ToothGrowth Analysis

Phillip Chaffee

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Synopsis

This report takes a look at the dataset within R on tooth growth. What it is, and some comparisons of the different vairables effects on tooth growth.

Data Analysis

Load the data

```
library(datasets)
toothgrowth <- ToothGrowth
```

Analyze and summarize the data

```
colnames(toothgrowth)
```

```
## [1] "len"  "supp" "dose"
```

```
head(toothgrowth)
```

```
##     len supp dose
## 1  4.2   VC  0.5
## 2 11.5   VC  0.5
## 3  7.3   VC  0.5
## 4  5.8   VC  0.5
## 5  6.4   VC  0.5
## 6 10.0   VC  0.5
```

The data set measures tooth growth in length (len) as affected by Vitamin C administration (supp), given through ascorbic acid (VC) and orange juice (OJ) in variant doses (dose).

Explore the data

Let's look at how tooth growth relates to Vitamin C dose between type of administration: orange juice or asorbuic acid.

```
library(lattice)
xyplot(len ~ dose | supp, data=toothgrowth, type=c("p","r"))
```
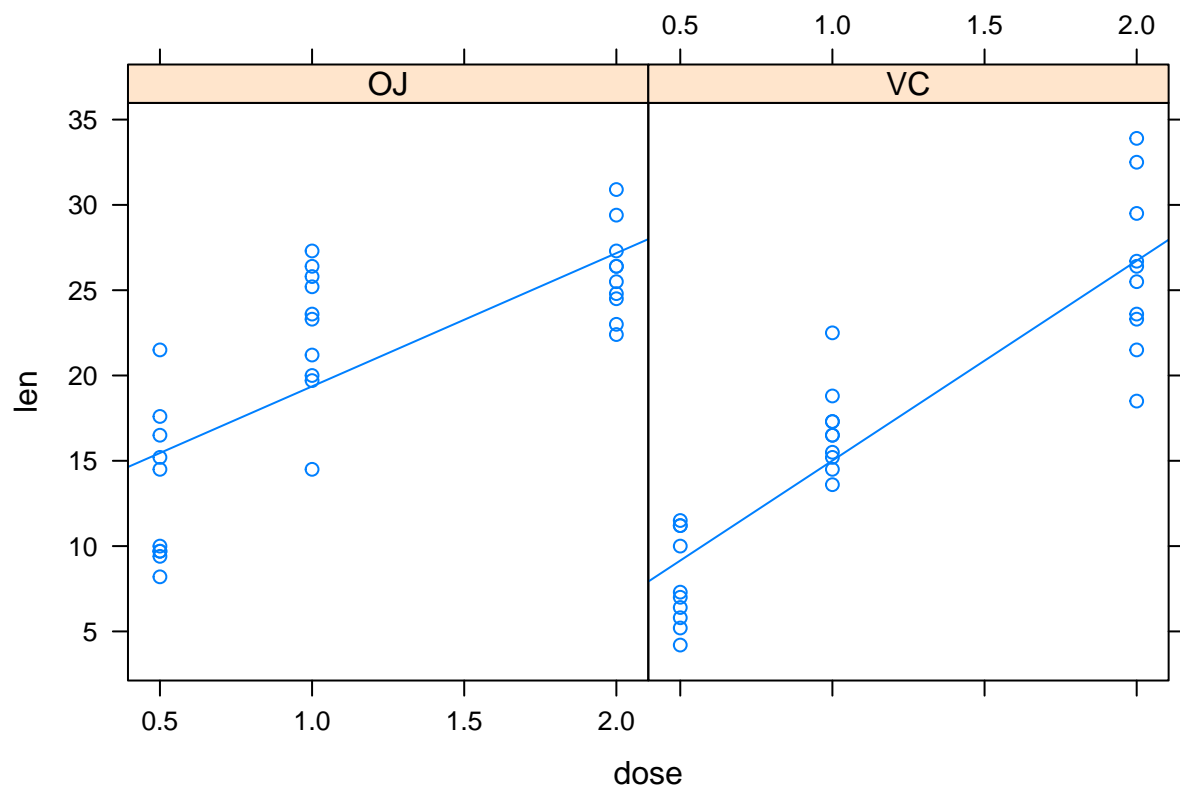
Conclusion

It seems that Vitamin C affects tooth growth no matter what, but does a better job in small doses when administered through Orange Juice.