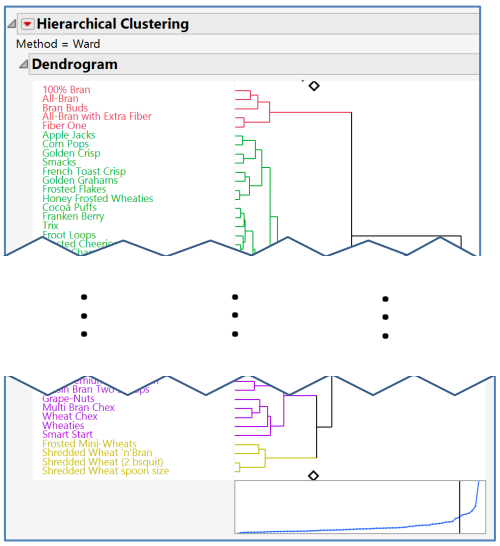
Clustering

Use Hierarchical or K-Means Clustering to form clusters (groups) of observations having similar characteristics.

Hierarchical Clustering

Cereal.jmp (Help > Sample Data Folder)



1. From an open JMP® data table, select **Analyze > Clustering > Hierarchical Cluster.**
2. Select one or more numeric variables from **Select Columns** and click **Y, Columns**. Here we used the 13 numeric variables.
3. If available, select a **Label** variable.
4. Select the desired **method** (bottom left corner) and click **OK**.

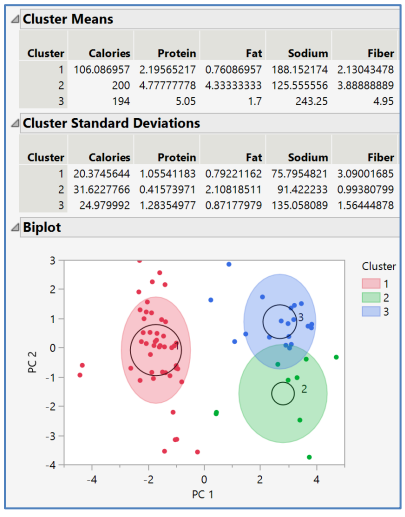
   JMP will generate:

   - A **dendrogram**, showing the clusters formed at each step.
   - A **scree plot**, showing the distance bridged each step.
   - The **clustering history**, giving cluster statistics for each step.

Tips:

- To **color clusters**, to **mark or save clusters**, or to **request other options**, click the **top red triangle**.
- To dynamically change the number of clusters, click and drag one of the **black diamonds** left or right.

K-Means Clustering



1. From an open JMP data table, select **Analyze > Clustering > K Means Cluster.**
2. Select one or more numeric variables from **Select Columns** and click **Y, Columns**. Here we used 13 numeric variables. Click **OK**.
3. In the resulting **Control Panel**, choose **K Means Cluster** Under **Method**.
4. Enter the number of clusters. Click **Go**. Here we chose 3.

   JMP will generate:

   - A **summary** of the cluster sizes.
   - Tables of **cluster means** and **standard deviations** for each variable.

Tips:

- To obtain biplots, parallel plots or request other options, click the **red triangle** for the **K Means** heading.
- To perform analyses for a range of cluster sizes: In the **Control Panel**, enter the lower limit in **number of clusters** and the upper limit in **range of clusters**, then click **Go**.
- To step through the formation of the clusters: In the **Control Panel**, check **Single Step** then click **Go**.

Visit **Multivariate Methods > Hierarchical Cluster** and **K Means Cluster** in **JMP Help** to learn more.