

# Saturday, February 16, 2019 08:40:16 PM 2 LINEAR REGRESSION FOR WEIGHT\_VS\_AGE OF PUMPKINS

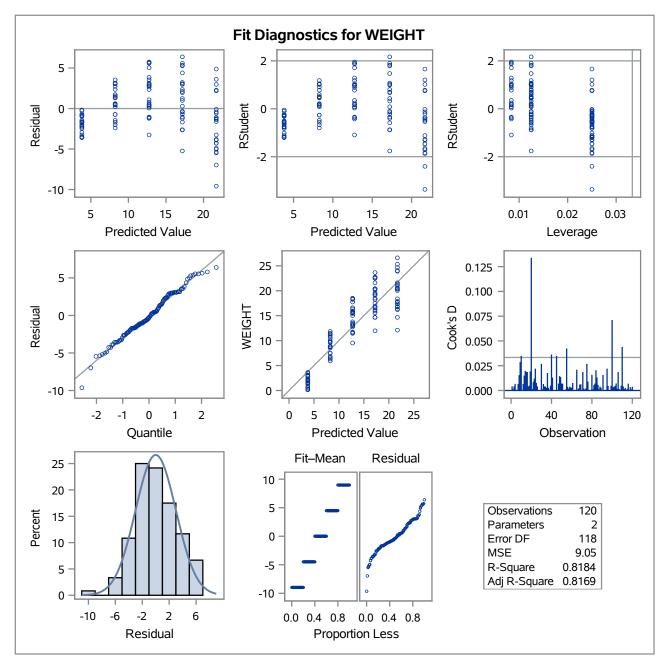
Number of Observations Read	120
Number of Observations Used	120

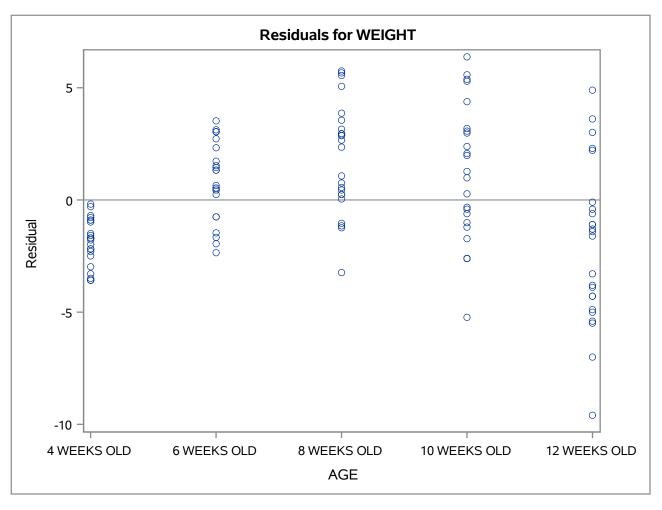
Analysis of Variance					
Source DF		Sum of Squares	Mean Square	F Value	Pr > F
Model	1	4814.20838	4814.20838	531.95	<.0001
Error	118	1067.90487	9.05004		
Corrected Total	119	5882.11325			

Root MSE	3.00833	R-Square	0.8184	
Dependent Mean	12.74250	Adj R-Sq	0.8169	
Coeff Var	23.60862			

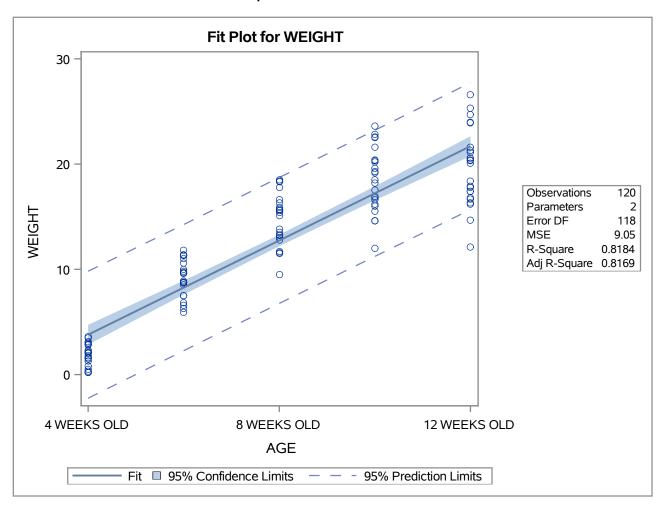
Parameter Estimates						
Variable	DF	Parameter Estimate Standard Error		t Value	Pr >  t	
Intercept	1	-5.17250	0.82386	-6.28	<.0001	
AGE	1	2.23938	0.09709	23.06	<.0001	

