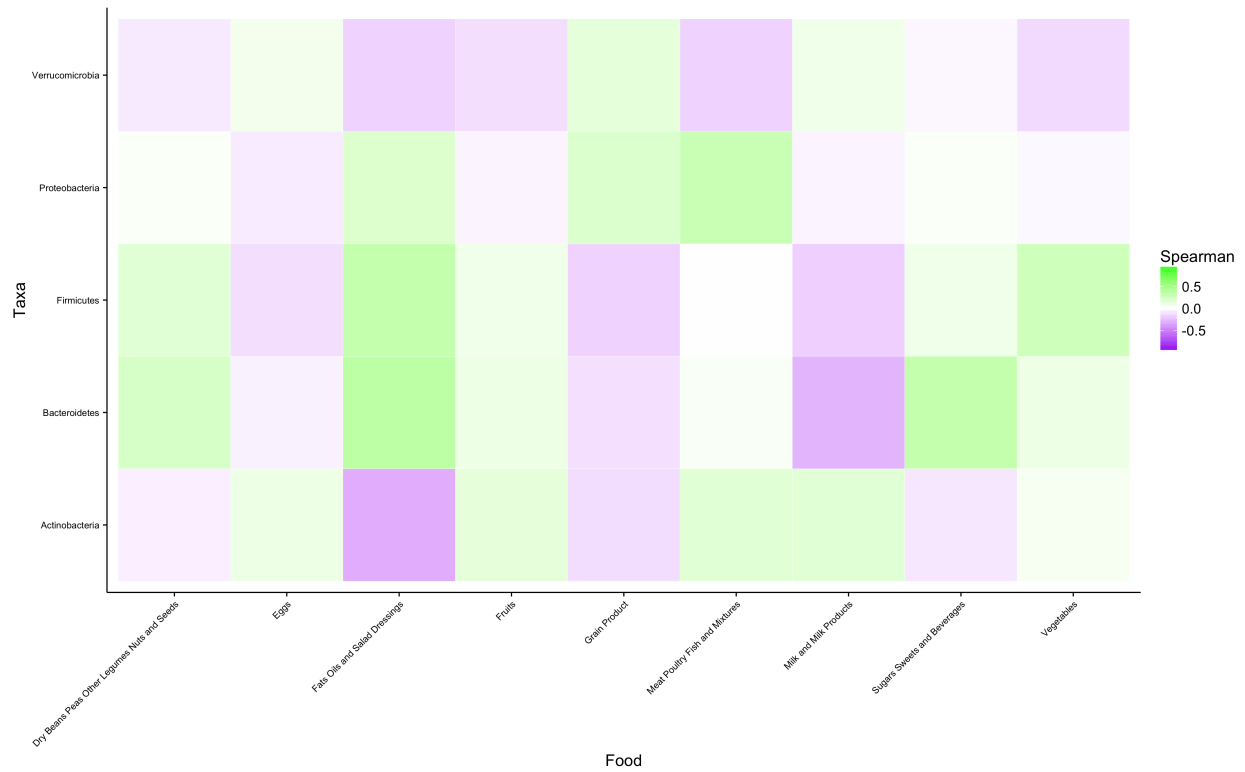# Microbes v. food

Abby

May 9, 2017

Repeat this but with the averages from the individual people comparisons

```
## Loading required package: abind
```

