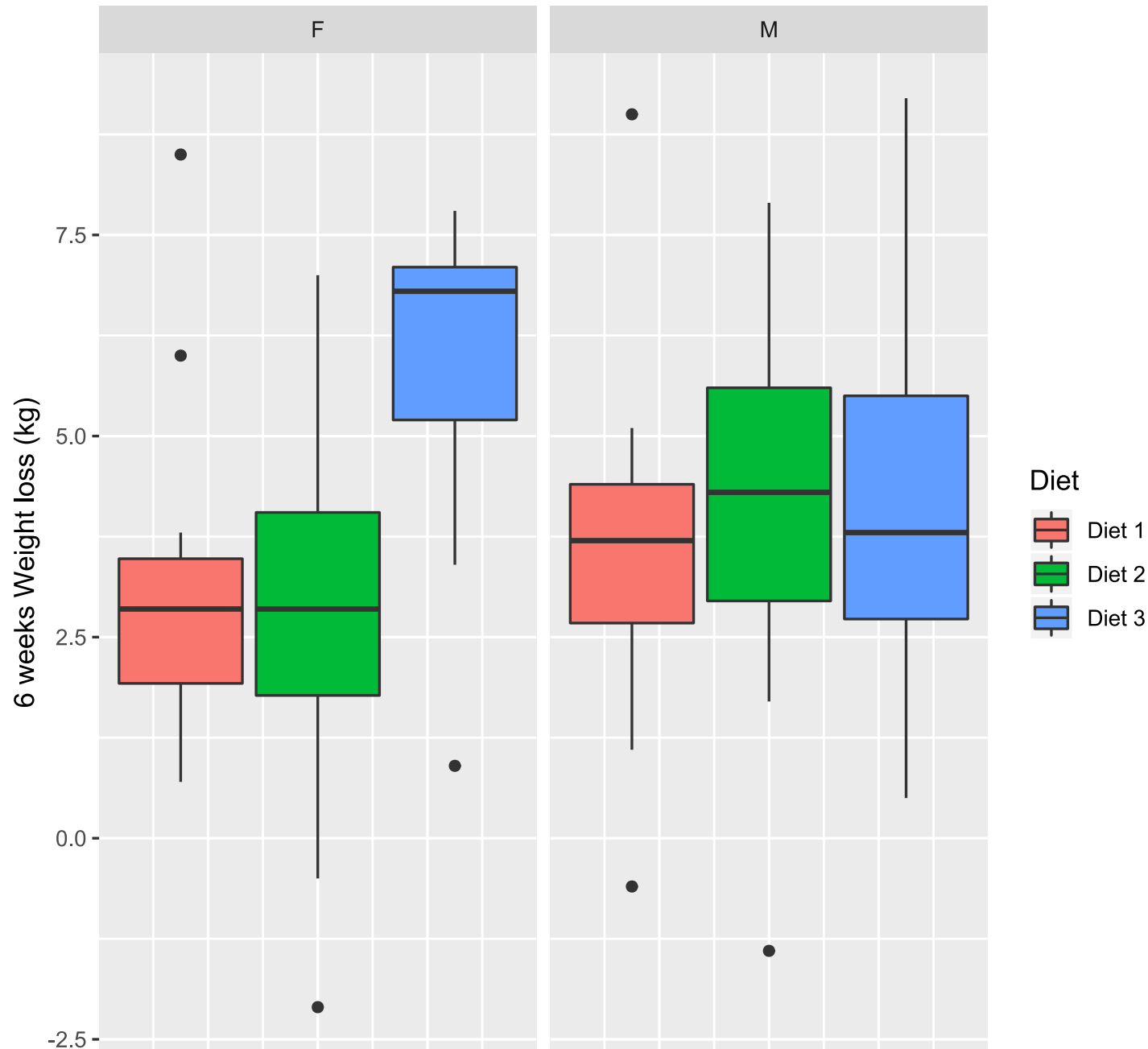# Diet Study Exploratory Analysis

Robert Garrett

Questions of interest

- **Which diet is the best for losing weight?**
  - Which diet had the highest average weight loss?
  - Did everyone lose weight equally?

- **What is the effect of gender on losing weight?**
  - Did one gender lose less weight in general?
  - Does a subject's gender influence the best diet for weight loss?