## LINEAR REGRESSION FOR WEIGHT\_VS\_AGE OF PUMPKINS





## LINEAR REGRESSION FOR WEIGHT\_VS\_AGE OF PUMPKINS



## Saturday, February 16, 2019 08:40:16 PM **6 POLYNOMIAL MODEL FOR WEIGHT VS AGE OF PUMPKINS**

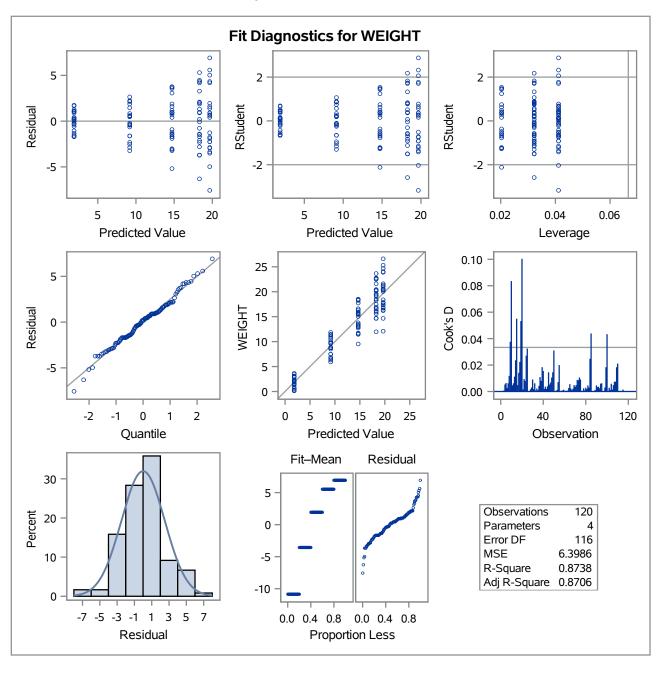
Number of Observations Read	120
Number of Observations Used	120

Analysis of Variance					
Source DF		Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5139.87857	1713.29286	267.76	<.0001
Error	116	742.23468	6.39857		
Corrected Total	119	5882.11325			

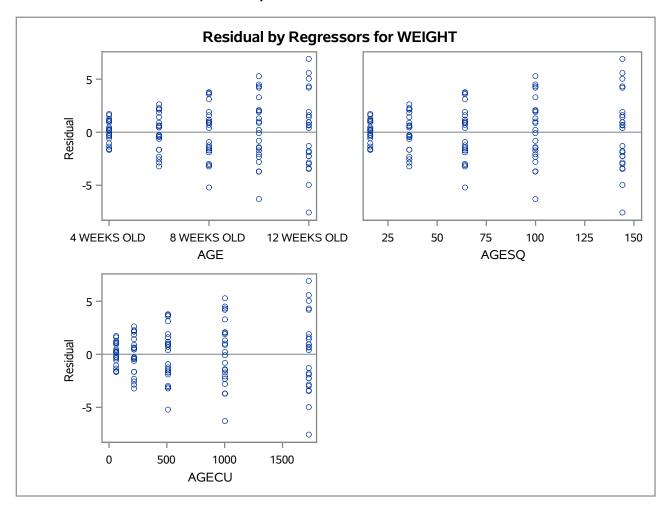
Root MSE	2.52954	R-Square	0.8738
Dependent Mean	12.74250	Adj R-Sq	0.8706
Coeff Var	19.85121		

Parameter Estimates							
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t		
Intercept	1	-16.87833	7.15835	-2.36	0.0201		
AGE	1	5.26022	3.08519	1.70	0.0909		
AGESQ	1	-0.12299	0.40966	-0.30	0.7645		
AGECU	1	-0.00512	0.01701	-0.30	0.7639		

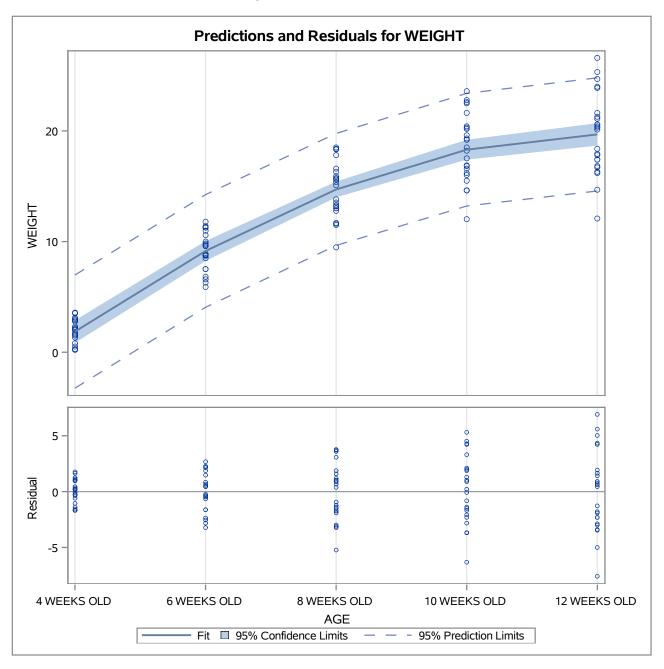
## POLYNOMIAL MODEL FOR WEIGHT VS AGE OF PUMPKINS



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## POLYNOMIAL MODEL FOR WEIGHT VS AGE OF PUMPKINS



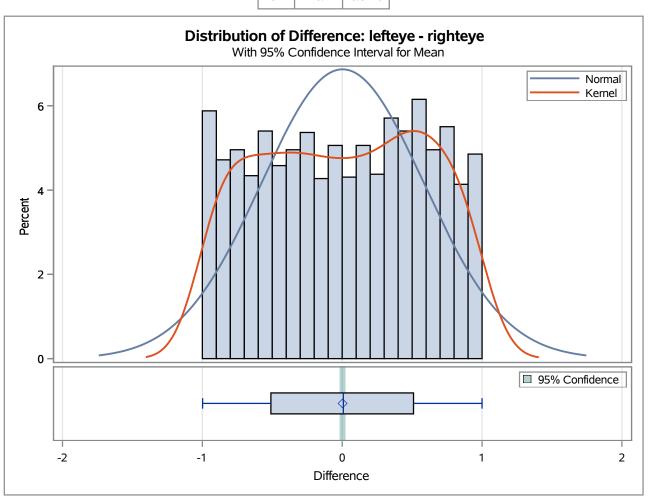
#### The TTEST Procedure

#### Difference: lefteye - righteye

N	Mean	Std Dev	Std Err	Minimum	Maximum
2925	0.00256	0.5810	0.0107	-0.9982	0.9998

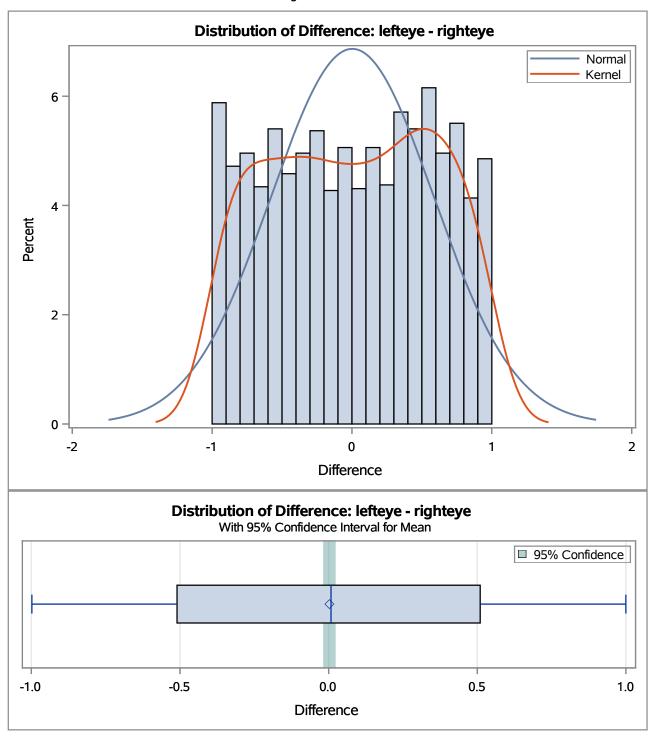
Mean	95% CL Mean		Std Dev	95 CL St	, .
0.00256	-0.0185	0.0236	0.5810	0.5665	0.5963

DF	t Value	Pr >  t
2924	0.24	0.8120



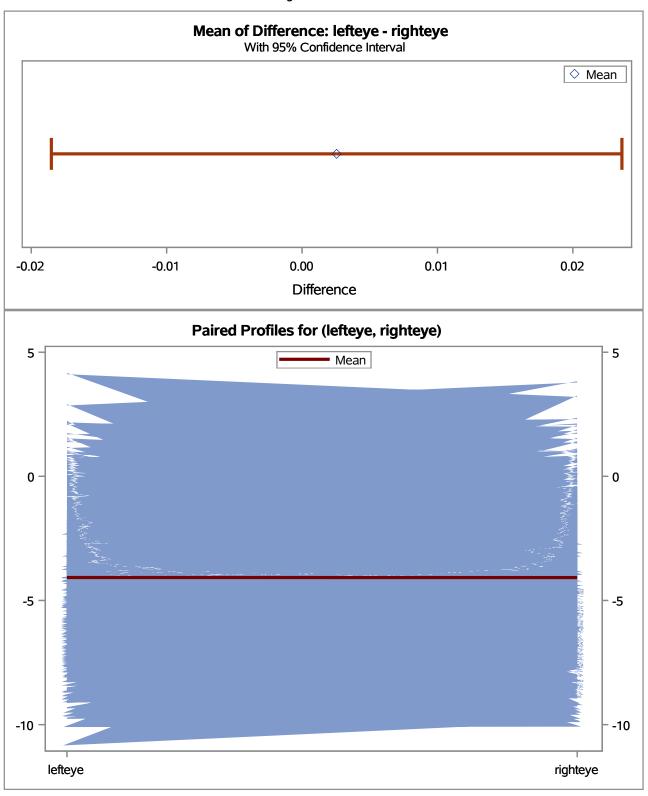
#### The TTEST Procedure

Difference: lefteye - righteye



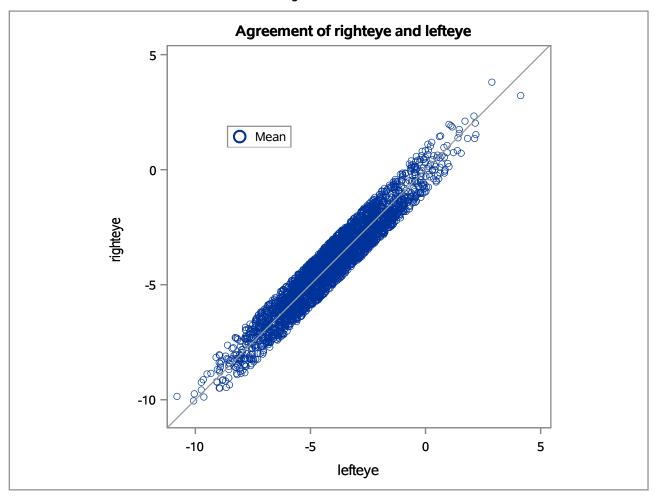
#### The TTEST Procedure

Difference: lefteye - righteye



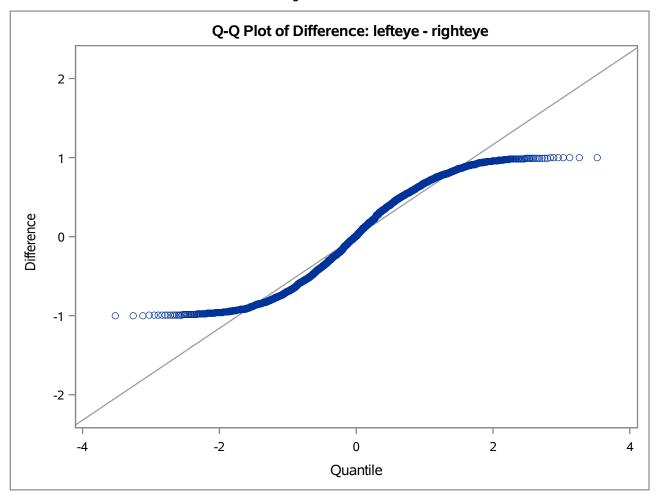
#### The TTEST Procedure

Difference: lefteye - righteye



#### The TTEST Procedure

Difference: lefteye - righteye



#### The TTEST Procedure

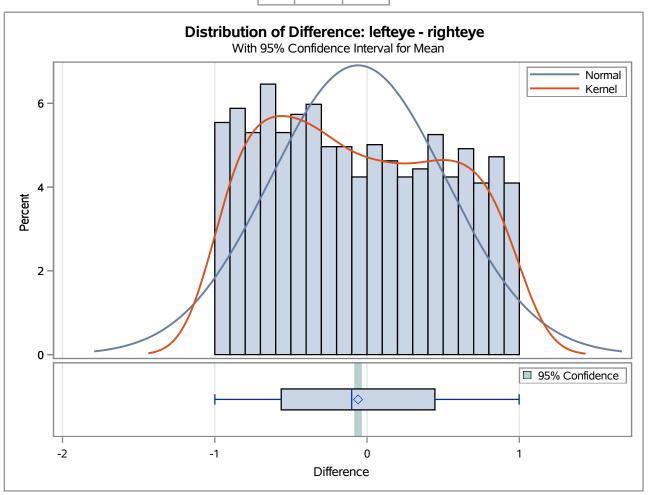
Difference: lefteye - righteye

gender=male

N	Mean	Std Dev	Std Err	Minimum	Maximum
2075	-0.0593	0.5776	0.0127	-0.9995	0.9986

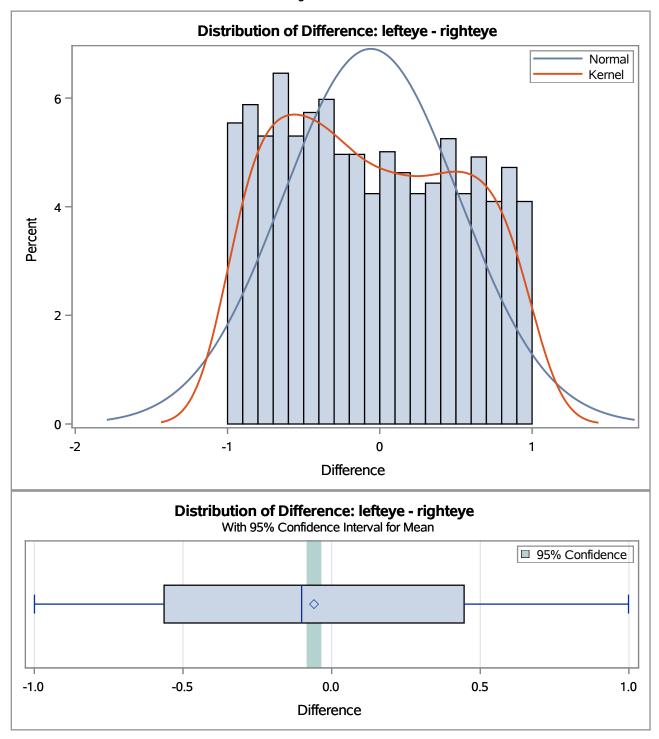
Mean	95% CL Mean		Std Dev	95 CL St	
-0.0593	-0.0841	-0.0344	0.5776	0.5606	0.5958

DF	t Value	Pr >  t
2074	-4.67	<.0001



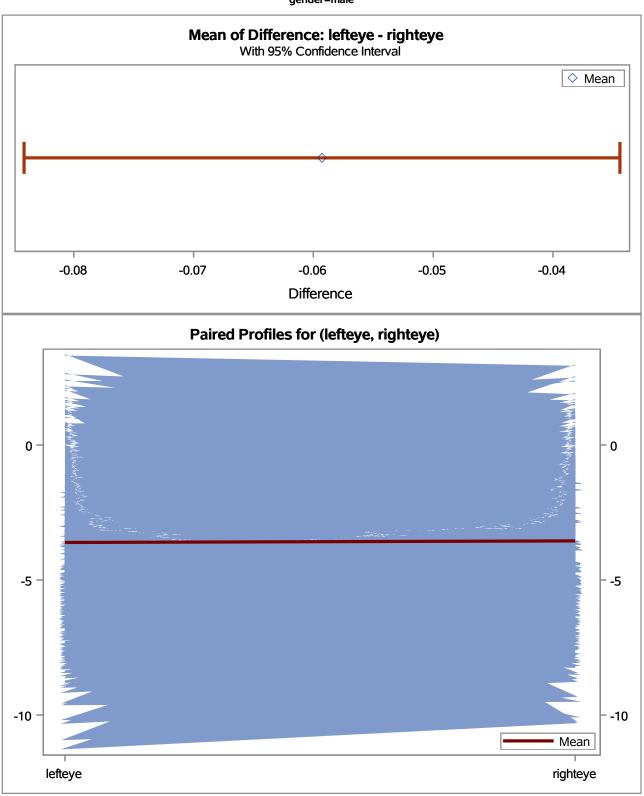
#### The TTEST Procedure

Difference: lefteye - righteye



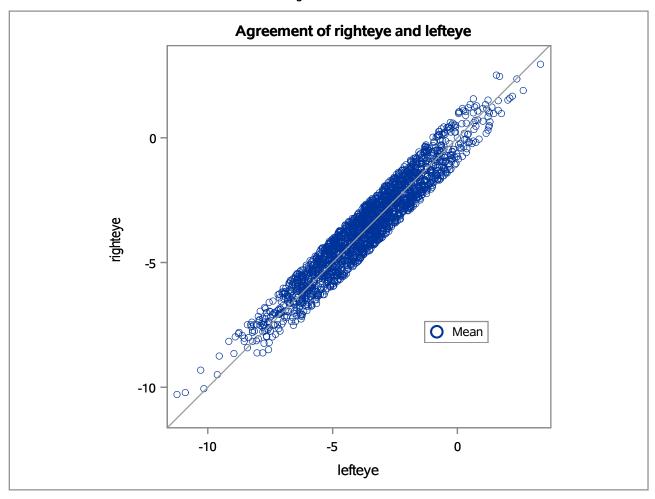
#### The TTEST Procedure

Difference: lefteye - righteye



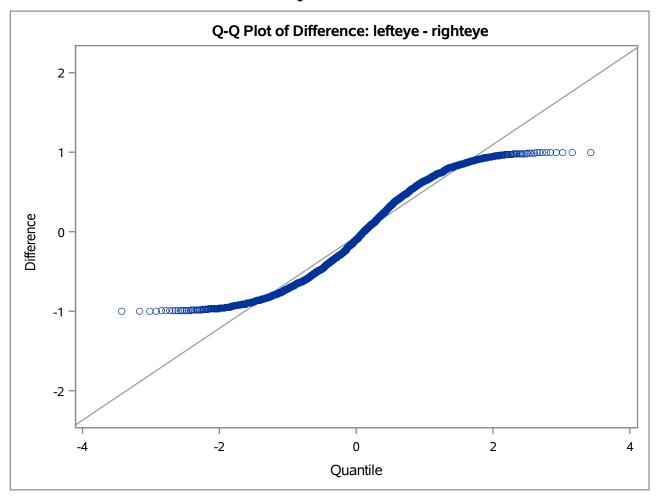
#### The TTEST Procedure

Difference: lefteye - righteye



#### The TTEST Procedure

Difference: lefteye - righteye



## ODDS RATIO OF PATIENTS WITH GREATER MYOPIC ON LEFT OR RIGHT EYE

#### The FREQ Procedure

Frequency Percent Row Pct Col Pct

Table of gender by PATIENT						
	PATIENT					
gender(gender)	LEFT_MYOPIC RIGHT_MYOPIC Total					
female	1476 29.52 50.46 60.92	1449 28.98 49.54 56.23	2925 58.50			
male	947 18.94 45.64 39.08	1128 22.56 54.36 43.77	2075 41.50			
Total	2423 48.46	2577 51.54	5000 100.00			