Repeat previous steps

```
##      fdr_pval  Correlation                                              Food
## 1   0.7837852 -0.049412725                                              Eggs
## 2   0.7917428 -0.046462113                                              Eggs
## 3   0.8571808 -0.045989307                    Fats Oils and Salad Dressings
## 4   0.8733955 -0.037938944                                            Fruits
## 5   0.8362280 -0.034202879                    Fats Oils and Salad Dressings
## 6   0.8379266 -0.033897219                      Sugars Sweets and Beverages
## 7   0.8327886 -0.032417077                                     Grain Product
## 8   0.8666568 -0.032125407 Dry Beans Peas Other Legumes Nuts and Seeds
## 9   0.8371777 -0.030370092                                              Eggs
## 10  0.8890120 -0.022991071                                        Vegetables
## 11  0.8633949 -0.021293430                    Meat Poultry Fish and Mixtures
## 12  0.8763292 -0.020866615                    Meat Poultry Fish and Mixtures
## 13  0.8809601 -0.020066055 Dry Beans Peas Other Legumes Nuts and Seeds
## 14  0.8457486 -0.019325206                      Sugars Sweets and Beverages
## 15  0.8491543 -0.018835813                            Milk and Milk Products
## 16  0.8322011 -0.018556146                                            Fruits
## 17  0.8906155 -0.015513393                      Sugars Sweets and Beverages
## 18  0.8011077 -0.013316641                                            Fruits
## 19  0.8515024 -0.007640111                            Milk and Milk Products
## 20  0.8344465 -0.007336414                                     Grain Product
## 21  0.8400846 -0.003564219 Dry Beans Peas Other Legumes Nuts and Seeds
## 22  0.8865096 -0.002895166                                              Eggs
## 23  0.8313365 -0.001596665                                        Vegetables
## 24  0.8891010  0.000000000                    Fats Oils and Salad Dressings
## 25  0.8757423  0.000000000                    Fats Oils and Salad Dressings
## 26  0.8847439  0.000000000                    Meat Poultry Fish and Mixtures
## 27  0.8843883  0.000000000                            Milk and Milk Products
## 28  0.8806877  0.000000000                            Milk and Milk Products
## 29  0.8760446  0.000000000                            Milk and Milk Products
## 30  0.8537959  0.002146305                                            Fruits
## 31  0.8587666  0.002214509                      Sugars Sweets and Beverages
## 32  0.8663773  0.006998528                            Milk and Milk Products
## 33  0.8375906  0.007074952                                        Vegetables
## 34  0.8491878  0.007512701 Dry Beans Peas Other Legumes Nuts and Seeds
## 35  0.8794198  0.012371134                    Fats Oils and Salad Dressings
## 36  0.8166270  0.014013223                                     Grain Product
## 37  0.8735007  0.014950674                                     Grain Product
## 38  0.8829263  0.017520778                                            Fruits
## 39  0.8573984  0.018073333                                              Eggs
## 40  0.8288016  0.018849467                                            