

# LAMPIRAN 1.

## 1. Uji Kimia

Tests of Normality

wtkkks_kons	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Kdr_air	0 mnt,40%	,210	6	,200*	,883	6	,281
	0 mnt,50%	,223	6	,200*	,899	6	,369
	0 mnt,60%	,164	6	,200*	,981	6	,956
	0 mnt, kontrol	,259	6	,200*	,838	6	,126
	10 mnt,40%	,199	6	,200*	,934	6	,611
	10 mnt,50%	,286	6	,136	,831	6	,109
	10mnt,60%	,168	6	,200*	,949	6	,732
	10 mnt,kontrol	,196	6	,200*	,943	6	,680
	15 mnt,40%	,259	6	,200*	,869	6	,222
	15 mnt, 50%	,280	6	,153	,891	6	,326
	15 mnt, 60%	,299	6	,099	,827	6	,100
	15 mnt, kontrol	,251	6	,200*	,887	6	,303
	Kdr_abu	0 mnt,40%	,231	6	,200*	,850	6
0 mnt,50%		,252	6	,200*	,855	6	,171
0 mnt,60%		,274	6	,178	,860	6	,190
0 mnt, kontrol		,250	6	,200*	,930	6	,584
10 mnt,40%		,204	6	,200*	,906	6	,413
10 mnt,50%		,172	6	,200*	,941	6	,664
10mnt,60%		,238	6	,200*	,950	6	,737
10 mnt,kontrol		,204	6	,200*	,899	6	,370
15 mnt,40%		,220	6	,200*	,853	6	,168
15 mnt, 50%		,243	6	,200*	,862	6	,197
15 mnt, 60%		,251	6	,200*	,887	6	,301
15 mnt, kontrol		,303	6	,091	,794	6	,051
Kdr_prot		0 mnt,40%	,173	6	,200*	,914	6
	0 mnt,50%	,265	6	,200*	,875	6	,245
	0 mnt,60%	,223	6	,200*	,906	6	,412
	0 mnt, kontrol	,283	6	,143	,864	6	,203
	10 mnt,40%	,282	6	,148	,869	6	,223
	10 mnt,50%	,279	6	,159	,865	6	,208
	10mnt,60%	,263	6	,200*	,884	6	,287
	10 mnt,kontrol	,236	6	,200*	,945	6	,697
	15 mnt,40%	,321	6	,053	,829	6	,106
	15 mnt, 50%	,195	6	,200*	,935	6	,620
	15 mnt, 60%	,271	6	,191	,851	6	,160
	15 mnt, kontrol	,181	6	,200*	,962	6	,832
	Kdr_lemak	0 mnt,40%	,307	6	,081	,801	6
0 mnt,50%		,178	6	,200*	,926	6	,551
0 mnt,60%		,181	6	,200*	,924	6	,535
0 mnt, kontrol		,230	6	,200*	,856	6	,177
10 mnt,40%		,282	6	,147	,824	6	,095
10 mnt,50%		,213	6	,200*	,930	6	,578
10mnt,60%		,244	6	,200*	,905	6	,407
10 mnt,kontrol		,234	6	,200*	,898	6	,364
15 mnt,40%		,261	6	,200*	,784	6	,042
15 mnt, 50%		,216	6	,200*	,975	6	,925
15 mnt, 60%		,206	6	,200*	,938	6	,642
15 mnt, kontrol		,095	6	,200*	,997	6	,999

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

### Tests of Normality

wtkkks_kons		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Kdr_serat	0 mnt,40%	,279	6	,157	,866	6	,212
	0 mnt,50%	,145	6	,200*	,963	6	,844
	0 mnt,60%	,263	6	,200*	,874	6	,242
	0 mnt, kontrol	,247	6	,200*	,823	6	,093
	10 mnt,40%	,263	6	,200*	,881	6	,274
	10 mnt,50%	,188	6	,200*	,898	6	,361
	10mnt,60%	,291	6	,123	,817	6	,084
	10 mnt,kontrol	,151	6	,200*	,983	6	,964
	15 mnt,40%	,266	6	,200*	,872	6	,236
	15 mnt, 50%	,180	6	,200*	,946	6	,706
	15 mnt, 60%	,197	6	,200*	,925	6	,541
	15 mnt, kontrol	,238	6	,200*	,928	6	,563
	Kdr_KH	0 mnt,40%	,198	6	,200*	,970	6
0 mnt,50%		,155	6	,200*	,935	6	,618
0 mnt,60%		,169	6	,200*	,950	6	,738
0 mnt, kontrol		,140	6	,200*	,982	6	,960
10 mnt,40%		,180	6	,200*	,955	6	,782
10 mnt,50%		,224	6	,200*	,912	6	,448
10mnt,60%		,282	6	,148	,880	6	,268
10 mnt,kontrol		,200	6	,200*	,904	6	,396
15 mnt,40%		,188	6	,200*	,930	6	,579
15 mnt, 50%		,307	6	,079	,857	6	,180
15 mnt, 60%		,220	6	,200*	,931	6	,589
15 mnt, kontrol		,277	6	,165	,853	6	,166
antosianin		0 mnt,40%	,231	6	,200*	,835	6
	0 mnt,50%	,259	6	,200*	,944	6	,696
	0 mnt,60%	,263	6	,200*	,942	6	,677
	0 mnt, kontrol	,162	6	,200*	,980	6	,953
	10 mnt,40%	,218	6	,200*	,859	6	,187
	10 mnt,50%	,285	6	,139	,831	6	,110
	10mnt,60%	,224	6	,200*	,913	6	,453
	10 mnt,kontrol	,295	6	,111	,838	6	,125
	15 mnt,40%	,230	6	,200*	,930	6	,578
	15 mnt, 50%	,299	6	,100	,862	6	,197
	15 mnt, 60%	,190	6	,200*	,979	6	,944
	15 mnt, kontrol	,278	6	,162	,812	6	,075

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## POST HOC

### 1. Kadar air

#### Tests of Between-Subjects Effects

Dependent Variable: Kdr\_air

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	280,189 <sup>a</sup>	11	25,472	38,477	,000
Intercept	80241,983	1	80241,983	121211,9	,000
wkt_kukus	105,396	2	52,698	79,605	,000
kons	157,948	3	52,649	79,531	,000
wkt_kukus * kons	16,844	6	2,807	4,241	,001
Error	39,720	60	,662		
Total	80561,891	72			
Corrected Total	319,908	71			

a. R Squared = ,876 (Adjusted R Squared = ,853)

#### Kdr\_air

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset		
		1	2	3
0 mnt	24	31,7133		
15 mnt	24		33,8979	
10 menit	24			34,5399
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,662.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

#### Kdr\_air

Duncan<sup>a,b</sup>

kons	N	Subset			
		1	2	3	4
kontrol	18	31,3200			
40%	18		32,8556		
50%	18			34,0169	
60%	18				35,3423
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,662.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.

## 2. Kadar abu

### Tests of Between-Subjects Effects

Dependent Variable: Kdr\_abu

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	,031 <sup>a</sup>	11	,003	,699	,735
Intercept	59,988	1	59,988	14815,856	,000
wkt_kukus	,004	2	,002	,505	,606
kons	,008	3	,003	,656	,582
wkt_kukus * kons	,019	6	,003	,785	,585
Error	,243	60	,004		
Total	60,262	72			
Corrected Total	,274	71			

a. R Squared = ,114 (Adjusted R Squared = -,049)

#### Kdr\_abu

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset
		1
10 menit	24	,9063
0 mnt	24	,9088
15 mnt	24	,9233
Sig.		,386

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,004.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

#### Kdr\_abu

Duncan<sup>a,b</sup>

kons	N	Subset
		1
40%	18	,8956
60%	18	,9144
kontrol	18	,9172
50%	18	,9239
Sig.		,230

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,004.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.

### 3. Kadar Protein

#### Tests of Between-Subjects Effects

Dependent Variable: Kdr\_prot

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	86,755 <sup>a</sup>	11	7,887	307,865	,000
Intercept	1685,937	1	1685,937	65810,919	,000
wkt_kukus	11,883	2	5,942	231,929	,000
kons	73,739	3	24,580	959,479	,000
wkt_kukus * kons	1,133	6	,189	7,370	,000
Error	1,537	60	,026		
Total	1774,229	72			
Corrected Total	88,292	71			

a. R Squared = ,983 (Adjusted R Squared = ,979)

#### Kdr\_prot

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset		
		1	2	3
15 mnt	24	4,3071		
10 menit	24		4,9168	
0 mnt	24			5,2931
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,026.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

#### Kdr\_prot

Duncan<sup>a,b</sup>

kons	N	Subset			
		1	2	3	4
60%	18	3,7528			
50%	18		4,1662		
40%	18			5,0413	
kontrol	18				6,3957
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,026.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.

#### 4. Kadar Lemak

##### Tests of Between-Subjects Effects

Dependent Variable: Kdr\_lemak

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	49,938 <sup>a</sup>	11	4,540	266,460	,000
Intercept	1991,973	1	1991,973	116918,0	,000
wkt_kukus	13,566	2	6,783	398,111	,000
kons	35,518	3	11,839	694,901	,000
wkt_kukus * kons	,854	6	,142	8,356	,000
Error	1,022	60	,017		
Total	2042,932	72			
Corrected Total	50,960	71			

a. R Squared = ,980 (Adjusted R Squared = ,976)

##### Kdr\_lemak

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset		
		1	2	3
15 mnt	24	4,7364		
10 menit	24		5,2440	
0 mnt	24			5,7993
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,017.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

##### Kdr\_lemak

Duncan<sup>a,b</sup>

kons	N	Subset			
		1	2	3	4
kontrol	18	4,1269			
40%	18		5,2612		
50%	18			5,6684	
60%	18				5,9829
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,017.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.

## 5. Kadar serat

### Tests of Between-Subjects Effects

Dependent Variable: Kdr\_serat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	19,966 <sup>a</sup>	11	1,815	55,095	,000
Intercept	358,187	1	358,187	10872,130	,000
wkt_kukus	2,638	2	1,319	40,031	,000
kons	16,640	3	5,547	168,359	,000
wkt_kukus * kons	,689	6	,115	3,483	,005
Error	1,977	60	,033		
Total	380,130	72			
Corrected Total	21,943	71			

a. R Squared = ,910 (Adjusted R Squared = ,893)

#### Kdr\_serat

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset		
		1	2	3
15 mnt	24	1,9835		
10 menit	24		2,2579	
0 mnt	24			2,4499
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,033.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

#### Kdr\_serat

Duncan<sup>a,b</sup>

kons	N	Subset			
		1	2	3	4
kontrol	18	1,6029			
40%	18		2,0250		
50%	18			2,3808	
60%	18				2,9130
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,033.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.

