GET

 $\label{thm:likelike} FILE='\kclad.ds.kcl.ac.ukanywhere\UserData\TGStore03\k1759846\My Documents\diabetes-raw data.sav'.$ 

DATASET NAME DataSet1 WINDOW=FRONT.

COMPUTE chol\_ratio=chol / hdl.

EXECUTE.

EXAMINE VARIABLES=chol\_ratio BY gender

/PLOT=BOXPLOT

/STATISTICS=NONE

/NOTOTAL.

### **Explore**

#### **Notes**

Output Created		18-OCT-2017 12:03:14
Comments		
Input	Data	\\kclad.ds.kcl.ac. uk\anywhere\UserData\TG Store03\k1759846\My Documents\diabetes - raw data.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	403
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=chol_ratio BY gender /PLOT=BOXPLOT /STATISTICS=NONE /NOTOTAL.
Resources	Processor Time	00:00:02.41
	Elapsed Time	00:00:01.88

[DataSet1]  $\kclad.ds.kcl.ac.uk\anywhere\UserData\TGStore03\k1759846\My Documents\diabetes - raw data.sav$ 

# gender

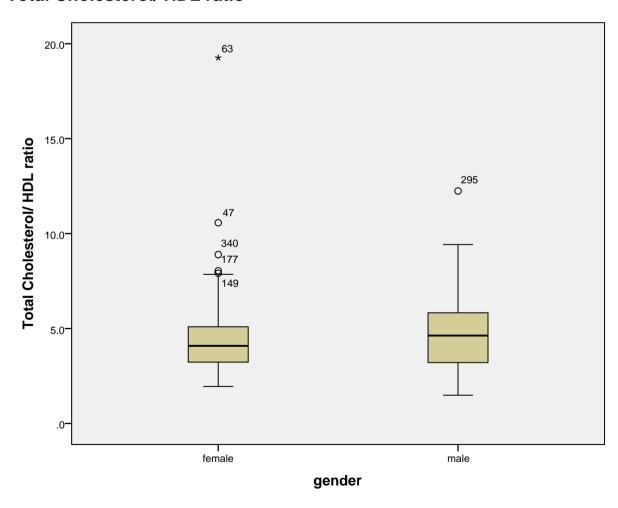
# **Case Processing Summary**

			Cases				
		Va	Valid		sing	Total	
	gender	N	Percent	N	Percent	N	
Total Cholesterol/ HDL ratio	female	234	100.0%	0	0.0%	234	
	male	168	99.4%	1	0.6%	169	

# **Case Processing Summary**

		Cases
		Total
	gender	Percent
Total Cholesterol/ HDL ratio	female	100.0%
	male	100.0%

# **Total Cholesterol/ HDL ratio**



RECODE age (Lowest thru 39=1) (40 thru 59=2) (60 thru 79=3) (80 thru Highes t=4) INTO age\_groups.

VARIABLE LABELS age\_groups 'Age Groups'.

EXECUTE.

EXAMINE VARIABLES=bp.1s BY age\_groups

/PLOT=BOXPLOT

/STATISTICS=NONE

/NOTOTAL.

# **Explore**

#### **Notes**

Output Created		18-OCT-2017 12:29:43		
Comments				
Input	Data	\\kclad.ds.kcl.ac. uk\anywhere\UserData\TG Store03\k1759846\My Documents\diabetes - raw data.sav		
	Active Dataset	DataSet1		
	Filter	<none></none>		
	Weight	<none></none>		
	Split File	<none></none>		
	N of Rows in Working Data File	403		
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.		
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.		
Syntax		EXAMINE VARIABLES=bp.1s BY age_groups /PLOT=BOXPLOT /STATISTICS=NONE		
Resources	Processor Time	00:00:00.52		
	Elapsed Time	00:00:00.23		

# **Age Groups**

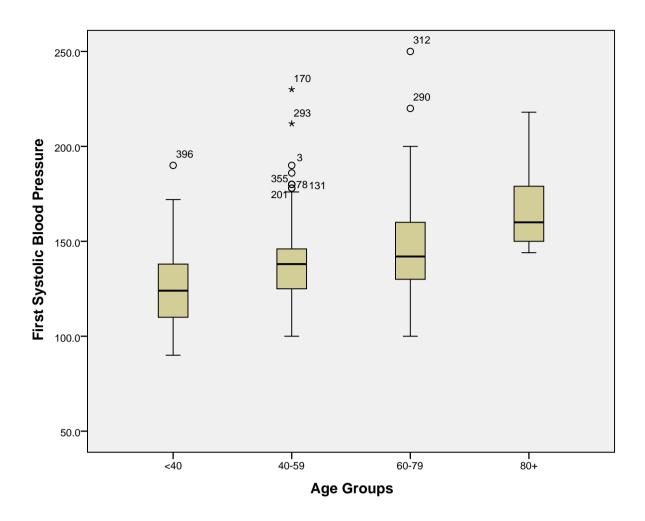
### **Case Processing Summary**

		Cases				
		Va	alid	Mis	sing	Total
	Age Groups	N	Percent	N	Percent	N
First Systolic Blood	<40	141	97.9%	3	2.1%	144
Pressure	40-59	155	98.7%	2	1.3%	157
	60-79	92	100.0%	0	0.0%	92
	80+	10	100.0%	0	0.0%	10

# **Case Processing Summary**

	Age Groups	Percent
First Systolic Blood Pressure	<40	100.0%
	40-59	100.0%
	60-79	100.0%
	80+	100.0%

# **First Systolic Blood Pressure**



```
USE ALL.
COMPUTE filter_$=(glyhb > 7.0).
VARIABLE LABELS filter_$ 'glyhb > 7.0 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
DATASET COPY Diabetes.
DATASET ACTIVATE Diabetes.
FILTER OFF.
USE ALL.
SELECT IF (glyhb > 7.0).
EXECUTE.
DATASET ACTIVATE DataSet1.
FREQUENCIES VARIABLES-chol_ratio
  /ORDER=ANALYSIS.
```

### **Frequencies**

Output Created		18-OCT-2017 12:41:25	
Comments			
Input	Active Dataset	DataSet1	
	Filter	glyhb > 7.0 (FILTER)	
	Weight	<none></none>	
	Split File	<none></none>	
	N of Rows in Working Data File	60	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.	
	Cases Used	Statistics are based on all cases with valid data.	
Syntax		FREQUENCIES VARIABLES=chol_ratio /ORDER=ANALYSIS.	
Resources	Processor Time	00:00:00.02	
	Elapsed Time	00:00:00.00	

#### **Statistics**

Total Cholesterol/ HDL ratio

N	Valid	60
	Missing	0

### **Total Cholesterol/ HDL ratio**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.0	1	1.7	1.7	1.7
	2.8	1	1.7	1.7	3.3
	2.8	1	1.7	1.7	5.0
	2.9	1	1.7	1.7	6.7
	2.9	1	1.7	1.7	8.3
	3.0	1	1.7	1.7	10.0
	3.2	1	1.7	1.7	11.7
	3.2	1	1.7	1.7	13.3
	3.3	1	1.7	1.7	15.0
	3.3	2	3.3	3.3	18.3
	3.8	1	1.7	1.7	20.0
	4.0	1	1.7	1.7	21.7
	4.0	1	1.7	1.7	23.3
	4.0	1	1.7	1.7	25.0
	4.0	1	1.7	1.7	26.7
	4.1	1	1.7	1.7	28.3
	4.2	1	1.7	1.7	30.0
	4.2	1	1.7	1.7	31.7
	4.3	1	1.7	1.7	33.3
	4.5	1	1.7	1.7	35.0
	4.5	1	1.7	1.7	36.7
	4.7	1	1.7	1.7	38.3
	4.8	1	1.7	1.7	40.0
	4.8	1	1.7	1.7	41.7
	4.9	1	1.7	1.7	43.3
	4.9	1	1.7	1.7	45.0
	5.0	1	1.7	1.7	46.7
	5.0	1	1.7	1.7	48.3
	5.1	1	1.7	1.7	50.0
	5.3	1	1.7	1.7	51.7
	5.3	1	1.7	1.7	53.3
	5.3	1	1.7	1.7	55.0
	5.5	1	1.7	1.7	56.7
	5.6	1	1.7	1.7	58.3
	5.7	1	1.7	1.7	60.0
	5.7	1	1.7	1.7	61.7
	5.8	1	1.7	1.7	63.3
	6.0	1	1.7	1.7	65.0

**Total Cholesterol/ HDL ratio** 

		Frequency	Percent	Valid Percent	Cumulative Percent
	6.3	1	1.7	1.7	66.7
_	6.4	1	1.7	1.7	68.3
_	6.5	1	1.7	1.7	70.0
-	6.8	1	1.7	1.7	71.7
_	6.9	1	1.7	1.7	73.3
_	7.0	1	1.7	1.7	75.0
_	7.0	1	1.7	1.7	76.7
	7.1	1	1.7	1.7	78.3
	7.1	1	1.7	1.7	80.0
	7.1	1	1.7	1.7	81.7
	7.3	1	1.7	1.7	83.3
	7.3	1	1.7	1.7	85.0
_	7.5	1	1.7	1.7	86.7
_	7.6	1	1.7	1.7	88.3
_	7.8	1	1.7	1.7	90.0
_	7.9	1	1.7	1.7	91.7
_	8.0	1	1.7	1.7	93.3
_	8.9	1	1.7	1.7	95.0
_	9.4	1	1.7	1.7	96.7
_	12.2	1	1.7	1.7	98.3
_	19.3	1	1.7	1.7	100.0
	Total	60	100.0	100.0	

COMPUTE wh\_ratio=waist / hip.

EXECUTE.

RECODE age glyhb (Lowest thru 7=0) (ELSE=1) INTO age\_groups diabetes.

VARIABLE LABELS age\_groups 'Age Groups' /diabetes 'diagnosis of diabetes'.

EXECUTE.

EXAMINE VARIABLES=wh\_ratio BY diabetes

/PLOT=BOXPLOT

/STATISTICS=NONE

/NOTOTAL.

# **Explore**

Output Created	18-OCT-2017 12:49:30	
Comments		
Input	Active Dataset	DataSet1
	Filter	glyhb > 7.0 (FILTER)
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	60
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=wh_ratio BY diabetes /PLOT=BOXPLOT /STATISTICS=NONE /NOTOTAL.
Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:00.19

# diagnosis of diabetes

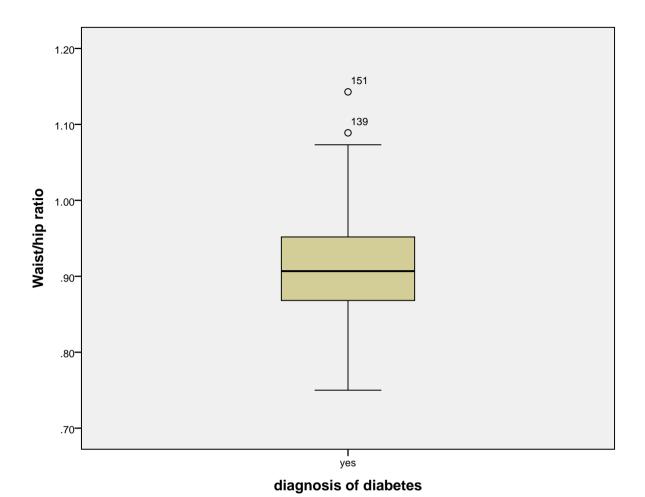
# **Case Processing Summary**

		Cases					
		Va	Valid		sing	Total	
	diagnosis of diabetes	N	Percent	N	Percent	N	
Waist/hip ratio	yes	60	100.0%	0	0.0%	60	ĺ

### **Case Processing Summary**

		Cases
		Total
	diagnosis of diabetes	Percent
Waist/hip ratio	yes	100.0%

# Waist/hip ratio



FILTER OFF.

USE ALL.

EXECUTE.

EXAMINE VARIABLES=wh\_ratio BY diabetes

/PLOT=BOXPLOT

/STATISTICS=NONE

/NOTOTAL.

# **Explore**

Output Created		18-OCT-2017 12:50:08
Comments		
Input	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	403
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=wh_ratio BY diabetes /PLOT=BOXPLOT /STATISTICS=NONE /NOTOTAL.
Resources	Processor Time	00:00:00.41
	Elapsed Time	00:00:00.21

# diagnosis of diabetes

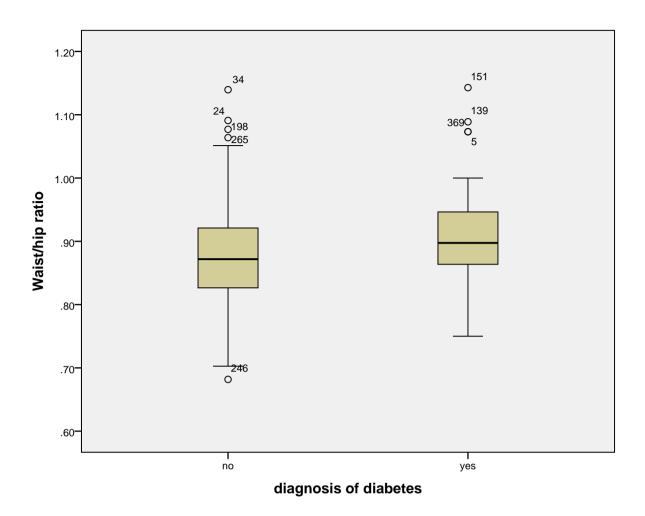
### **Case Processing Summary**

		Cases				
		Va	alid	Mis	sing	Total
	diagnosis of diabetes	N	Percent	N	Percent	N
Waist/hip ratio	no	328	99.4%	2	0.6%	330
	yes	73	100.0%	0	0.0%	73

