Stat 245 – Tidy Dataset

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```
bihs_household <- readxl::read_excel('BIHS_household_2011_15.xlsx')
bihs_child <- readxl::read_excel('BIHS_child_health_2011_15.xlsx')
```

Food Security

Summary Statistics

```
fs <- bihs_household %>% select(fcs, dd_1_wheat, dd_2_wheat, dd_3_tubers, dd_4_cereals, dd_5_vegetables
```

Summary of Food Consumption Score

```
pander::pander( summary(fs$fcs, fs$hhs_total) )
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
18	51.5	63	64.83	79.5	112	11

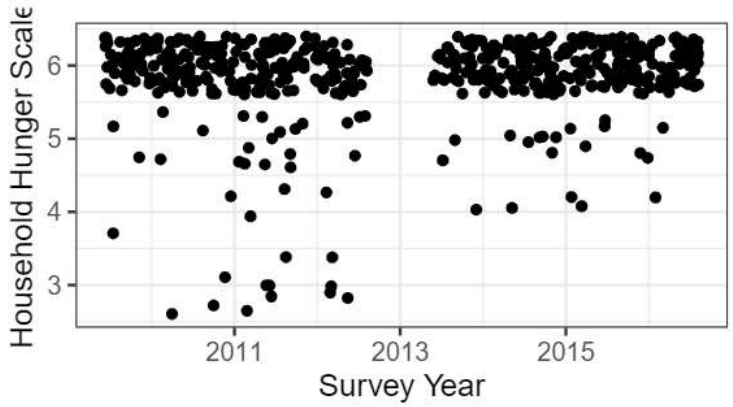
Summary of Total Household Hunger Scale

```
pander::pander( summary(fs$hhs_total) )
```

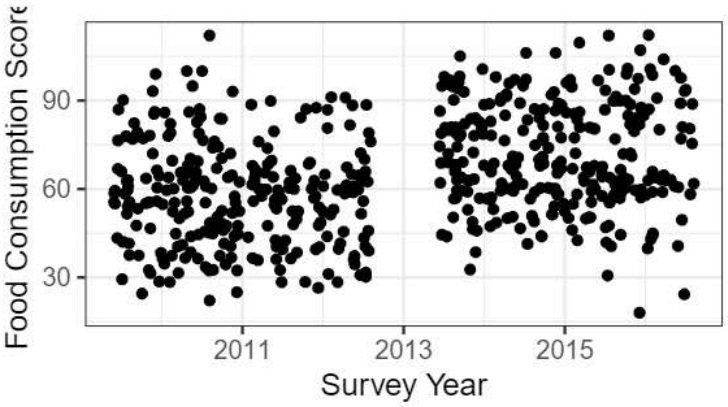
Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
3	6	6	5.828	6	6	10

Data Exploration Plots

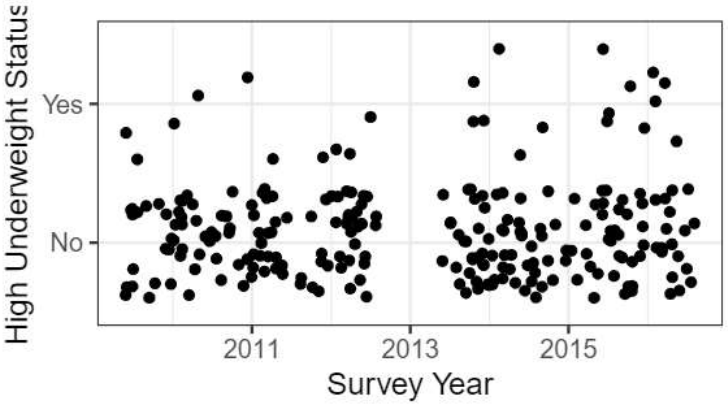
```
gf_jitter(hhs_total ~ survey_year, data = bihs_household, ylab = "Household Hunger Scale", xlab = "Surv
```




```
gf_jitter(fcs ~ survey_year, data = bihs_household, xlab = "Survey Year", ylab = "Food Consumption Scor
```

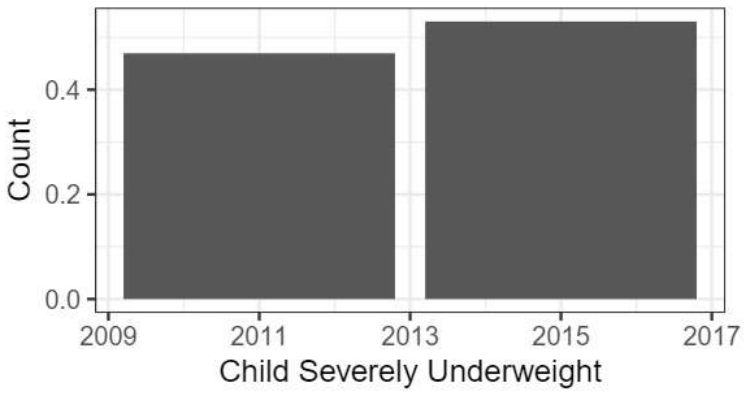



```
gf_jitter(underweight_high ~ survey_year, data = bihs_child, xlab = "Survey Year", ylab = "High Underwe
```

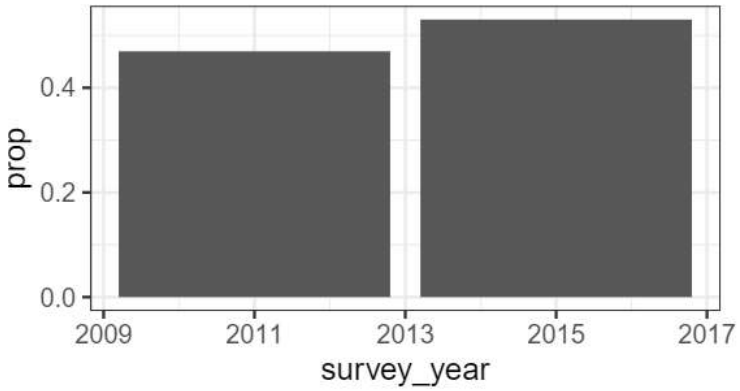



```
underweight <- bihs_child %>% select(underweight_high, survey_year)

require(ggplot2)
gf_bar(..prop..~survey_year, data = underweight, xlab = "Child Severely Underweight", ylab = "Count")
```




```
ggplot(underweight) + geom_bar(aes(x = survey_year, y = ..prop.., group = 1), stat = 'count')
```


0.4
0.2
0.0
prop
2009
2011
2013
2015
2017
survey_year