## 6. Kadar karbohidrat

### Tests of Between-Subjects Effects

Dependent Variable: Kdr\_KH

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	298,581 <sup>a</sup>	11	27,144	33,193	,000
Intercept	205541,897	1	205541,897	251345,3	,000
wkt_kukus	63,139	2	31,570	38,605	,000
kons	201,226	3	67,075	82,023	,000
wkt_kukus * kons	34,216	6	5,703	6,973	,000
Error	49,066	60	,818		
Total	205889,544	72			
Corrected Total	347,647	71			

a. R Squared = ,859 (Adjusted R Squared = ,833)

#### Kdr\_KH

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset	
		1	2
10 menit	24	52,1352	
0 mnt	24		53,8358
15 mnt	24		54,3185
Sig.		1,000	,069

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,818.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

#### Kdr\_KH

Duncan<sup>a,b</sup>

kons	N	Subset			
		1	2	3	4
60%	18	51,0946			
50%	18		52,8439		
40%	18			54,1436	
kontrol	18				55,6373
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,818.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.



## 7. Kadar Antosianin

### Tests of Between-Subjects Effects

Dependent Variable: antosianin

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1094,259 <sup>a</sup>	11	99,478	137,374	,000
Intercept	3303,748	1	3303,748	4562,295	,000
wkt_kukus	215,232	2	107,616	148,612	,000
kons	800,703	3	266,901	368,576	,000
wkt_kukus * kons	78,324	6	13,054	18,027	,000
Error	43,448	60	,724		
Total	4441,455	72			
Corrected Total	1137,707	71			

a. R Squared = ,962 (Adjusted R Squared = ,955)

#### antosianin

Duncan<sup>a,b</sup>

wkt_kukus	N	Subset		
		1	2	3
0 mnt	24	4,3676		
10 menit	24		7,6009	
15 mnt	24			8,3531
Sig.		1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,724.

a. Uses Harmonic Mean Sample Size = 24,000.

b. Alpha = ,05.

#### antosianin

Duncan<sup>a,b</sup>

kons	N	Subset			
		1	2	3	4
kontrol	18	1,7022			
40%	18		6,3568		
50%	18			8,1907	
60%	18				10,8458
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = ,724.

a. Uses Harmonic Mean Sample Size = 18,000.

b. Alpha = ,05.

## LAMPIRAN 2

### 2. Uji Fisik

#### 2.1. Hardness

##### Tests of Normality

perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
hardness 10 mnt,0%	,157	6	,200*	,936	6	,626
10 mnt,40%	,129	6	,200*	,994	6	,997
10 mnt,50%	,258	6	,200*	,944	6	,692
10 mnt,60%	,189	6	,200*	,943	6	,681

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

##### Tests of Normality

perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
hardness 15 mnt,0%	,215	6	,200*	,970	6	,893
15 mnt,40%	,300	6	,098	,817	6	,084
15 mnt,50%	,316	6	,061	,842	6	,135
15 mnt,60%	,241	6	,200*	,928	6	,568

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

## Analisis Hardness dengan SPSS ONE WAY ANOVA

### hardness

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
10 mnt,0%	6	1,0273			
10 mnt,40%	6		2,1258		
10 mnt,50%	6			2,2530	
10 mnt,60%	6				2,3733
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

### hardness

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
15 mnt,0%	6	1,6012			
15 mnt,40%	6		2,1928		
15 mnt,50%	6			2,3535	
15 mnt,60%	6				2,6152
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Analisis Hardness Dengan Uji Independent Sample T-Tes

**Group Statistics**

perlakuan	N	Mean	Std. Deviation	Std. Error Mean
hardness 0%, 10 mnt	6	1,0273	,02434	,00994
0%, 15 mnt	6	1,6012	,00958	,00391

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
hardness	Equal variances assumed	4,412	,062	-53,727	10	,000	-,57383	,01068	-,59763	-,55004
	Equal variances not assumed			-53,727	6,512	,000	-,57383	,01068	-,59948	-,54819

**Group Statistics**

perlakuan	N	Mean	Std. Deviation	Std. Error Mean
hardness 40%, 10 mnt	6	2,1258	,02961	,01209
40%, 15 mnt	6	2,1928	,03391	,01384

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
hardness	Equal variances assumed	,001	,974	-3,646	10	,004	-,06700	,01838	-,10795	-,02605
	Equal variances not assumed			-3,646	9,821	,005	-,06700	,01838	-,10805	-,02595

### Group Statistics

perlakuan		N	Mean	Std. Deviation	Std. Error Mean
hardness	50%, 10 mnt	6	2,2530	,03026	,01235
	50%, 15 mnt	6	2,3535	,01171	,00478

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
hardness	Equal variances assumed	3,399	,095	-7,587	10	,000	-,10050	,01325	-,13001	-,07099
	Equal variances not assumed			-7,587	6,465	,000	-,10050	,01325	-,13235	-,06865

**Group Statistics**

perlakuan		N	Mean	Std. Deviation	Std. Error Mean
hardness	60%, 10 mnt	6	2,3733	,02573	,01051
	60%, 15 mnt	6	2,6152	,01699	,00694

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
hardness	Equal variances assumed	,853	,377	-19,211	10	,000	-,24183	,01259	-,26988	-,21378
	Equal variances not assumed			-19,211	8,662	,000	-,24183	,01259	-,27048	-,21319

## 2.2. SPRINGINESS

**Tests of Normality**

perlakuan		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
springiness	10 mnt,0%	,202	6	,200*	,939	6	,649
	10 mnt,40%	,211	6	,200*	,849	6	,154
	10 mnt,50%	,265	6	,200*	,801	6	,060
	10 mnt,60%	,227	6	,200*	,908	6	,425

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

**Tests of Normality**

perlakuan		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
springiness	15 mnt,0%	,302	6	,092	,831	6	,110
	15 mnt,40%	,276	6	,170	,878	6	,259
	15 mnt,50%	,285	6	,138	,807	6	,067
	15 mnt,60%	,293	6	,117	,915	6	,473

a. Lilliefors Significance Correction

Analisis Springiness Dengan SPSS ONE WAY ANOVA

**springiness**

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
10 mnt,60%	6	6,6467			
10 mnt,50%	6		7,1700		
10 mnt,0%	6			8,3783	
10 mnt,40%	6				9,3533
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

**springiness**

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
15 mnt,60%	6	5,0267			
15 mnt,50%	6		6,4233		
15 mnt,0%	6			6,6750	
15 mnt,40%	6				7,0500
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.