### **Case Processing Summary**

		Cases
		Total
	diagnosis of diabetes	Percent
Waist/hip ratio	no	100.0%
	yes	100.0%

# Waist/hip ratio



```
USE ALL.
COMPUTE filter_$=(glyhb > 7.0).
VARIABLE LABELS filter_$ 'glyhb > 7.0 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter $.
EXECUTE.
FILTER OFF.
USE ALL.
EXECUTE.
USE ALL.
COMPUTE filter_$=(diabetes = 1).
VARIABLE LABELS filter_$ 'diabetes = 1 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
FILTER OFF.
USE ALL.
```

```
EXECUTE.
USE ALL.
COMPUTE filter_$=(glyhb > 7).
VARIABLE LABELS filter_$ 'glyhb > 7 (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
T-TEST
    /TESTVAL=0
    /MISSING=ANALYSIS
    /VARIABLES=wh_ratio
    /CRITERIA=CI(.95).
```

#### **T-Test**

#### **Notes**

Output Created		18-OCT-2017 12:57:18
Comments		
Input	Active Dataset	DataSet1
	Filter	glyhb > 7 (FILTER)
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	60
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST /TESTVAL=0 /MISSING=ANALYSIS /VARIABLES=wh_ratio /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01

### **One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Waist/hip ratio	60	.9113	.07556	.00976

#### **One-Sample Test**

Test Value = 0

		1001 Valad = 0				
				Mean	95% Confidence	
	t	df	Sig. (2-tailed)	Difference	Lower	
Waist/hip ratio	93.419	59	.000	.91131	.8918	

#### **One-Sample Test**

Test Value = 0 95% Confidence

Interval of the ...

Upper
Waist/hip ratio .9308

```
FILTER OFF.

USE ALL.

EXECUTE.

USE ALL.

COMPUTE filter_$=(glyhb <= 7).

VARIABLE LABELS filter_$ 'glyhb <= 7 (FILTER)'.

VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.

FORMATS filter_$ (f1.0).

FILTER BY filter_$.

EXECUTE.

T-TEST

/TESTVAL=0

/MISSING=ANALYSIS

/VARIABLES=wh_ratio

/CRITERIA=CI(.95).
```

#### **T-Test**

Output Created		18-OCT-2017 13:00:05
Comments		
Input	Active Dataset	DataSet1
	Filter	glyhb <= 7 (FILTER)
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	330
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.
Syntax		T-TEST /TESTVAL=0 /MISSING=ANALYSIS /VARIABLES=wh_ratio /CRITERIA=CI(.95).
Resources	Processor Time	00:00:00
	Elapsed Time	00:00:00

# **One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Waist/hip ratio	328	.8754	.07157	.00395

# **One-Sample Test**

	Test Value = 0				
				Mean	95% Confidence
	t	df	Sig. (2-tailed)	Difference	Lower
Waist/hip ratio	221.520	327	.000	.87537	.8676

# **One-Sample Test**

	Test Value = 0
	95% Confidence Interval of the
	Upper
Waist/hip ratio	.8831

FILTER OFF.

USE ALL.

EXECUTE.

EXAMINE VARIABLES=wh\_ratio BY gender BY location

/PLOT=BOXPLOT

/STATISTICS=NONE

# **Explore**

#### **Notes**

Output Created		18-OCT-2017 13:06:30
Comments		
Input	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	403
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=wh_ratio BY gender BY location /PLOT=BOXPLOT /STATISTICS=NONE /NOTOTAL.
Resources	Processor Time	00:00:00.20
	Elapsed Time	00:00:00.20

#### **Warnings**

Text: location Command: EXAMINE

This procedure cannot use string variables longer than 8 bytes.

The values will be truncated.

# gender\*location

### **Case Processing Summary**

Cases

			Valid		Missing		Total
	gender	location	N	Percent	N	Percent	N
Waist/hip ratio	female	Buckingh	114	100.0%	0	0.0%	114
		Louisa	119	99.2%	1	0.8%	120
	male	Buckingh	86	100.0%	0	0.0%	86
		Louisa	82	98.8%	1	1.2%	83

# **Case Processing Summary**

Cases

				Odooo
				Total
		gender	location	Percent
	Waist/hip ratio	female	Buckingh	100.0%
			Louisa	100.0%
		male	Buckingh	100.0%
			Louisa	100.0%

# Waist/hip ratio