Fruits
## 41  0.8668322  0.019090089                                              Eggs
## 42  0.8623923  0.020967742                    Meat Poultry Fish and Mixtures
## 43  0.8647090  0.021222527                      Sugars Sweets and Beverages
## 44  0.8112795  0.022271479                                     Grain Product
## 45  0.8395273  0.025586265 Dry Beans Peas Other Legumes Nuts and Seeds
## 46  0.8466461  0.025806452                    Meat Poultry Fish and Mixtures
## 47  0.8639014  0.026239879                                        Vegetables
## 48  0.8620245  0.034852033 Dry Beans Peas Other Legumes Nuts and Seeds
## 49  0.8530140  0.036339935                    Fats Oils and Salad Dressings
## 50  0.8534215  0.038352273                      Sugars Sweets and Beverages
## 51  0.8348424  0.038795625                                     Grain Product
```

```
## 52 0.8918830  0.045366427           Meat Poultry Fish and Mixtures
## 53 0.8350779  0.045797508                              Vegetables
## 54 0.8125823  0.052077921                              Vegetables
##               Taxa
## 1       Firmicutes
## 2    Actinobacteria
## 3    Proteobacteria
## 4    Actinobacteria
## 5    Actinobacteria
## 6     Bacteroidetes
## 7     Bacteroidetes
## 8        Firmicutes
## 9    k  Bacteria;NA
## 10    Bacteroidetes
## 11    Bacteroidetes
## 12   k  Bacteria;NA
## 13   k  Bacteria;NA
## 14   k  Bacteria;NA
## 15   Proteobacteria
## 16  Verrucomicrobia
## 17   Proteobacteria
## 18       Firmicutes
## 19   k  Bacteria;NA
## 20       Firmicutes
## 21  Verrucomicrobia
## 22   Proteobacteria
## 23  Verrucomicrobia
## 24       Firmicutes
## 25  Verrucomicrobia
## 26   Actinobacteria
## 27   Actinobacteria
## 28    Bacteroidetes
## 29       Firmicutes
## 30    Bacteroidetes
## 31       Firmicutes
## 32  Verrucomicrobia
## 33   Actinobacteria
## 34   Actinobacteria
## 35   k  Bacteria;NA
## 36   Proteobacteria
## 37   k  Bacteria;NA
## 38   Proteobacteria
## 39    Bacteroidetes
## 40   k  Bacteria;NA
## 41  Verrucomicrobia
## 42       Firmicutes
## 43  Verrucomicrobia
## 44  Verrucomicrobia
## 45   Proteobacteria
## 46   Proteobacteria
## 47   k  Bacteria;NA
## 48    Bacteroidetes
## 49    Bacteroidetes
## 50   Actinobacteria
```

```
## 51  Actinobacteria
## 52 Verrucomicrobia
## 53      Firmicutes
## 54  Proteobacteria

##
## Attaching package: 'igraph'

## The following object is masked from 'package:tibble':
##
##     as_data_frame

## The following objects are masked from 'package:dplyr':
##
##     as_data_frame, groups, union

## The following object is masked from 'package:tidyr':
##
##     crossing

## The following objects are masked from 'package:stats':
##
##     decompose, spectrum

## The following object is masked from 'package:base':
##
##     union
```
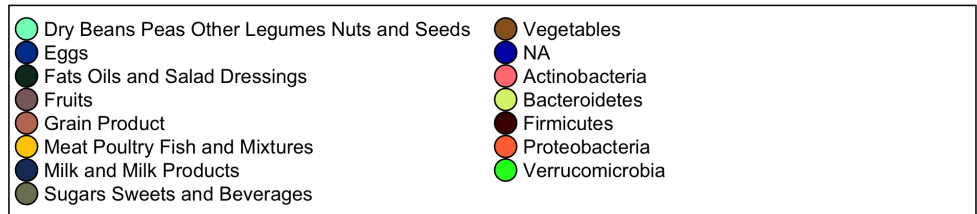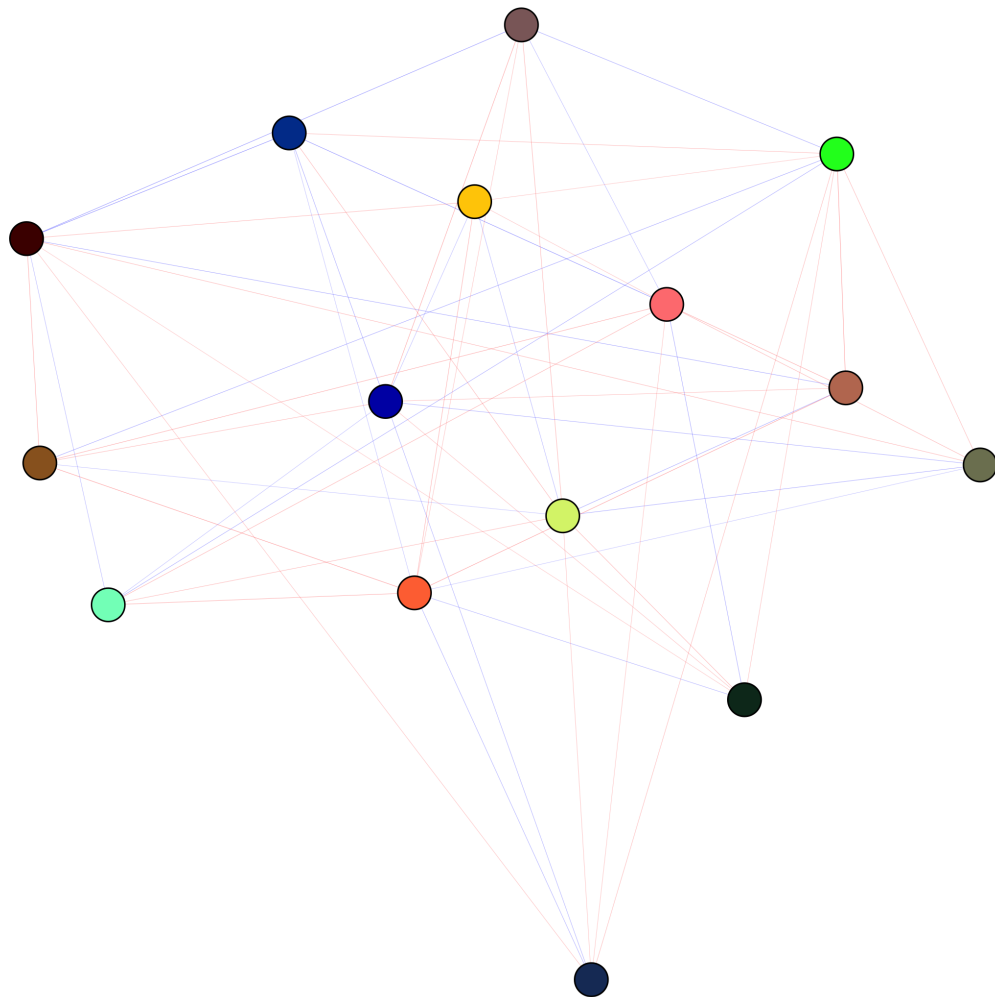
Average of inidvidual correlations

Dry Beans Peas Other Legumes Nuts and Seeds
Eggs
Fats Oils and Salad Dressings
Fruits
Grain Product
Meat Poultry Fish and Mixtures
Milk and Milk Products
Sugars Sweets and Beverages
Vegetables
NA
Actinobacteria
Bacteroidetes
Firmicutes
Proteobacteria
Verrucomicrobia

NUTR variables: