

## Week One: Reading different file types

### Raw versus Processed Data

- Raw data - Original source of the data
- Processed data - Ready for analysis

### Components of Tidy Data

- Raw Data
- Tidy Data Set
- A code book of each variable and value (and units)
- Explicit and exact recipe to go from 1 to 2,3

### Downloading Files

- Check for and create directory exists `** if(!file.exists("data")) { dir.create("data")} **`  
`download.file()`

### Read Excel Files

- `library(xlsx) *r ead.xlsx`

### Read XML

- Refer to class notes for best example

### Reading JSON

- `Library(jsonlite) ** fromJSON("")`

### Writing data frames to JSON

- `toJSON(iris, pretty=true)`

### Read more about data.table