Analisis Springiness Dengan Uji Independent Sample T-Tes

**Group Statistics**

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
springiness	0%, 10 mnt	6	8,3783	,21047	,08592
	0%, 15 mnt	6	6,6750	,12973	,05296

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
springiness	Equal variances assumed	1,506	,248	16,876	10	,000	1,70333	,10093	1,47844	1,92823
	Equal variances not assumed			16,876	8,320	,000	1,70333	,10093	1,47213	1,93454

**Group Statistics**

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
springiness	40%, 10 mnt	6	9,3533	,28696	,11715
	40%, 15 mnt	6	7,0500	,03950	,01612

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
springiness	Equal variances assumed	9,182	,013	19,478	10	,000	2,30333	,11826	2,03984	2,56682
	Equal variances not assumed			19,478	5,189	,000	2,30333	,11826	2,00265	2,60401

### Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
springiness	50%, 10 mnt	6	7,1700	,12442	,05079
	50%, 15 mnt	6	6,4233	,11039	,04507

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
springiness	Equal variances assumed	,183	,678	10,996	10	,000	,74667	,06791	,59536	,89797
	Equal variances not assumed			10,996	9,860	,000	,74667	,06791	,59507	,89826

**Group Statistics**

perlakuan		N	Mean	Std. Deviation	Std. Error Mean
springiness	60%, 10 mnt	6	6,6467	,28640	,11692
	60%, 15 mnt	6	5,0267	,01033	,00422

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
springiness	Equal variances assumed	11,269	,007	13,846	10	,000	1,62000	,11700	1,35931	1,88069
	Equal variances not assumed			13,846	5,013	,000	1,62000	,11700	1,31948	1,92052

### 2.3. POROSITAS

**Tests of Normality**

perlakuan		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
porositas	10 mnt,0%	,185	6	,200*	,974	6	,918
	10 mnt,40%	,315	6	,063	,753	6	,021
	10 mnt,50%	,143	6	,200*	,989	6	,987
	10 mnt,60%	,233	6	,200*	,907	6	,417

\*. This is a lower bound of the true significance.

