0.43  
## 4 59.13990 0.50  
## 5 160.62054 71.32  
## 6 172.73422 134.30  
## reach\_meal\_fruit\_kcal\_consumed reach\_meal\_water\_grams\_consumed  
## 1 5.36312 100.86  
## 2 7.91231 144.26  
## 3 0.18361 252.63  
## 4 0.21350 2.05  
## 5 30.45364 86.84  
## 6 57.34610 240.16  
## reach\_meal\_water\_kcal\_consumed reach\_meal\_ranch\_grams\_consumed  
## 1 0 0.00  
## 2 0 0.00  
## 3 0 0.00  
## 4 0 0.00  
## 5 0 0.00  
## 6 0 33.71  
## reach\_meal\_ranch\_kcal\_consumed reach\_meal\_ketchup\_grams\_consumed  
## 1 0.0000 33.03  
## 2 0.0000 0.00  
## 3 0.0000 0.00  
## 4 0.0000 0.00  
## 5 0.0000 29.19  
## 6 154.2907 15.10  
## reach\_meal\_ketchup\_kcal\_consumed reach\_eah\_brownie\_grams\_consumed  
## 1 38.84328 0.00  
## 2 0.00000 13.58  
## 3 0.00000 0.09  
## 4 0.00000 28.32  
## 5 34.32744 40.64  
## 6 17.75760 13.93  
## reach\_eah\_brownie\_kcal\_consumed reach\_eah\_corn\_chip\_grams\_consumed  
## 1 0.00000 0.13  
## 2 59.24954 0.00  
## 3 0.39267 0.00  
## 4 123.56016 0.00  
## 5 177.31232 0.00  
## 6 60.77659 0.05  
## reach\_eah\_corn\_chip\_kcal\_consumed reach\_eah\_kiss\_grams\_consumed  
## 1 0.74282 4.56  
## 2 0.00000 9.29  
## 3 0.00000 0.00  
## 4 0.00000 4.61  
## 5 0.00000 0.00  
## 6 0.28570 4.62  
## reach\_eah\_kiss\_kcal\_consumed reach\_eah\_ice\_cream\_grams\_consumed  
## 1 22.80 38.90  
## 2 46.45 40.29  
## 3 0.00 14.33  
## 4 23.05 9.99  
## 5 0.00 35.20  
## 6 23.10 0.14  
## reach\_eah\_ice\_cream\_kcal\_consumed reach\_eah\_oreo\_grams\_consumed  
## 1 84.95760 0.00  
## 2 87.99336 11.30  
## 3 31.29672 0.00  
## 4 21.81816 10.78  
## 5 76.87680 22.76  
## 6 0.30576 0.00  
## reach\_eah\_oreo\_kcal\_consumed reach\_eah\_popcorn\_grams\_consumed  
## 1 0.00000 0.00  
## 2 53.17780 0.00  
## 3 0.00000 0.00  
## 4 50.73068 0.00  
## 5 107.10856 0.00  
## 6 0.00000 0.18  
## reach\_eah\_popcorn\_kcal\_consumed reach\_eah\_pretzel\_grams\_consumed  
## 1 0.0 0  
## 2 0.0 0  
## 3 0.0 0  
## 4 0.0 0  
## 5 0.0 0  
## 6 0.9 0  
## reach\_eah\_pretzel\_kcal\_consumed reach\_eah\_skittle\_grams\_consumed  
## 1 0 8.67  
## 2 0 0.00  
## 3 0 5.31  
## 4 0 0.00  
## 5 0 0.00  
## 6 0 0.00  
## reach\_eah\_skittle\_kcal\_consumed reach\_eah\_starburst\_grams\_consumed  
## 1 34.06443 9.84  
## 2 0.00000 44.17  
## 3 20.86299 5.04  
## 4 0.00000 0.00  
## 5 0.00000 0.00  
## 6 0.00000 0.00  
## reach\_eah\_starburst\_kcal\_consumed reach\_eah\_water\_eah\_grams\_consumed  
## 1 40.71792 0  
## 2 182.77546 0  
## 3 20.85552 0  
## 4 0.00000 0  
## 5 0.00000 0  
## 6 0.00000 0  
## reach\_eah\_water\_eah\_kcal\_consumed  
## 1 0  
## 2 0  
## 3 0  
## 4 0  
## 5 0  
## 6 0

table(thesis\_data$study)

