

```

GET
  FILE='A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_162536636
6840.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
GET
  FILE='A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_163093052
6720.sav'.
DATASET NAME DataSet2 WINDOW=FRONT.
DATASET CLOSE DataSet2.
DATASET ACTIVATE DataSet1.
DESCRIPTIVES VARIABLES=TotalFat_g CaloriesFromFat Cholesterol_mg Carbohydra
tes_g
  /SAVE
  /STATISTICS=MEAN STDDEV MIN MAX.

```

Descriptives

Notes

Output Created		11-SEP-2021 01:56:18
Comments		
Input	Data	A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_1625366366840.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	190
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=TotalFat_g CaloriesFromFat Cholesterol_mg Carbohydrates_g /SAVE /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

Notes

Variables Created or Modified	ZTotalFat_g	Zscore: Total Fat (g)
	ZCaloriesFromFat	Zscore: Calories From Fat
	ZCholesterol_mg	Zscore: Cholesterol (mg)
	ZCarbohydrates_g	Zscore: Carbohydrates (g)

[DataSet1] A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_1625366366840.sav

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Total Fat (g)	190	3	92	26.96	15.065
Calories From Fat	164	35	830	246.74	135.540
Cholesterol (mg)	190	5	260	75.47	43.822
Carbohydrates (g)	190	4	126	42.86	15.649
Valid N (listwise)	164				

```
QUICK CLUSTER ZTotalFat_g ZCaloriesFromFat ZCholesterol_mg ZCarbohydrates_g
/MISSING=LISTWISE
/CRITERIA=CLUSTER(2) MXITER(10) CONVERGE(0)
/METHOD=KMEANS(NOUPDATE)
/PRINT INITIAL ANOVA.
```

Quick Cluster

Notes

Output Created		11-SEP-2021 02:32:34
Comments		
Input	Data	A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_16 25366366840.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	190
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any clustering variable used.
Syntax		QUICK CLUSTER ZTotalFat_g ZCaloriesFromFat ZCholesterol_mg ZCarbohydrates_g /MISSING=LISTWISE /CRITERIA=CLUSTER (2) MXITER(10) CONVERGE(0) /METHOD=KMEANS (NOUPDATE) /PRINT INITIAL ANOVA.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.09
	Workspace Required	768 bytes

Initial Cluster Centers

	Cluster	
	1	2
Zscore: Total Fat (g)	-1.05964	4.31716
Zscore: Calories From Fat	-1.08262	4.30325
Zscore: Cholesterol (mg)	-1.15178	4.21077
Zscore: Carbohydrates (g)	-2.09962	.07298

Iteration History^a

Iteration	Change in Cluster Centers	
	1	2
1	2.606	3.285
2	.072	.569
3	.080	.459
4	.048	.237
5	.016	.078
6	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 6. The minimum distance between initial centers is 9.560.

Final Cluster Centers

	Cluster	
	1	2
Zscore: Total Fat (g)	-.30685	1.82790
Zscore: Calories From Fat	-.33547	1.78058
Zscore: Cholesterol (mg)	-.30018	1.44173
Zscore: Carbohydrates (g)	-.10344	.97987



ANOVA

	Cluster		Error		F
	Mean Square	df	Mean Square	df	
Zscore: Total Fat (g)	99.702	1	.399	162	249.876
Zscore: Calories From Fat	97.962	1	.401	162	244.012
Zscore: Cholesterol (mg)	66.384	1	.548	162	121.139
Zscore: Carbohydrates (g)	25.675	1	.860	162	29.843

ANOVA

	Sig.
Zscore: Total Fat (g)	.000
Zscore: Calories From Fat	.000
Zscore: Cholesterol (mg)	.000
Zscore: Carbohydrates (g)	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Number of Cases in each Cluster

Cluster	1	138.000
	2	26.000
Valid		164.000
Missing		26.000

```
QUICK CLUSTER ZTotalFat_g ZCaloriesFromFat ZCholesterol_mg ZCarbohydrates_g
/MISSING=LISTWISE
/CRITERIA=CLUSTER(3) MXITER(10) CONVERGE(0)
/METHOD=KMEANS(NOUPDATE)
/SAVE CLUSTER
/PRINT INITIAL ANOVA.
```

Quick Cluster

Notes

Output Created		11-SEP-2021 02:33:26
Comments		
Input	Data	A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_16 25366366840.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	190
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any clustering variable used.