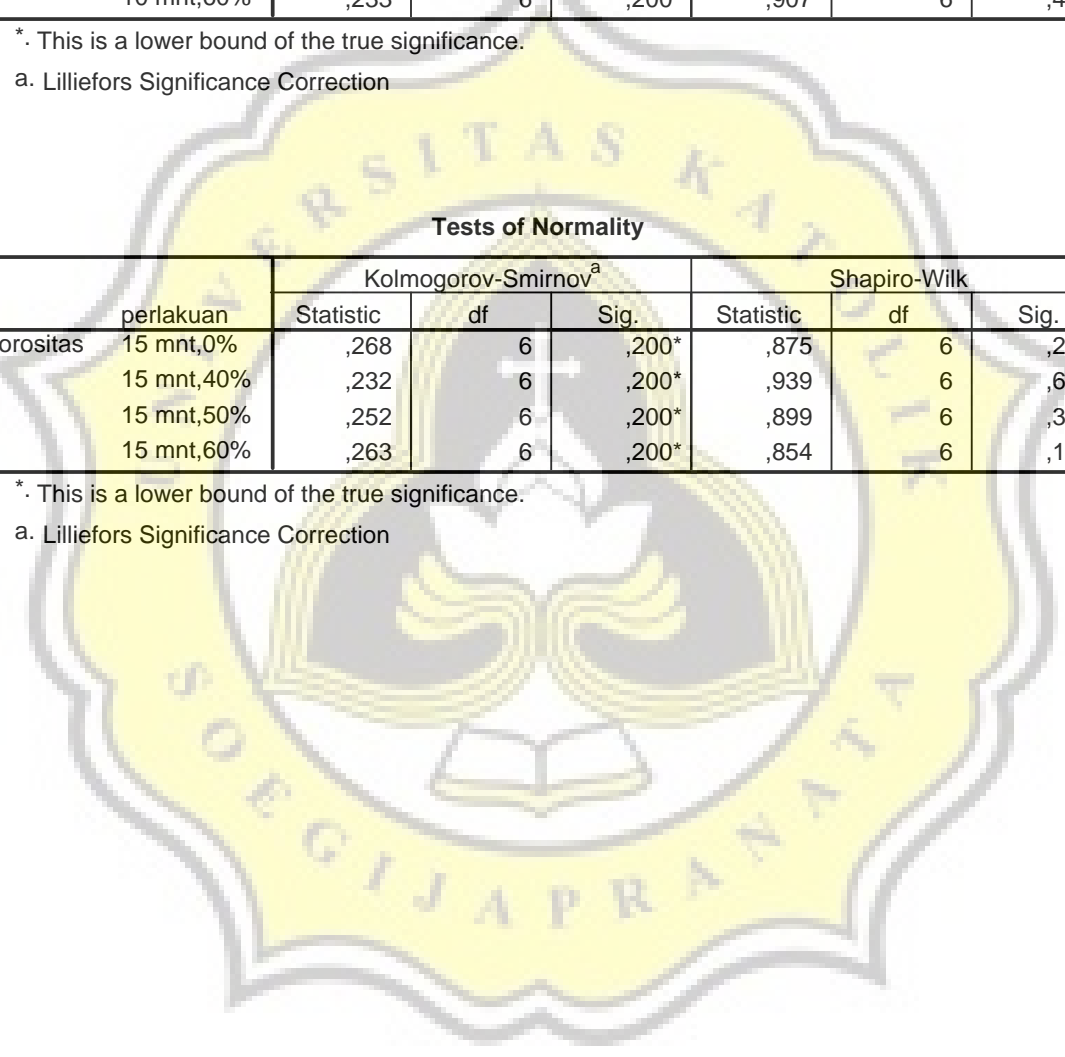
a. Lilliefors Significance Correction

**Tests of Normality**

perlakuan		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
porositas	15 mnt,0%	,268	6	,200*	,875	6	,249
	15 mnt,40%	,232	6	,200*	,939	6	,650
	15 mnt,50%	,252	6	,200*	,899	6	,368
	15 mnt,60%	,263	6	,200*	,854	6	,170

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction



Analisis Porositas Dengan SPSS ONE WAY ANOVA

**porositas**

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
10 mnt,0%	6	1,7267			
10 mnt,40%	6		1,7683		
10 mnt,50%	6			1,8083	
10 mnt,60%	6				1,9533
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

**porositas**

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05		
		1	2	3
15 mnt,0%	6	1,6783		
15 mnt,40%	6		1,7433	
15 mnt,50%	6		1,7617	
15 mnt,60%	6			1,9250
Sig.		1,000	,515	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

Analisis Springiness Dengan Uji Independent Sample T-Tes

**Group Statistics**

perlakuan	N	Mean	Std. Deviation	Std. Error Mean
porositas 0%,10 mnt	6	1,7267	,01751	,00715
0%,15 mnt	6	1,6783	,04535	,01851

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
porositas	Equal variances assumed	4,681	,056	2,435	10	,035	,04833	,01985	,00411	,09255
	Equal variances not assumed			2,435	6,459	,048	,04833	,01985	,00059	,09607

**Group Statistics**

perlakuan	N	Mean	Std. Deviation	Std. Error Mean
porositas 40%,10 mnt	6	1,7683	,02041	,00833
40%,15 mnt	6	1,7433	,04082	,01667

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
porositas	Equal variances assumed	2,666	,134	1,342	10	,209	,02500	,01863	-,01652	,06652
	Equal variances not assumed			1,342	7,353	,220	,02500	,01863	-,01864	,06864

### Group Statistics

		perlakuan	N	Mean	Std. Deviation	Std. Error Mean
porositas	50%,10 mnt		6	1,8083	,02858	,01167
	50%,15 mnt		6	1,7617	,03869	,01579

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
porositas	Equal variances assumed	,909	,363	2,377	10	,039	,04667	,01964	,00292	,09042
	Equal variances not assumed			2,377	9,205	,041	,04667	,01964	,00240	,09094



**Group Statistics**

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
porositas	60%,10 mnt	6	1,9533	,03983	,01626
	60%,15 mnt	6	1,9250	,06285	,02566

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
porositas	Equal variances assumed	4,711	,055	,933	10	,373	,02833	,03038	-,03935	,09602
	Equal variances not assumed			,933	8,459	,377	,02833	,03038	-,04106	,09773

## 2.4. JUMLAH PORI

**Tests of Normality**

perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
jmlpori 10 mnt,0%	,254	6	,200*	,866	6	,212
10 mnt,40%	,293	6	,117	,822	6	,091
10 mnt,50%	,302	6	,094	,775	6	,035
10 mnt,60%	,293	6	,117	,822	6	,091

\*. This is a lower bound of the true significance.

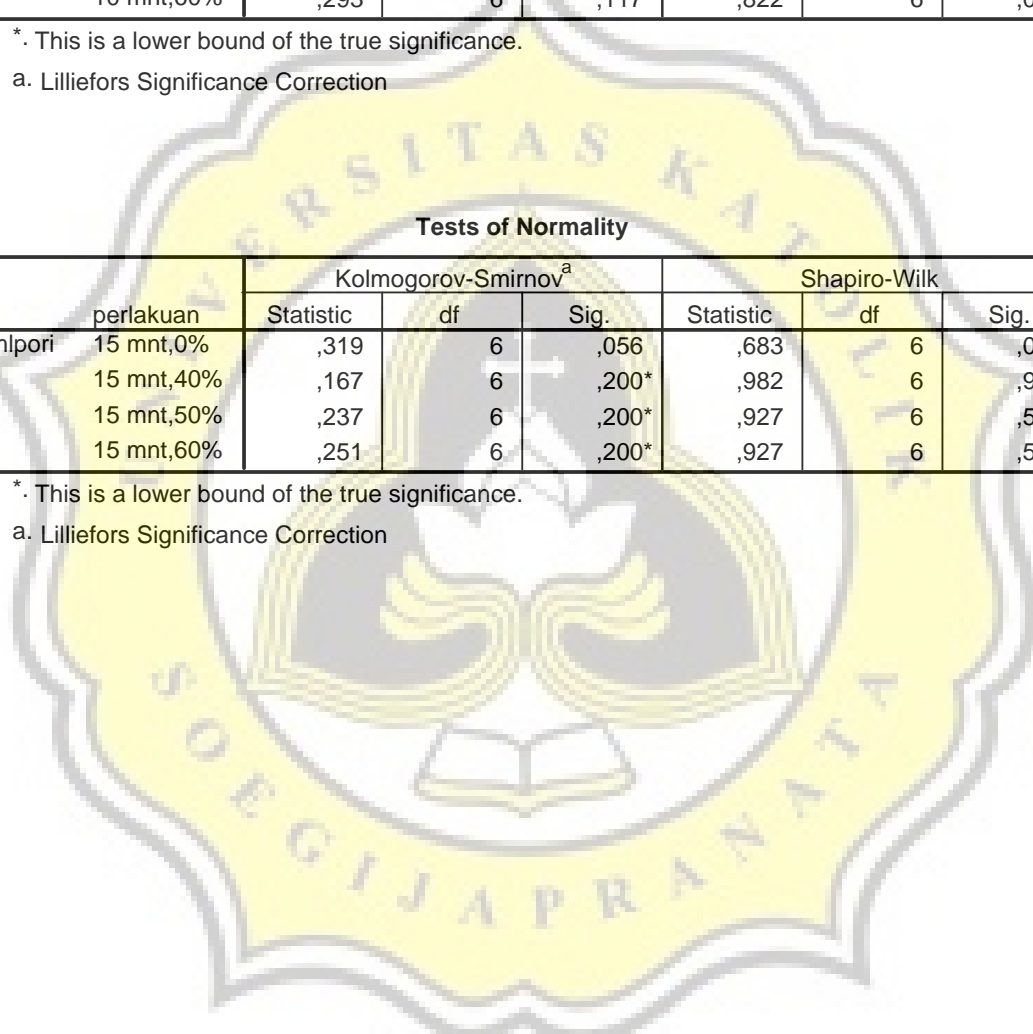
a. Lilliefors Significance Correction

**Tests of Normality**

perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
jmlpori 15 mnt,0%	,319	6	,056	,683	6	,004
15 mnt,40%	,167	6	,200*	,982	6	,960
15 mnt,50%	,237	6	,200*	,927	6	,554
15 mnt,60%	,251	6	,200*	,927	6	,557

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction



Analisis Jumlah Pori Dengan SPSS ONE WAY ANOVA

**jmlpori**

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
10 mnt,60%	6	64,6667			
10 mnt,50%	6		71,1667		
10 mnt,40%	6			73,3333	
10 mnt,0%	6				78,1667
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.

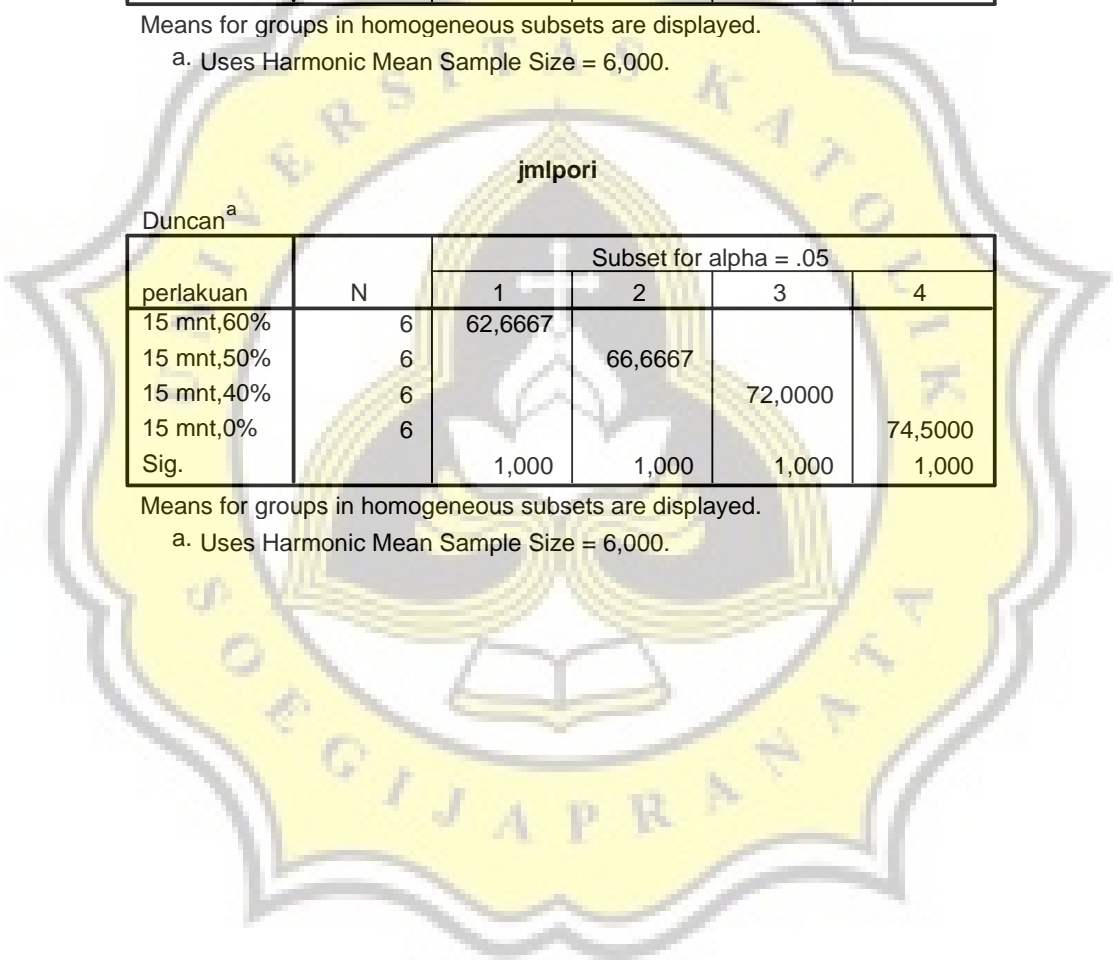
**jmlpori**

Duncan<sup>a</sup>

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
15 mnt,60%	6	62,6667			
15 mnt,50%	6		66,6667		
15 mnt,40%	6			72,0000	
15 mnt,0%	6				74,5000
Sig.		1,000	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6,000.