## < table of extent 0 >

1. Generating demographics table. Unknown indicates missing data

thesis\_data %>% select (!c(participant\_id,pre\_meal\_fullness,pre\_eah\_fullness, meal\_grams\_consumed, meal\_kcal\_consumed, eah\_grams\_consumed\_foodonly,bis, bas,bas\_funseeking, bas\_drive, bas\_rewardresp, eah\_kcal\_consumed,fb\_meal\_consumed\_applesauce\_kcal, fb\_meal\_consumed\_applesauce\_g, fb\_meal\_consumed\_carrot\_g, fb\_meal\_consumed\_carrot\_kcal, fb\_meal\_consumed\_cheese\_sndwch\_g, fb\_meal\_consumed\_cheese\_sndwch\_kcal, fb\_meal\_consumed\_cookies\_g, fb\_meal\_consumed\_cookies\_kcal, fb\_meal\_consumed\_ham\_sndwch\_g, fb\_meal\_consumed\_ham\_sndwch\_kcal, fb\_meal\_consumed\_milk\_g, fb\_meal\_consumed\_milk\_kcal, fb\_meal\_consumed\_pbj\_sndwch\_g, fb\_meal\_consumed\_pbj\_sndwch\_kcal, fb\_meal\_consumed\_potatochip\_g, fb\_meal\_consumed\_potatochip\_kcal, fb\_meal\_consumed\_turkey\_sndwch\_g, fb\_meal\_consumed\_turkey\_sndwch\_kcal, fb\_meal\_consumed\_ketchup\_g, fb\_meal\_consumed\_ketchup\_kcal, fb\_meal\_consumed\_mayo\_g, fb\_meal\_consumed\_mayo\_kcal, fb\_meal\_consumed\_mustard\_g, fb\_meal\_consumed\_mustard\_kcal,fb\_eah\_consumed\_brownies\_g, fb\_eah\_consumed\_brownies\_kcal, fb\_eah\_consumed\_cornchips\_g,fb\_eah\_consumed\_cornchips\_kcal,fb\_eah\_consumed\_hersheys\_g,fb\_eah\_consumed\_hersheys\_kcal,fb\_eah\_consumed\_icecream\_g,fb\_eah\_consumed\_icecream\_kcal,fb\_eah\_consumed\_oreos\_g, fb\_eah\_consumed\_oreos\_kcal, fb\_eah\_consumed\_popcorn\_g,fb\_eah\_consumed\_popcorn\_kcal, fb\_eah\_consumed\_pretzels\_g, fb\_eah\_consumed\_pretzels\_kcal, fb\_eah\_consumed\_skittles\_g, fb\_eah\_consumed\_skittles\_kcal, fb\_eah\_consumed\_starbursts\_g,fb\_eah\_consumed\_starbursts\_kcal, fb\_eah\_consumed\_water\_g, reach\_eah\_brownie\_grams\_consumed, reach\_eah\_brownie\_kcal\_consumed, reach\_eah\_corn\_chip\_grams\_consumed, reach\_eah\_corn\_chip\_kcal\_consumed, reach\_eah\_ice\_cream\_grams\_consumed,reach\_eah\_ice\_cream\_kcal\_consumed,reach\_eah\_kiss\_grams\_consumed,reach\_eah\_kiss\_kcal\_consumed,reach\_eah\_oreo\_grams\_consumed, reach\_eah\_oreo\_kcal\_consumed, reach\_eah\_popcorn\_grams\_consumed, reach\_eah\_popcorn\_kcal\_consumed, reach\_eah\_pretzel\_grams\_consumed, reach\_eah\_pretzel\_kcal\_consumed, reach