Notes

Syntax		QUICK CLUSTER ZTotalFat_g ZCaloriesFromFat ZCholesterol_mg ZCarbohydrates_g /MISSING=LISTWISE /CRITERIA=CLUSTER (3) MXITER(10) CONVERGE(0) /METHOD=KMEANS (NOUPDATE) /SAVE CLUSTER /PRINT INITIAL ANOVA.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.11
	Workspace Required	944 bytes
Variables Created or Modified	QCL_1	Cluster Number of Case

Initial Cluster Centers

	Cluster		
	1	2	3
Zscore: Total Fat (g)	-1.05964	4.31716	1.59557
Zscore: Calories From Fat	-1.08262	4.30325	1.57343
Zscore: Cholesterol (mg)	-1.15178	4.21077	-.01081
Zscore: Carbohydrates (g)	-2.09962	.07298	4.80158

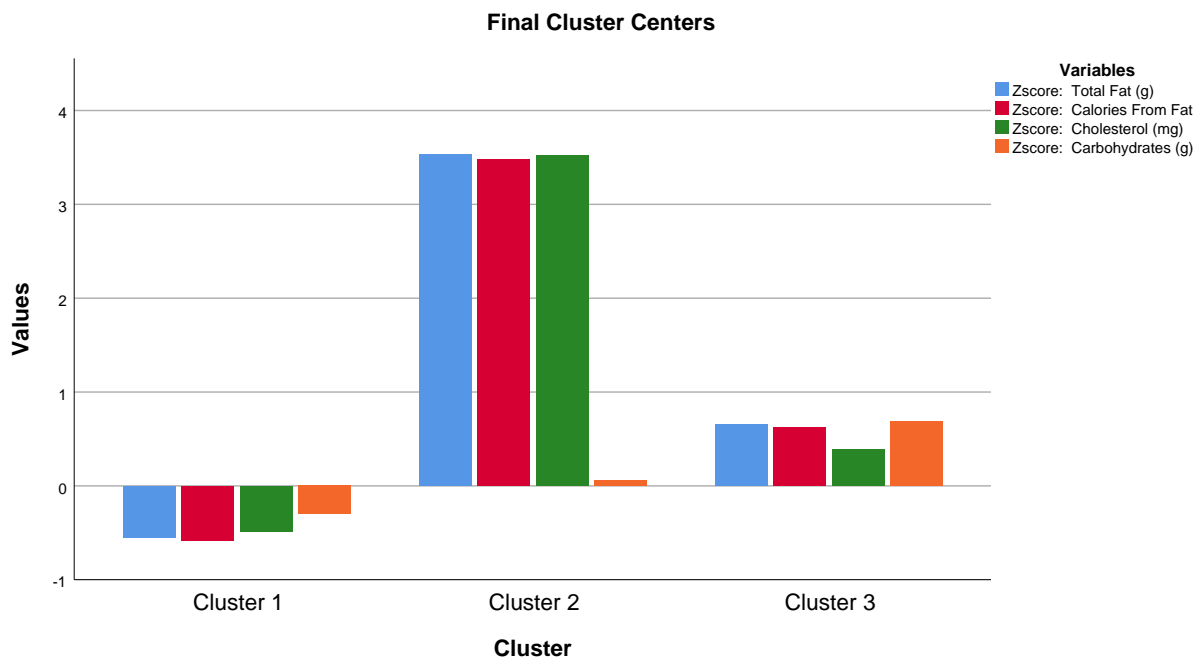
Iteration History^a

Iteration	Change in Cluster Centers		
	1	2	3
1	2.453	2.626	2.606
2	.068	.377	.318
3	.046	.000	.319
4	.013	.214	.196
5	.044	.419	.285
6	.060	.661	.257
7	.085	.407	.221
8	.103	.000	.215
9	.047	.000	.083
10	.022	.000	.039

a. Iterations stopped because the maximum number of iterations was performed. Iterations failed to converge. The maximum absolute coordinate change for any center is .024. The current iteration is 10. The minimum distance between initial centers is 7.419.

