

Lampiran 1. Foto Bahan-bahan yang Digunakan Pada Pembuatan *Soya Bread*

Terigu Protein Tinggi



T. Protein Sedang



Tepung Kedelai Sangrai



Gula Pasir

*Instant Yeast**Bread Improver*

Susu UHT



Susu Kedelai



Telur ayam



Garam

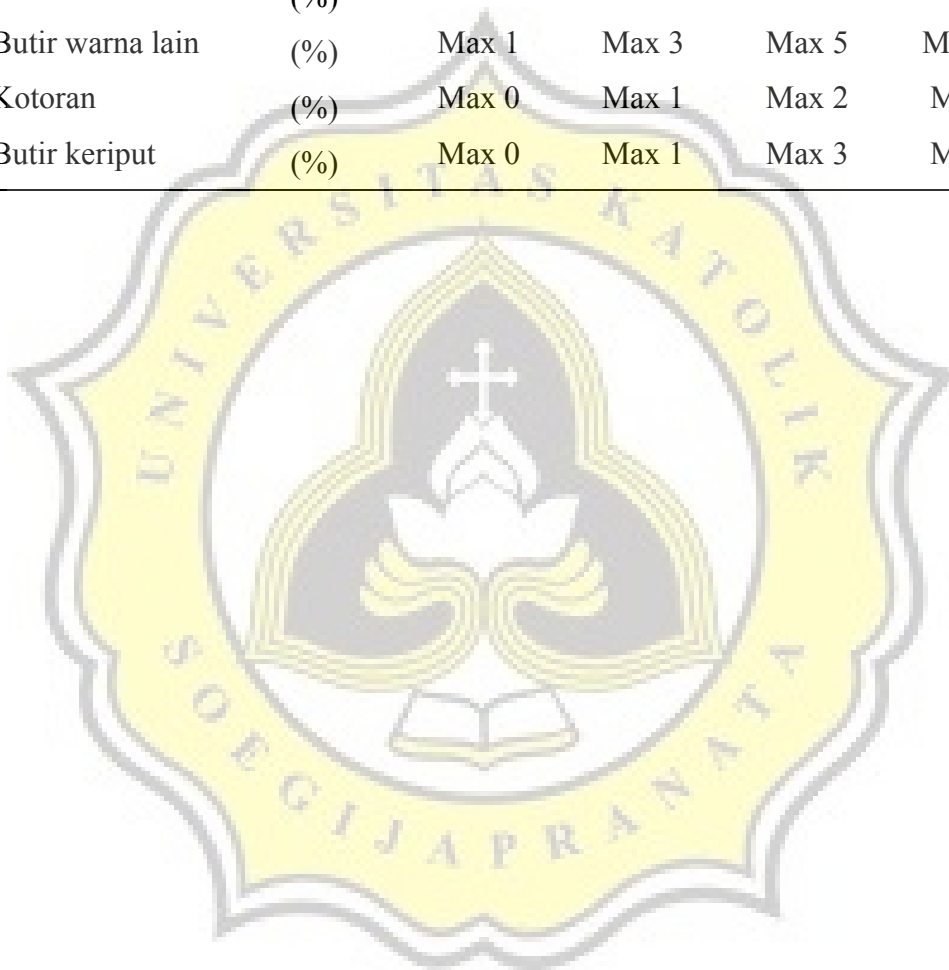
*Butter**Margarin canola*

## Lampiran 2. SNI Roti

No	Kriteria Uji	Satuan	Persyaratan	
			Roti Tawar	Roti Manis
1	Keadaan			
1.1	Kenampakan	-	Tidak berjamur	Tidak berjamur
1.2	Bau	-	Normal	Normal
1.3	Rasa	-	Normal	Normal
2	Air	% b/b	Maks 40	Maks 40
3	Abu (tidak termasuk garam, dihitung atas dasar bahan kering)	% b/b	Maks 1	Maks 3
4	Abu yang tidak larut dalam asam	% b/b	Maks 3,0	Maks 3,0
5	NaCl	% b/b	Maks 2,5	Maks 2,5
6	Gula jumlah	% b/b	-	Maks 8,0
7	Lemak	% b/b	-	Maks 3,0
8	Serangga/belatung	-	Tidak boleh ada	
9	Bahan Tambahan Makanan			
9.1	Pengawet			
9.2	Pewarna	Sesuai dengan SNI 0222-1987		
9.3	Pemanis buatan			
9.4	Sakarín siklamát		Negatif	Negatif
10	Cemaran Logam			
10.1	Raksa (Hg)	mg/kg	Maks 0,05	Maks 0,05
10.2	Timbal (Pb)	mg/kg	Maks 1,0	Maks 1,0
10.3	Tembaga (Cu)	mg/kg	Maks 10,0	Maks 10,0
10.4	Seng (Zn)	mg/kg	Maks 40,0	Maks 40,0
11	Cemaran Arsen (As)	mg/kg	Maks 0,5	Maks 0,5
12	Cemaran Mikroba:			
12.1	Angka lempeng total	koloni/g	Maks 10 <sup>6</sup>	Maks 10 <sup>6</sup>
12.2	E.coli	APM/g	< 3	< 3
12.3	Kapang	koloni/g	Maks 10 <sup>4</sup>	Maks 10 <sup>4</sup>