\_eah\_skittle\_grams\_consumed, reach\_eah\_skittle\_kcal\_consumed, reach\_eah\_starburst\_grams\_consumed, reach\_eah\_starburst\_kcal\_consumed,reach\_eah\_water\_eah\_grams\_consumed,reach\_eah\_water\_eah\_kcal\_consumed, reach\_meal\_grilled\_cheese\_grams\_consumed,reach\_meal\_grilled\_cheese\_kcal\_consumed, reach\_meal\_carrot\_grams\_consumed, reach\_meal\_carrot\_kcal\_consumed, reach\_meal\_chips\_grams\_consumed, reach\_meal\_chips\_kcal\_consumed, reach\_meal\_fruit\_grams\_consumed, reach\_meal\_fruit\_kcal\_consumed, reach\_meal\_ketchup\_grams\_consumed, reach\_meal\_ketchup\_kcal\_consumed, reach\_meal\_ranch\_grams\_consumed, reach\_meal\_ranch\_kcal\_consumed, reach\_meal\_water\_grams\_consumed, reach\_meal\_water\_kcal\_consumed, cebq\_sr, cebq\_avoid, cebq\_eue, cebq\_ff, cebq\_fr, cebq\_se, meal\_grams\_consumed\_inc\_water, eah\_grams\_consumed\_inc\_water,total\_grams\_consumed\_inc\_water, total\_kcal\_consumed, reach\_meal\_tender\_grams\_consumed, reach\_meal\_tender\_kcal\_consumed, total\_grams\_consumed)) %>% tbl\_summary()

| **Characteristic** | **N = 179***1* |
| --- | --- |
| Study |  |
| FOOD\_BRAIN | 95 (53%) |
| REACH | 84 (47%) |
| Sex |  |
| Female | 87 (49%) |
| Male | 92 (51%) |
| Age in years | 8.00 (7.40, 8.60) |
| Unknown | 1 |
| Maternal risk status |  |
| high-risk | 83 (47%) |
| low-risk | 95 (53%) |
| Unknown | 1 |
| Child BMI z-score | 0.01 (-0.57, 0.53) |
| Child BMI | 15.77 (14.73, 17.00) |
| Child BMI percentile | 50 (28, 70) |
| Measured Parent |  |
| Female | 160 (89%) |
| Male | 19 (11%) |
| Income |  |
| <$20,000 | 2 (1.1%) |
| $20,000-$35,000 | 7 (4.0%) |
| $36,000-$50,000 | 12 (6.8%) |
| $51,000-$75,000 | 29 (16%) |
| $76,000-$100,000 | 49 (28%) |
| >$100,000 | 77 (44%) |
| Unknown | 3 |
| Ethinicity |  |
| Hispanic or Latino | 4 (2.2%) |
| NOT Hispanic or Latino | 174 (98%) |
| Unknown | 1 |
| Race |  |
| Asian | 10 (5.6%) |
| Black or African American | 2 (1.1%) |
| Other | 1 (0.6%) |
| White | 165 (93%) |
| Unknown | 1 |
| *1*n (%); Median (Q1, Q3) | |

1. Generating demographics table by study with medians. Unknown indicates missing data

thesis\_data %>% select (!c(participant\_id,pre\_meal\_fullness,pre\_eah\_fullness, meal\_grams\_consumed, meal\_kcal\_consumed, eah\_grams\_consumed\_foodonly,bis, bas,bas\_funseeking, bas\_drive, bas\_rewardresp, eah\_kcal\_consumed,fb\_meal\_consumed\_applesauce\_kcal, fb\_meal\_consumed\_applesauce\_g, fb\_meal\_consumed\_carrot\_g, fb\_meal\_consumed\_carrot\_kcal, fb\_meal\_consumed\_cheese\_sndwch\_g, fb\_meal\_consumed\_cheese\_sndwch\_kcal, fb\_meal\_consumed\_cookies\_g, fb\_meal\_consumed\_cookies\_kcal, fb\_meal\_consumed\_ham\_sndwch\_g, fb\_meal\_consumed\_ham\_sndwch\_kcal, fb\_meal\_consumed\_milk\_g, fb\_meal\_consumed\_milk\_kcal, fb\_meal\_consumed\_pbj\_sndwch\_g, fb\_meal\_consumed\_pbj\_sndwch\_kcal, fb\_meal\_consumed\_potatochip\_g, fb\_meal\_consumed\_potatochip\_kcal, fb\_meal\_consumed\_turkey\_sndwch\_g, fb\_meal\_consumed\_turkey\_sndwch\_kcal, fb\_meal\_consumed\_ketchup\_g, fb\_meal\_consumed\_ketchup\_kcal, fb\_meal\_consumed\_mayo\_g, fb\_meal\_consumed\_mayo\_kcal, fb\_meal\_consumed\_mustard\_g, fb\_meal\_consumed\_mustard\_kcal,fb\_eah\_consumed\_brownies\_g, fb\_eah\_consumed\_brownies\_kcal, fb\_eah\_consumed\_cornchips\_g,fb\_eah\_consumed\_cornchips\_kcal,fb\_eah\_consumed\_hersheys\_g,fb\_eah\_consumed\_hersheys\_kcal,fb\_eah\_consumed\_icecream\_g,fb\_eah\_consumed\_icecream\_kcal,fb\_eah\_consumed\_oreos\_g, fb\_eah\_consumed\_oreos\_kcal, fb\_eah\_consumed\_popcorn\_g,fb\_eah\_consumed\_popcorn\_kcal, fb\_eah\_consumed\_pretzels\_g, fb\_eah\_consumed\_pretzels\_kcal, fb\_eah\_consumed\_skittles\_g, fb\_eah\_consumed\_skittles\_kcal, fb\_eah\_consumed\_starbursts\_g,fb\_eah\_consumed\_starbursts\_kcal, fb\_eah\_consumed\_water\_g, reach\_eah\_brownie\_grams\_consumed, reach\_eah\_brownie\_kcal\_consumed, reach\_eah\_corn\_chip\_grams\_consumed, reach\_eah\_corn\_chip\_kcal\_consumed, reach\_eah\_ice\_cream\_grams\_consumed,reach\_eah\_ice\_cream\_kcal\_consumed,reach\_eah\_kiss\_grams\_consumed,reach\_eah\_kiss\_kcal\_consumed,reach\_eah\_oreo\_grams\_consumed, reach\_eah\_oreo\_kcal\_consumed, reach\_eah\_popcorn\_grams\_consumed, reach\_eah\_popcorn\_kcal\_consumed, reach\_eah\_pretzel\_grams\_consumed, reach\_eah\_pretzel\_kcal\_consumed, reach\_eah\_skittle\_grams\_consumed, reach\_eah\_skittle\_kcal\_consumed, reach\_eah\_starburst\_grams\_consumed, reach\_eah\_starburst\_kcal\_consumed,reach\_eah\_water\_eah\_grams\_consumed,reach\_eah\_water\_eah\_kcal\_consumed, reach\_meal\_grilled\_cheese\_grams\_consumed,reach\_meal\_grilled\_cheese\_kcal\_consumed, reach\_meal\_carrot\_grams\_consumed, reach\_meal\_carrot\_kcal\_consumed, reach\_meal\_chips\_grams\_consumed, reach\_meal\_chips\_kcal\_consumed, reach\_meal\_fruit\_grams\_consumed, reach\_meal\_fruit\_kcal\_consumed, reach\_meal\_ketchup\_grams\_consumed, reach\_meal\_ketchup\_kcal\_consumed, reach\_meal\_ranch\_grams\_consumed, reach\_meal\_ranch\_kcal\_consumed, reach\_meal\_water\_grams\_consumed, reach\_meal\_water\_kcal\_consumed, cebq\_sr, cebq\_avoid, cebq\_eue, cebq\_ff, cebq\_fr, cebq\_se, meal\_grams\_consumed\_inc\_water, eah\_grams\_consumed\_inc\_water,total\_grams\_consumed\_inc\_water, total\_kcal\_consumed, reach\_meal\_tender\_grams\_consumed, reach\_meal\_tender\_kcal\_consumed, total\_grams\_consumed)) %>% tbl\_summary(by = Study)

| **Characteristic** | **FOOD\_BRAIN** N = 95*1* | **REACH** N = 84*1* |
| --- | --- | --- |
| Sex |  |  |
| Female | 45 (47%) | 42 (50%) |
| Male | 50 (53%) | 42 (50%) |
| Age in years | 7.79 (7.33, 8.41) | 8.30 (7.70, 8.90) |
| Unknown | 0 | 1 |
| Maternal risk status |  |  |
| high-risk | 42 (44%) | 41 (49%) |
| low-risk | 53 (56%) | 42 (51%) |
| Unknown | 0 | 1 |
| Child BMI z-score | 0.00 (-0.57, 0.53) | 0.03 (-0.64, 0.55) |
| Child BMI | 15.71 (14.73, 16.65) | 15.93 (14.72, 17.23) |
| Child BMI percentile | 50 (28, 70) | 51 (26, 71) |
| Measured Parent |  |  |
| Female | 83 (87%) | 77 (92%) |
| Male | 12 (13%) | 7 (8.3%) |
| Income |  |  |
| <$20,000 | 1 (1.1%) | 1 (1.2%) |
| $20,000-$35,000 | 4 (4.3%) | 3 (3.6%) |
| $36,000-$50,000 | 7 (7.6%) | 5 (6.0%) |
| $51,000-$75,000 | 22 (24%) | 7 (8.3%) |
| $76,000-$100,000 | 23 (25%) | 26 (31%) |
| >$100,000 | 35 (38%) | 42 (50%) |
| Unknown | 3 | 0 |
| Ethinicity |  |  |
| Hispanic or Latino | 0 (0%) | 4 (4.8%) |
| NOT Hispanic or Latino | 95 (100%) | 79 (95%) |
| Unknown | 0 | 1 |
| Race |  |  |
| Asian | 3 (3.2%) | 7 (8.4%) |
| Black or African American | 0 (0%) | 2 (2.4%) |
| Other | 0 (0%) | 1 (1.2%) |
| White | 92 (97%) | 73 (88%) |
| Unknown | 0 | 1 |
| *1*n (%); Median (Q1, Q3) | | |

1. Generating demographics table by study with means and SD. Unknown indicates missing data

thesis\_data %>%   
 select(!c(participant\_id, pre\_meal\_fullness, pre\_eah\_fullness, meal\_grams\_consumed,   
 meal\_kcal\_consumed, eah\_grams\_consumed\_foodonly, bis, bas, bas\_funseeking,   
 bas\_drive, bas\_rewardresp, eah\_kcal\_consumed, fb\_meal\_consumed\_applesauce\_kcal,   
 fb\_meal\_consumed\_applesauce\_g, fb\_meal\_consumed\_carrot\_g,   
 fb\_meal\_consumed\_carrot\_kcal, fb\_meal\_consumed\_cheese\_sndwch\_g,   
 fb\_meal\_consumed\_cheese\_sndwch\_kcal, fb\_meal\_consumed\_cookies\_g,   
 fb\_meal\_consumed\_cookies\_kcal, fb\_meal\_consumed\_ham\_sndwch\_g,   
 fb\_meal\_consumed\_ham\_sndwch\_kcal, fb\_meal\_consumed\_milk\_g,   