## Statistics for Table of gender by PATIENT

Statistic	DF	Value	Prob
Chi-Square	1	11.3052	0.0008
Likelihood Ratio Chi-Square	1	11.3138	0.0008
Continuity Adj. Chi-Square	1	11.1129	0.0009
Mantel-Haenszel Chi-Square	1	11.3029	0.0008
Phi Coefficient		0.0476	
Contingency Coefficient		0.0475	
Cramer's V		0.0476	

Fisher's Exact Test			
Cell (1,1) Frequency (F)	1476		
Left-sided Pr <= F	0.9997		
Right-sided Pr >= F	0.0004		
Table Probability (P)	<.0001		
Two-sided Pr <= P	0.0008		

Sample Size = 5000

## ODDS RATIO OF PATIENTS WITH GREATER MYOPIC ON LEFT OR RIGHT EYE

#### The FREQ Procedure

## **Summary Statistics for gender by PATIENT**

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)					
Statistic	Alternative Hypothesis	DF	Value	Prob	
1	Nonzero Correlation	1	11.3029	0.0008	
2	Row Mean Scores Differ	1	11.3029	0.0008	
3	General Association	1	11.3029	0.0008	

Common Odds Ratio and Relative Risks					
Statistic	Method	Value	95% Confidence Limits		
Odds Ratio	Mantel-Haenszel	1.2133	1.0839	1.3582	
	Logit	1.2133	1.0839	1.3582	
Relative Risk (Column 1)	Mantel-Haenszel	1.1057	1.0422	1.1730	
	Logit	1.1057	1.0422	1.1730	
Relative Risk (Column 2)	Mantel-Haenszel	0.9113	0.8636	0.9616	
	Logit	0.9113	0.8636	0.9616	

**Total Sample Size = 5000** 

## RISK RATIO OF MYOPIC PATIENTS BY AGE

## The FREQ Procedure

Frequency Percent Row Pct Col Pct

Table of age by PATIENT						
	PATIENT					
age(age)	LEFT_MYOPIC RIGHT_MYOPIC To					
UNDER 20	96 1.92 46.60 3.96	110 2.20 53.40 4.27	206 4.12			
20 TO 29	346 6.92 48.19 14.28	372 7.44 51.81 14.44	718 14.36			
30 TO 39	862 17.24 47.84 35.58	940 18.80 52.16 36.48	1802 36.04			
40 TO 49	799 15.98 50.09 32.98	796 15.92 49.91 30.89	1595 31.90			
50 TO 59	264 5.28 45.44 10.90	317 6.34 54.56 12.30	581 11.62			
60 AND OVER	56 1.12 57.14 2.31	42 0.84 42.86 1.63	98 1.96			
Total	2423 48.46	2577 51.54	5000 100.00			

## Statistics for Table of age by PATIENT

Statistic	DF	Value	Prob
Chi-Square	5	7.3734	0.1943
Likelihood Ratio Chi-Square	5	7.3813	0.1938
Mantel-Haenszel Chi-Square	1	0.5358	0.4642
Phi Coefficient		0.0384	
Contingency Coefficient		0.0384	
Cramer's V		0.0384	

Sample Size = 5000

## RISK RATIO OF MYOPIC PATIENTS BY AGE

## The FREQ Procedure

## **Summary Statistics for age by PATIENT**

Cochran-Mantel-Haenszel Statistics (Based on Table Scores)					
Statistic	Alternative Hypothesis	DF	Value	Prob	
1	Nonzero Correlation	1	0.5358	0.4642	
2	Row Mean Scores Differ	5	7.3719	0.1944	
3	General Association	5	7.3719	0.1944	

**Total Sample Size = 5000**