## Lampiran 3. SNI Kedelai

No	Jenis Uji	Satuan	Persyaratan			
			I	II	III	IV
1.	Kadar air	(%)	Max 13	Max 14	Max 14	Max 16
2.	Butir belah	(%)	Max 1	Max 2	Max 3	Max 5
3.	Butir rusak	(%)	Max 1	Max 2	Max 3	Max 5
4.	Butir warna lain	(%)	Max 1	Max 3	Max 5	Max 10
5.	Kotoran	(%)	Max 0	Max 1	Max 2	Max 3
6.	Butir keriput	(%)	Max 0	Max 1	Max 3	Max 5



## Lampiran 4. SNI Susu Kedelai

No	Kriteria Uji	Satuan	Persyaratan	
			Susu	Minuman
1	Keadaan			
1.1	Bau	-	Normal	Normal
1.2	Rasa	-	Normal	Normal
1.3	Warna	-	Normal	Normal
2	pH	-	6,5-7,0	6,5-7,0
3	Protein	% b/b	Min 2,0	Min 1,0
4	Lemak	% b/b	Min 1,0	Min 0,30
5	Padatan jumlah	% b/b	Min 11,50	Min 11,5
6	Bahan Tambahan Makanan			
6.1	Pemanis buatan			
6.2	Pewarna	Sesuai dengan SNI 0222-1987		
6.3	Pengawet			
7	Cemaran Logam			
7.1	Timbal (Pb)	mg/kg	Maks 0,2	Maks 0,2
7.2	Tembaga (Cu)	mg/kg	Maks 2	Maks 2
7.3	Seng (Zn)	mg/kg	Maks 5	Maks 5
7.4	Timah (Sn)	mg/kg	Maks 40/250	Maks 40/250
7.5	Merkuri (Hg)	mg/kg	Maks 0,03	Maks 0,03
8	Cemaran Arsen (As)	mg/kg	Maks 0,1	Maks 0,1
9	Cemaran Mikroba			
9.1	Angka lempeng total	Koloni/ml	Maks $2 \times 10^2$	Maks $2 \times 10^2$
9.2	Bakteri bentuk koli	APM/ml	Maks 20	Maks 20
9.3	E. coli	APM/ml	< 3	< 3
9.4	Salmonella	-	Negatif	Negatif
9.5	Staphylococcus aureus	Koloni/ml	0	0
9.6	Vibrio sp	-	Negatif	Negatif
9.7	Kapang	Koloni/ml	Maks 50	Maks 50