 fb\_meal\_consumed\_milk\_kcal, fb\_meal\_consumed\_pbj\_sndwch\_g,   
 fb\_meal\_consumed\_pbj\_sndwch\_kcal, fb\_meal\_consumed\_potatochip\_g,   
 fb\_meal\_consumed\_potatochip\_kcal, fb\_meal\_consumed\_turkey\_sndwch\_g,   
 fb\_meal\_consumed\_turkey\_sndwch\_kcal, fb\_meal\_consumed\_ketchup\_g,   
 fb\_meal\_consumed\_ketchup\_kcal, fb\_meal\_consumed\_mayo\_g, fb\_meal\_consumed\_mayo\_kcal,   
 fb\_meal\_consumed\_mustard\_g, fb\_meal\_consumed\_mustard\_kcal,   
 fb\_eah\_consumed\_brownies\_g, fb\_eah\_consumed\_brownies\_kcal,   
 fb\_eah\_consumed\_cornchips\_g, fb\_eah\_consumed\_cornchips\_kcal,   
 fb\_eah\_consumed\_hersheys\_g, fb\_eah\_consumed\_hersheys\_kcal,   
 fb\_eah\_consumed\_icecream\_g, fb\_eah\_consumed\_icecream\_kcal,   
 fb\_eah\_consumed\_oreos\_g, fb\_eah\_consumed\_oreos\_kcal, fb\_eah\_consumed\_popcorn\_g,   
 fb\_eah\_consumed\_popcorn\_kcal, fb\_eah\_consumed\_pretzels\_g,   
 fb\_eah\_consumed\_pretzels\_kcal, fb\_eah\_consumed\_skittles\_g,   
 fb\_eah\_consumed\_skittles\_kcal, fb\_eah\_consumed\_starbursts\_g,   
 fb\_eah\_consumed\_starbursts\_kcal, fb\_eah\_consumed\_water\_g,   
 reach\_eah\_brownie\_grams\_consumed, reach\_eah\_brownie\_kcal\_consumed,   
 reach\_eah\_corn\_chip\_grams\_consumed, reach\_eah\_corn\_chip\_kcal\_consumed,   
 reach\_eah\_ice\_cream\_grams\_consumed, reach\_eah\_ice\_cream\_kcal\_consumed,   
 reach\_eah\_kiss\_grams\_consumed, reach\_eah\_kiss\_kcal\_consumed,   
 reach\_eah\_oreo\_grams\_consumed, reach\_eah\_oreo\_kcal\_consumed,   
 reach\_eah\_popcorn\_grams\_consumed, reach\_eah\_popcorn\_kcal\_consumed,   
 reach\_eah\_pretzel\_grams\_consumed, reach\_eah\_pretzel\_kcal\_consumed,   
 reach\_eah\_skittle\_grams\_consumed, reach\_eah\_skittle\_kcal\_consumed,   
 reach\_eah\_starburst\_grams\_consumed, reach\_eah\_starburst\_kcal\_consumed,   
 reach\_eah\_water\_eah\_grams\_consumed, reach\_eah\_water\_eah\_kcal\_consumed,   
 reach\_meal\_grilled\_cheese\_grams\_consumed, reach\_meal\_grilled\_cheese\_kcal\_consumed,   
 reach\_meal\_carrot\_grams\_consumed, reach\_meal\_carrot\_kcal\_consumed,   
 reach\_meal\_chips\_grams\_consumed, reach\_meal\_chips\_kcal\_consumed,   
 reach\_meal\_fruit\_grams\_consumed, reach\_meal\_fruit\_kcal\_consumed,   
 reach\_meal\_ketchup\_grams\_consumed, reach\_meal\_ketchup\_kcal\_consumed,   
 reach\_meal\_ranch\_grams\_consumed, reach\_meal\_ranch\_kcal\_consumed,   
 reach\_meal\_water\_grams\_consumed, reach\_meal\_water\_kcal\_consumed,   