Analisis Jumlah Pori Dengan Uji Independent Sample T-Tes

**Group Statistics**

perlakuan	N	Mean	Std. Deviation	Std. Error Mean
jmlpori 0%,10 mnt	6	78,1667	,75277	,30732
0%,15 mnt	6	74,5000	,54772	,22361

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
jmlpori	Equal variances assumed	,094	,765	9,648	10	,000	3,66667	,38006	2,81984	4,51349
	Equal variances not assumed			9,648	9,135	,000	3,66667	,38006	2,80885	4,52448

**Group Statistics**

perlakuan	N	Mean	Std. Deviation	Std. Error Mean
jmlpori 40%,10 mnt	6	73,3333	,81650	,33333
40%,15 mnt	6	72,0000	1,41421	,57735

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
jmlpori	Equal variances assumed	,714	,418	2,000	10	,073	1,33333	,66667	-,15209	2,81876
	Equal variances not assumed			2,000	8,000	,081	1,33333	,66667	-,20400	2,87067

### Group Statistics

	perlakuan	N	Mean	Std. Deviation	Std. Error Mean
jmlpori	50%,10 mnt	6	71,1667	,98319	,40139
	50%,15 mnt	6	66,6667	1,36626	,55777

### Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
jmlpori	Equal variances assumed	9,000	,013	2,301	10	,044	2,00000	,86923	,06324	3,93676
	Equal variances not assumed			2,301	6,674	,057	2,00000	,86923	-,07590	4,07590

**Group Statistics**

		N	Mean	Std. Deviation	Std. Error Mean
jmlpori	60%,10 mnt	6	64,6667	,81650	,33333
	60%,15 mnt	6	62,6667	1,96638	,80277

**Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
jmlpori	Equal variances assumed	9,000	,013	2,301	10	,044	2,00000	,86923	,06324	3,93676
	Equal variances not assumed			2,301	6,674	,057	2,00000	,86923	-,07590	4,07590

### LAMPIRAN 3

### 3. UJI SENSORIS

#### 3.1. Warna

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
kontrol	15	1,00	4,00	3,3333	1,17514
A	15	1,00	4,00	2,7333	,88372
B	15	1,00	3,00	2,0000	,84515
C	15	1,00	4,00	1,9333	1,03280
Valid N (listwise)	15				

**FRIEDMAN TEST**

**Ranks**

	Mean Rank
kontrol	3,33
A	2,73
B	2,00
C	1,93

**Test Statistics<sup>a</sup>**

N	15
Chi-Square	11,880
df	3
Asymp. Sig.	,008

a. Friedman Test

Asymp. Sig = 0,008 < 0,05 → terdapat beda nyata pada warna diantara keempat produk

**Uji LSD rank (manual) =  $t_{\alpha/2, \infty} \sqrt{[p.f.(t+1)]/6}$**

Keterangan :  $t_{\alpha/2, \infty}$  = derajat bebas galat, untuk  $\alpha = 5\%$  yang nilainya adalah 1,96

p = jumlah panelis

t = jumlah perlakuan



$$\text{Nilai LSD Rank} = 1,96 \sqrt{[15 \times 4 \times (4 + 1)]} / 6 = 13,859$$