Lampiran 5. *Worksheet Uji Ranking Hedonik Soya Bread*



Lampiran 6. *Scoresheet Uji Ranging Hedonik Soya Bread*



Lampiran 7. Hasil Uji *Independet T-Test*

## 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
Kdr_Air	Equal variances assumed	.003	.956	.097	28	.923	.08517	.87552	-1.70825	1.87858
	Equal variances not assumed			.097	27.978	.923	.08517	.87552	-1.70832	1.87865
Kdr_Abu	Equal variances assumed	.000	.990	.098	28	.922	.01226	.12472	-.24321	.26773
	Equal variances not assumed			.098	27.999	.922	.01226	.12472	-.24321	.26773
Kdr_Lemak	Equal variances assumed	.035	.853	-.911	28	.370	-.90101	.98888	-2.92665	1.12463
	Equal variances not assumed			-.911	27.973	.370	-.90101	.98888	-2.92673	1.12472
Kdr_Protein	Equal variances assumed	.005	.947	.044	28	.965	.05670	1.28632	-2.57821	2.69161
	Equal variances not assumed			.044	27.996	.965	.05670	1.28632	-2.57823	2.69163
Kdr_KH	Equal variances assumed	.009	.927	-.018	28	.985	-.05714	3.10255	-6.41243	6.29815
	Equal variances not assumed			-.018	27.999	.985	-.05714	3.10255	-6.41244	6.29816



## Lampiran 8. Hasil Uji Normalitas

Tabel 9. Normalitas Uji Sensori

## Tests of Normality

Perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Warna	CKt	.349	50	.000	.600	50	.000
	BKt	.349	50	.000	.812	50	.000
	CK10%	.368	50	.000	.744	50	.000
	CK20%	.336	50	.000	.797	50	.000
	CK30%	.415	50	.000	.581	50	.000
Tekstur	CKt	.395	50	.000	.671	50	.000
	BKt	.379	50	.000	.675	50	.000
	CK10%	.318	50	.000	.833	50	.000
	CK20%	.380	50	.000	.709	50	.000
	CK30%	.471	50	.000	.489	50	.000
Rasa	CKt	.388	50	.000	.677	50	.000
	BKt	.349	50	.000	.688	50	.000
	CK10%	.372	50	.000	.731	50	.000
	CK20%	.349	50	.000	.782	50	.000
	CK30%	.431	50	.000	.503	50	.000

a. Lilliefors Significance Correction



Tabel 10. Normalitas Uji Karakteristik

Kimia

## Tests of Normality

Perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Kdr_Air	CKt	.254	6	.200*	.870	6	.226
	BKt	.189	6	.200*	.906	6	.409
	CK10%	.179	6	.200*	.964	6	.846
	CK20%	.251	6	.200*	.843	6	.138
	CK30%	.135	6	.200*	.987	6	.980
Kdr_Abu	CKt	.186	6	.200*	.885	6	.295
	BKt	.152	6	.200*	.985	6	.975
	CK10%	.200	6	.200*	.973	6	.910
	CK20%	.276	6	.171	.882	6	.277
	CK30%	.155	6	.200*	.960	6	.821
Kdr_Lemak	CKt	.292	6	.119	.797	6	.056
	BKt	.312	6	.069	.735	6	.014
	CK10%	.250	6	.200*	.874	6	.242
	CK20%	.311	6	.071	.714	6	.009
	CK30%	.289	6	.129	.776	6	.035
Kdr_Protein	CKt	.299	6	.101	.856	6	.177
	BKt	.316	6	.061	.774	6	.034
	CK10%	.282	6	.146	.761	6	.025
	CK20%	.270	6	.194	.875	6	.248
	CK30%	.206	6	.200*	.930	6	.581
Kdr_KH	CKt	.225	6	.200*	.876	6	.251
	BKt	.216	6	.200*	.906	6	.411
	CK10%	.224	6	.200*	.915	6	.473
	CK20%	.156	6	.200*	.979	6	.949
	CK30%	.203	6	.200*	.962	6	.831

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

a. Lilliefors Significance Correction

Tabel 11. Normalitas Uji Karakteristik Fisik

**Tests of Normality**

Perlakuan	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Vol_Pengembangan	CKt	.259	6	.200*	.830	6	.108
	BKt	.132	6	.200*	.970	6	.895
	CK10%	.156	6	.200*	.989	6	.987
	CK20%	.262	6	.200*	.832	6	.112
	CK30%	.177	6	.200*	.983	6	.967
Porositas	CKt	.209	6	.200*	.912	6	.450
	BKt	.204	6	.200*	.918	6	.493
	CK10%	.290	6	.124	.898	6	.361
	CK20%	.229	6	.200*	.874	6	.242
	CK30%	.234	6	.200*	.882	6	.280

\*. 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.	
Jumlah_Pori	CKt	.190	6	.200*	.934	6	.614
	BKt	.205	6	.200*	.961	6	.830
	CK10%	.258	6	.200*	.940	6	.659
	CK20%	.223	6	.200*	.908	6	.421
	CK30%	.293	6	.117	.822	6	.091

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

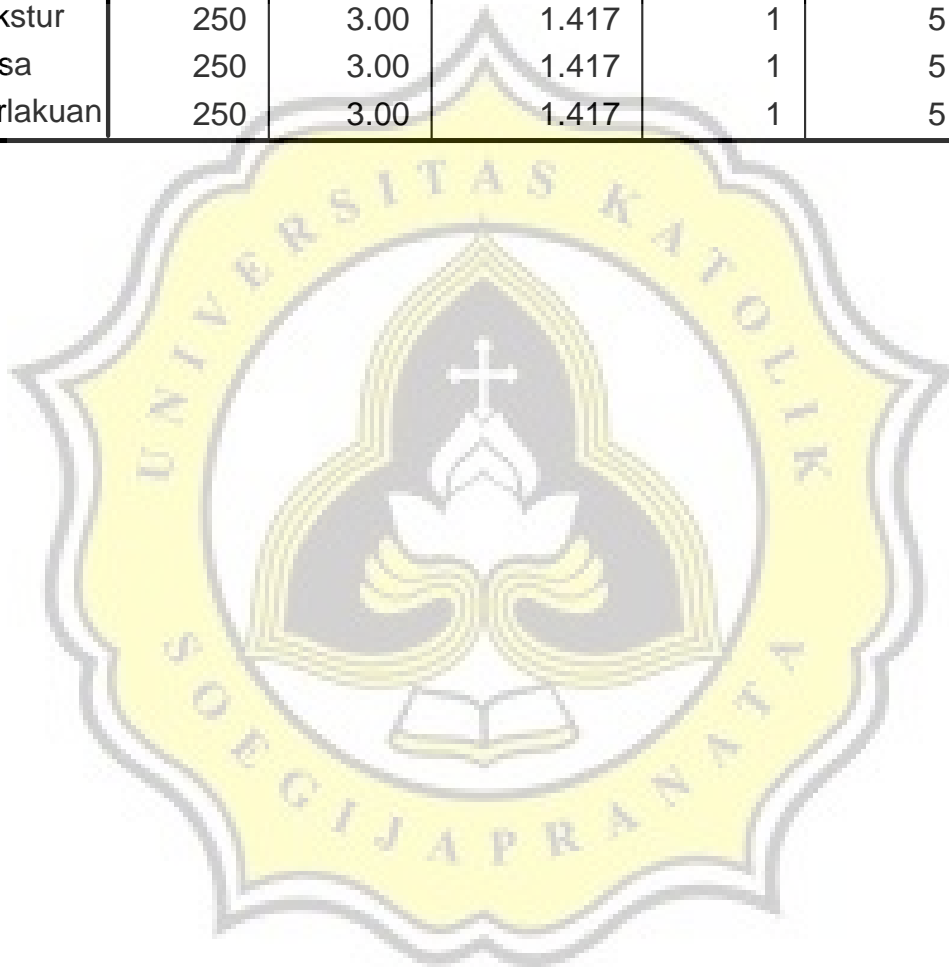
a. Lilliefors Significance Correction

## Lampiran 9. Hasil Uji Deskripsi Statistik

Tabel 12. Deskripsi Statistik Uji Sensori

**Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Warna	250	3.00	1.417	1	5
Tekstur	250	3.00	1.417	1	5
Rasa	250	3.00	1.417	1	5
Perlakuan	250	3.00	1.417	1	5