Final Cluster Centers

	Cluster		
	1	2	3
Zscore: Total Fat (g)	-.55072	3.53166	.65275
Zscore: Calories From Fat	-.58144	3.47939	.62180
Zscore: Cholesterol (mg)	-.48794	3.52619	.39336
Zscore: Carbohydrates (g)	-.29880	.06233	.68490



ANOVA

	Cluster		Error		F
	Mean Square	df	Mean Square	df	
Zscore: Total Fat (g)	64.919	2	.214	161	302.924
Zscore: Calories From Fat	64.459	2	.212	161	304.497
Zscore: Cholesterol (mg)	53.605	2	.298	161	179.985
Zscore: Carbohydrates (g)	17.887	2	.803	161	22.276

ANOVA

	Sig.
Zscore: Total Fat (g)	.000
Zscore: Calories From Fat	.000
Zscore: Cholesterol (mg)	.000
Zscore: Carbohydrates (g)	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Number of Cases in each Cluster

Cluster	1	99.000
	2	6.000
	3	59.000
Valid		164.000
Missing		26.000

```

QUICK CLUSTER ZTotalFat_g ZCaloriesFromFat ZCholesterol_mg ZCarbohydrates_g
/MISSING=LISTWISE
/CRITERIA=CLUSTER(4) MXITER(10) CONVERGE(0)
/METHOD=KMEANS(NOUPDATE)
/SAVE CLUSTER
/PRINT INITIAL ANOVA.

```

Quick Cluster

Notes

Output Created		11-SEP-2021 02:35:43
Comments		
Input	Data	A:\college\BITS\Course Material\SEM 2\ASM\BurgersOriginal_16 25366366840.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	190
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any clustering variable used.

Notes

Syntax	QUICK CLUSTER ZTotalFat_g ZCaloriesFromFat ZCholesterol_mg ZCarbohydrates_g /MISSING=LISTWISE /CRITERIA=CLUSTER (4) MXITER(10) CONVERGE(0) /METHOD=KMEANS (NOUPDATE) /SAVE CLUSTER /PRINT INITIAL ANOVA.	
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.07
	Workspace Required	1128 bytes
Variables Created or Modified	QCL_2	Cluster Number of Case

Initial Cluster Centers

	Cluster			
	1	2	3	4
Zscore: Total Fat (g)	-.86050	.46711	1.99385	4.31716
Zscore: Calories From Fat	-.86128	.46674	1.94232	4.30325
Zscore: Cholesterol (mg)	-1.49407	1.13016	.33148	4.21077
Zscore: Carbohydrates (g)	1.35098	-.56602	5.31278	.07298

Iteration History^a

Iteration	Change in Cluster Centers			
	1	2	3	4
1	1.528	1.115	1.334	1.328
2	.402	.443	.477	.407
3	.092	.142	.000	.000
4	.033	.048	.000	.000
5	.022	.033	.000	.000
6	.000	.000	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 6. The minimum distance between initial centers is 3.753.

Final Cluster Centers

	Cluster			
	1	2	3	4
Zscore: Total Fat (g)	-.60604	.48959	1.21057	3.33094
Zscore: Calories From Fat	-.63707	.46079	1.16027	3.28089
Zscore: Cholesterol (mg)	-.54199	.33148	.33148	3.23280
Zscore: Carbohydrates (g)	-.33598	.34507	3.90698	.07298

ANOVA

	Cluster		Error		
	Mean Square	df	Mean Square	df	F
Zscore: Total Fat (g)	44.249	3	.197	160	224.090
Zscore: Calories From Fat	43.924	3	.195	160	225.056
Zscore: Cholesterol (mg)	35.621	3	.302	160	118.004
Zscore: Carbohydrates (g)	31.045	3	.449	160	69.075

ANOVA

	Sig.
Zscore: Total Fat (g)	.000
Zscore: Calories From Fat	.000
Zscore: Cholesterol (mg)	.000
Zscore: Carbohydrates (g)	.000

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

Number of Cases in each Cluster

Cluster	1	90.000
	2	62.000
	3	5.000
	4	7.000
Valid		164.000
Missing		26.000