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```
R> summary(wg_aov)
```

```
              Df Sum Sq Mean Sq F value Pr(>F)
source         1  220.9   220.9   0.9879 0.32688
type           1 1299.6  1299.6   5.8123 0.02114 *
source:type    1  883.6   883.6   3.9518 0.05447 .
Residuals     36 8049.4   223.6
```

The resulting analysis of variance table in Figure 4.2 shows that the main effect of type is highly significant confirming what was seen in Figure 4.1. The main effect of source is not significant. But interpretation of both these main effects is complicated by the type  $\times$  source interaction which approaches significance at the 5% level. To try to understand this interaction effect it will be useful to plot the mean weight gain for low- and high-protein diets for each level of source of protein, beef and cereal. The required R code is given with Figure 4.3. From the resulting plot we see that for low-protein diets, the use of cereal as the source of the protein leads to a greater weight gain than using beef. For high-protein diets the reverse is the case with the beef/high diet leading to the highest weight gain.