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EEB 201
Pinter-Wollman Exercises

I.1.

For plot, see martin_pinter-wollman_day2_output_chickweightday0.pdf

No statistical significance.

ANOVA summary

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
day0\$Diet	3	4.32	1.440	1.132	0.346
Residuals	46	58.50	1.272		

Tukey summary

```
$`day0$Diet`
```

	diff	lwr	upr	p adj
2-1	-0.7	-1.864187	0.4641869	0.3872164
3-1	-0.6	-1.764187	0.5641869	0.5219101
4-1	-0.4	-1.564187	0.7641869	0.7965223
3-2	0.1	-1.244287	1.4442873	0.9971988
4-2	0.3	-1.044287	1.6442873	0.9331261
4-3	0.2	-1.144287	1.5442873	0.9786117

I.2.

For plot, see martin_pinter-wollman_day2_output_chickweightday21.pdf

Statistically significant.

ANOVA summary

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
day21\$Diet	3	57164	19055	4.655	0.00686 **
Residuals	41	167839	4094		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Tukey summary

```
$`day21$Diet`
```

	diff	lwr	upr	p adj
2-1	36.95000	-32.11064	106.01064	0.4868095
3-1	92.55000	23.48936	161.61064	0.0046959
4-1	60.80556	-10.57710	132.18821	0.1192661
3-2	55.60000	-21.01591	132.21591	0.2263918
4-2	23.85556	-54.85981	102.57092	0.8486781
4-3	-31.74444	-110.45981	46.97092	0.7036249

I.3

Statistically significant.

ANOVA summary

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
ChickWeight\$Diet	3	155863	51954	44.77	< 2e-16 ***
ChickWeight\$Time	1	2016357	2016357	1737.37	< 2e-16 ***
ChickWeight\$Diet:ChickWeight\$Time	3	80804	26935	23.21	3.47e-14 ***
Residuals	570	661532	1161		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

I.4.

For plot, see martin_pinter-wollman_day2_output_DietEffectsOnGrowth.pdf

I.5.

For plot, see martin_pinter-wollman_day2_output_IndividualChickGrowth.pdf

II.

N/A