**One-way ANOVA**

**Response: Fluid Water Intake** (grams)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Df** | **Sum Sq** | **Mean Sq** | **F-value** | **Pr (>F)** |
| **Visit** (day) | 9 | 681278184 | 75697576 | 59.976 | 2.20x10-16 *\*\*\** |
| **Residuals** | 1227 | 1548645145 | 1262139 |  |  |

Signif. codes: 0.000 = \*\*\* | 0.001 = \*\* | 0.01 = \* | 0.05 = . | 0.1 = ‘ ‘ | 1 = *blank*

**Response: Food Water Intake** (grams)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Df** | **Sum Sq** | **Mean Sq** | **F-value** | **Pr (>F)** |
| **Visit** (day) | 9 | 3233489 | 359277 | 3.8681 | 7.51x10-5  *\*\*\** |
| **Residuals** | 1234 | 114617324 | 92883 |  |  |

Signif. codes: 0.000 = \*\*\* | 0.001 = \*\* | 0.01 = \* | 0.05 = . | 0.1 = ‘ ‘ | 1 = *blank*

**Tukey Honest Significant Differences** (HSD)

Food Water Intake (specific visit significance)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Visit (day)** | **Difference** | **Lower** | **Upper** | **P. Adj** |
| D6 | D10 | -124.1475075 | -246.5792897 | -1.715725357 | 0.043716261 |
| D7 | D10 | -131.0507155 | -253.4824977 | -8.618933357 | 0.024806086 |
| D5 | D2 | -132.7506949 | -255.6852295 | -9.816160236 | 0.022467792 |
| D6 | D2 | -138.1878549 | -261.1223895 | -15.25332024 | 0.013926697 |
| D7 | D2 | -145.0910629 | -268.0255975 | -22.15652824 | 0.007330446 |

**\****Tukey's range test, also known as the Tukey's honest significance test, is a single-step multiple comparison procedure.*

*Assumptions: The observations being tested are independent within and among the groups, groups associated with each mean in the test are normally distributed, equal within-group variance across the groups associated with each mean in the test*

**Tukey Honest Significant Differences** (HSD)

Fluid Water Intake (expected)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Visit (day)** | **Difference** | **Lower** | **Upper** | **P. Adj** |
| D10 | D11 | 1036.546742 | 584.3210954 | 1488.772388 | 2.97E-11 |
| D2 | D10 | 1593.579563 | 1140.435691 | 2046.723435 | 0 |
| D3 | D10 | 1624.365366 | 1173.045077 | 2075.685655 | 0 |
| D4 | D10 | 1655.844089 | 1203.618442 | 2108.069735 | 0 |
| D5 | D10 | 1786.545083 | 1333.401211 | 2239.688955 | 0 |
| D6 | D10 | 1697.19162 | 1244.047748 | 2150.335492 | 0 |
| D7 | D10 | 1575.021742 | 1121.87787 | 2028.165614 | 0 |
| D2 | D11 | 557.0328211 | 103.888949 | 1010.176693 | 0.004060251 |
| D3 | D11 | 587.8186241 | 136.4983351 | 1039.138913 | 0.001597564 |
| D4 | D11 | 619.2973468 | 167.0717003 | 1071.522993 | 0.000645935 |
| D5 | D11 | 749.9983414 | 296.8544693 | 1203.142213 | 8.11E-06 |
| D6 | D11 | 660.644878 | 207.5010059 | 1113.78875 | 0.000181715 |
| D7 | D11 | 538.4749999 | 85.33112783 | 991.618872 | 0.006663775 |
| D8 | D11 | -1030.916323 | -1483.141969 | -578.6906761 | 3.93E-11 |
| D9 | D11 | -1036.426347 | -1488.651993 | -584.2007003 | 2.99E-11 |
| D8 | D2 | -1587.949144 | -2041.093016 | -1134.805272 | 0 |
| D9 | D2 | -1593.459168 | -2046.60304 | -1140.315296 | 0 |
| D8 | D3 | -1618.734947 | -2070.055236 | -1167.414658 | 0 |
| D9 | D3 | -1624.244971 | -2075.56526 | -1172.924682 | 0 |
| D8 | D4 | -1650.213669 | -2102.439316 | -1197.988023 | 0 |
| D9 | D4 | -1655.723694 | -2107.94934 | -1203.498047 | 0 |
| D8 | D5 | -1780.914664 | -2234.058536 | -1327.770792 | 0 |
| D9 | D5 | -1786.424688 | -2239.56856 | -1333.280816 | 0 |
| D8 | D6 | -1691.561201 | -2144.705073 | -1238.417328 | 0 |
| D9 | D6 | -1697.071225 | -2150.215097 | -1243.927353 | 0 |
| D8 | D7 | -1569.391323 | -2022.535195 | -1116.24745 | 0 |
| D9 | D7 | -1574.901347 | -2028.045219 | -1121.757475 | 0 |