- **How can we improve our study of diet on weight loss?**
  - Should we do a separate analysis for each gender?
  - Or should we simply scale weight loss values?
  - We can adjust for age, height, and starting weight to better our estimates

Six Weeks Weight Loss by Diet Number

n	mean	sd
24	3.3	2.24

Diet 1

n	mean	sd
25	3.27	2.46

Diet 2

n	mean	sd
27	5.15	2.4

Diet 3
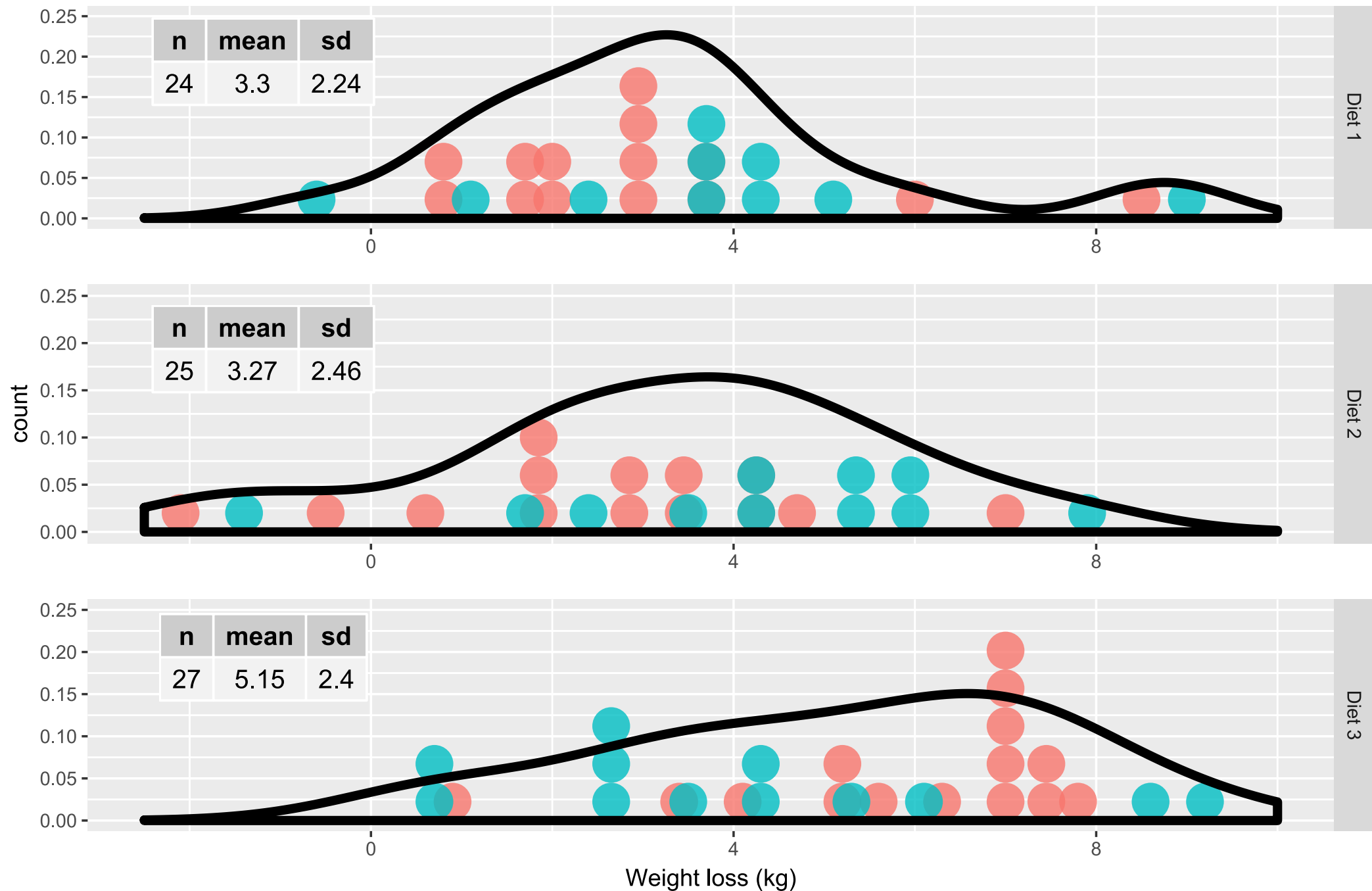
Weight loss (kg)

Comparisons of Weight Loss for each Diet by Gender

For Females in the study...

- Diet 3 has a higher median weight loss than other diets

- Diet 1 has the max value, but no other convincing arguments

For Males in the study...

- Diet 2 has the highest median but also minimum value

- Diet 3 has two observations above 8 kg, though