 cebq\_sr, cebq\_avoid, cebq\_eue, cebq\_ff, cebq\_fr, cebq\_se,   
 meal\_grams\_consumed\_inc\_water, eah\_grams\_consumed\_inc\_water,   
 total\_grams\_consumed\_inc\_water, total\_kcal\_consumed, reach\_meal\_tender\_grams\_consumed,   
 reach\_meal\_tender\_kcal\_consumed, total\_grams\_consumed)) %>%   
 tbl\_summary(by = Study,   
 statistic = list(all\_continuous() ~ "{mean} ({sd})",   
 all\_categorical() ~ "{n} / {N} ({p}%)"),   
 digits = all\_continuous() ~ 2) %>%   
 add\_overall() %>%   
 modify\_spanning\_header(c("stat\_1", "stat\_2") ~ "\*\*Participant's demographics by study\*\*")

|  |  | **Participant's demographics by study** | |
| --- | --- | --- | --- |
| **Characteristic** | **Overall** N = 179*1* | **FOOD\_BRAIN** N = 95*1* | **REACH** N = 84*1* |
| Sex |  |  |  |
| Female | 87 / 179 (49%) | 45 / 95 (47%) | 42 / 84 (50%) |
| Male | 92 / 179 (51%) | 50 / 95 (53%) | 42 / 84 (50%) |
| Age in years | 8.08 (0.75) | 7.85 (0.60) | 8.34 (0.81) |
| Unknown | 1 | 0 | 1 |
| Maternal risk status |  |  |  |
| high-risk | 83 / 178 (47%) | 42 / 95 (44%) | 41 / 83 (49%) |
| low-risk | 95 / 178 (53%) | 53 / 95 (56%) | 42 / 83 (51%) |
| Unknown | 1 | 0 | 1 |
| Child BMI z-score | -0.06 (0.77) | -0.07 (0.74) | -0.04 (0.82) |
| Child BMI | 15.97 (1.51) | 15.81 (1.28) | 16.15 (1.72) |
| Child BMI percentile | 48.44 (25.57) | 48.01 (24.64) | 48.93 (26.71) |
| Measured Parent |  |  |  |
| Female | 160 / 179 (89%) | 83 / 95 (87%) | 77 / 84 (92%) |
| Male | 19 / 179 (11%) | 12 / 95 (13%) | 7 / 84 (8.3%) |
| Income |  |  |  |
| <$20,000 | 2 / 176 (1.1%) | 1 / 92 (1.1%) | 1 / 84 (1.2%) |
| $20,000-$35,000 | 7 / 176 (4.0%) | 4 / 92 (4.3%) | 3 / 84 (3.6%) |
| $36,000-$50,000 | 12 / 176 (6.8%) | 7 / 92 (7.6%) | 5 / 84 (6.0%) |
| $51,000-$75,000 | 29 / 176 (16%) | 22 / 92 (24%) | 7 / 84 (8.3%) |
| $76,000-$100,000 | 49 / 176 (28%) | 23 / 92 (25%) | 26 / 84 (31%) |
| >$100,000 | 77 / 176 (44%) | 35 / 92 (38%) | 42 / 84 (50%) |
| Unknown | 3 | 3 | 0 |
| Ethinicity |  |  |  |
| Hispanic or Latino | 4 / 178 (2.2%) | 0 / 95 (0%) | 4 / 83 (4.8%) |
| NOT Hispanic or Latino | 174 / 178 (98%) | 95 / 95 (100%) | 79 / 83 (95%) |
| Unknown | 1 | 0 | 1 |
| Race |  |  |  |
| Asian | 10 / 178 (5.6%) | 3 / 95 (3.2%) | 7 / 83 (8.4%) |
| Black or African American | 2 / 178 (1.1%) | 0 / 95 (0%) | 2 / 83 (2.4%) |
| Other | 1 / 178 (0.6%) | 0 / 95 (0%) | 1 / 83 (1.2%) |
| White | 165 / 178 (93%) | 92 / 95 (97%) | 73 / 83 (88%) |
| Unknown | 1 | 0 | 1 |
| *1*n / N (%); Mean (SD) | | | |