$$R_k = 50; R_a = 41; R_b = 30; R_c = 29$$

$$R_k - R_a = 9, < \text{LSD Rank} \rightarrow \text{kontrol} = 40\%$$

$$R_k - R_b = 20, > \text{LSD Rank} \rightarrow \text{kontrol} \neq 50\%$$

$$R_k - R_c = 21, > \text{LSD Rank} \rightarrow \text{kontrol} \neq 60\%$$

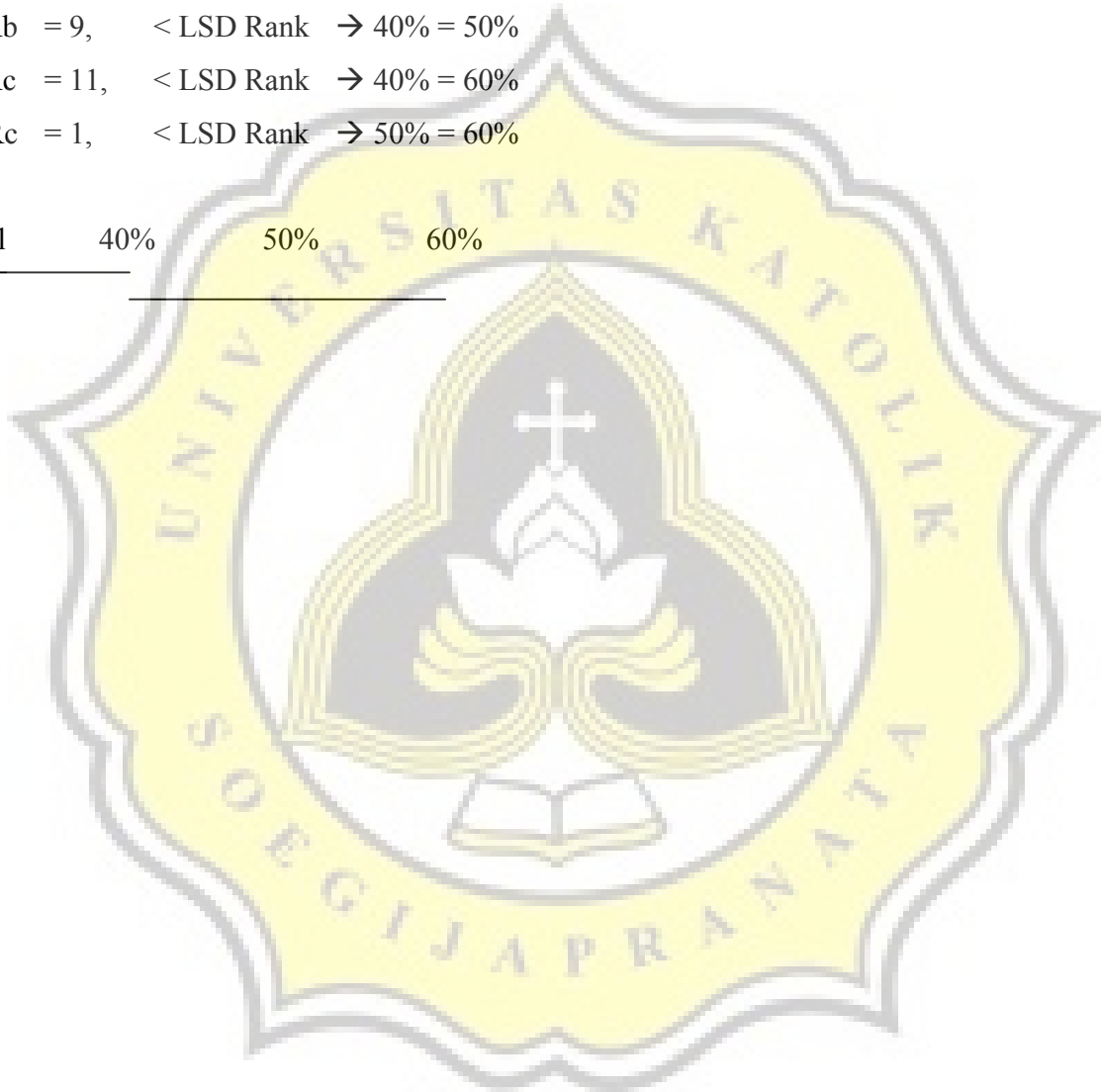
$$R_a - R_b = 9, < \text{LSD Rank} \rightarrow 40\% = 50\%$$

$$R_a - R_c = 11, < \text{LSD Rank} \rightarrow 40\% = 60\%$$

$$R_b - R_c = 1, < \text{LSD Rank} \rightarrow 50\% = 60\%$$

kontrol      40%      50%      60%

---



### 3.2. Tekstur

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
kontrol	15	1,00	4,00	3,2000	1,08233
A	15	1,00	4,00	3,0000	1,06904
B	15	1,00	4,00	2,2000	,86189
C	15	1,00	3,00	1,6000	,73679
Valid N (listwise)	15				

### FRIEDMAN TEST

#### Ranks

	Mean Rank
kontrol	3,20
A	3,00
B	2,20
C	1,60

#### Test Statistics<sup>a</sup>

N	15
Chi-Square	14,760
df	3
Asymp. Sig.	,002

a. Friedman Test

Asymp. Sig = 0,002 < 0,05 → terdapat beda nyata pada tekstur diantara keempat produk

$$\text{Uji LSD rank (manual)} = t_{\alpha/2, \infty} \sqrt{[p.t.(t+1)]/6}$$

Keterangan :  $t_{\alpha/2, \infty}$  = derajat bebas galat, untuk  $\alpha = 5\%$  yang nilainya adalah 1,96

p = jumlah panelis

t = jumlah perlakuan

Nilai LSD Rank =  $1,96 \sqrt{[15 \times 4 \times (4 + 1)]} / 6 = 13,859$

Rk = 48; Ra = 45; Rb = 33; Rc = 23

Rk - Ra = 3, < LSD Rank → kontrol = 40%

Rk - Rb = 15, > LSD Rank → kontrol ≠ 50%

Rk - Rc = 25, > LSD Rank → kontrol ≠ 60%

Ra - Rb = 12, < LSD Rank → 40% = 50%

Ra - Rc = 22, < LSD Rank → 40% ≠ 60%

Rb - Rc = 10, < LSD Rank → 50% = 60%

kontrol      40%      50%      60%

### 3.3.Rasa

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
kontrol	15	1,00	4,00	2,0667	1,33452
A	15	1,00	4,00	2,6000	1,05560
B	15	1,00	4,00	3,0667	1,09978
C	15	1,00	4,00	2,3333	,89974
Valid N (listwise)	15				

#### FRIEDMAN TEST

##### Ranks

	Mean Rank
kontrol	2,07
A	2,57
B	3,03
C	2,33

**Test Statistics<sup>a</sup>**

N	15
Chi-Square	4,570
df	3
Asymp. Sig.	,206

a. Friedman Test

Asymp. Sig = 0,206 > 0,05 → tidak terdapat beda nyata pada rasa diantara keempat produk.

**3.4. Overall**

**Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
kontrol	15	1,00	4,00	2,7333	,88372
A	15	1,00	4,00	3,0000	1,19523
B	15	1,00	4,00	2,0667	1,16292
C	15	1,00	4,00	2,2000	1,08233
Valid N (listwise)	15				

**FRIEDMAN TEST**

**Ranks**

	Mean Rank
kontrol	3,00
A	2,73
B	2,07
C	2,20

**Test Statistics<sup>a</sup>**

N	15
Chi-Square	5,240
df	3
Asymp. Sig.	,155

a. Friedman Test

Asymp. Sig = 0,155 > 0,05 → tidak terdapat beda nyata pada overall diantara keempat produk.