Tabel 13. Deskripsi Statistik Uji Karakteristik Kimia

**Descriptives**

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
Kdr_Air	CKt	6	21.1650	.30901	.12615	20.8407	21.4893	20.64	21.43
	BKt	6	22.8608	.26931	.10995	22.5781	23.1434	22.56	23.21
	CK10%	6	23.3749	.27359	.11169	23.0878	23.6620	23.03	23.82
	CK20%	6	25.4306	.28718	.11724	25.1293	25.7320	24.91	25.69
	CK30%	6	27.8536	.21198	.08654	27.6311	28.0761	27.58	28.18
	Total	30	24.1370	2.35640	.43022	23.2571	25.0169	20.64	28.18
Kdr_Abu	CKt	6	1.7894	.00414	.00169	1.7851	1.7937	1.79	1.80
	BKt	6	1.6149	.05038	.02057	1.5620	1.6678	1.54	1.69
	CK10%	6	1.7996	.02382	.00973	1.7746	1.8246	1.76	1.84
	CK20%	6	2.2187	.01046	.00427	2.2077	2.2297	2.21	2.24
	CK30%	6	2.5111	.03366	.01374	2.4757	2.5464	2.47	2.56
	Total	30	1.9867	.33567	.06129	1.8614	2.1121	1.54	2.56
Kdr_Lemak	CKt	6	13.7918	.52871	.21584	13.2369	14.3466	13.21	14.36
	BKt	6	17.3190	.59180	.24160	16.6979	17.9400	16.76	17.93
	CK10%	6	19.7374	.41045	.16757	19.3067	20.1682	19.22	20.17
	CK20%	6	19.8992	.61212	.24990	19.2568	20.5416	19.31	20.47
	CK30%	6	21.1765	.37115	.15152	20.7870	21.5660	20.80	21.55
	Total	30	18.3848	2.70023	.49299	17.3765	19.3931	13.21	21.55
Kdr_Protein	CKt	6	16.5134	.06202	.02532	16.4483	16.5785	16.41	16.57
	BKt	6	15.6170	.13033	.05321	15.4803	15.7538	15.46	15.73
	CK10%	6	19.8991	.14582	.05953	19.7461	20.0521	19.78	20.09
	CK20%	6	22.1930	.40543	.16552	21.7675	22.6185	21.76	22.74
	CK30%	6	24.6690	.06417	.02620	24.6017	24.7364	24.60	24.78
	Total	30	19.7783	3.46159	.63200	18.4857	21.0709	15.46	24.78
Kdr_KH	CKt	6	45.4947	.19263	.07864	45.2925	45.6968	45.30	45.85
	BKt	6	44.8508	.46802	.19107	44.3596	45.3419	44.40	45.65
	CK10%	6	36.3473	.62609	.25560	35.6903	37.0044	35.40	36.98
	CK20%	6	30.7985	.68651	.28027	30.0780	31.5189	29.90	31.85
	CK30%	6	24.1348	.26659	.10884	23.8550	24.4145	23.77	24.51
	Total	30	36.3252	8.34896	1.52431	33.2076	39.4428	23.77	45.85



### Descriptive Statistics

Dependent Variable: Akt\_Antioksidan

Perlakuan	Hari	Mean	Std. Deviation	N
CKt	0	19.5474	.10048	6
	1	10.5496	.12571	6
	2	8.7186	.14283	6
	3	7.6703	.21338	6
	Total	11.6215	4.79360	24
BKt	0	15.6313	.10653	6
	1	8.7976	.14075	6
	2	7.6300	.14749	6
	3	6.7038	.16605	6
	Total	9.6907	3.58708	24
CK10%	0	20.3226	.10676	6
	1	11.1533	.10272	6
	2	9.6428	.14701	6
	3	8.3414	.11554	6
	Total	12.3650	4.80322	24
CK20%	0	21.2522	.13598	6
	1	12.3224	.12605	6
	2	10.5895	.13033	6
	3	9.4935	.14059	6
	Total	13.4144	4.73756	24
CK30%	0	22.5745	.15446	6
	1	17.3827	.14126	6
	2	15.6085	.13606	6
	3	12.3235	.33106	6
	Total	16.9723	3.79362	24
Total	0	19.8656	2.38801	30
	1	12.0411	2.95530	30
	2	10.4378	2.81548	30
	3	8.9065	1.97745	30
	Total	12.8128	4.93576	120

Tabel 14. Deskripsi Statistik Uji Karakteristik Fisik

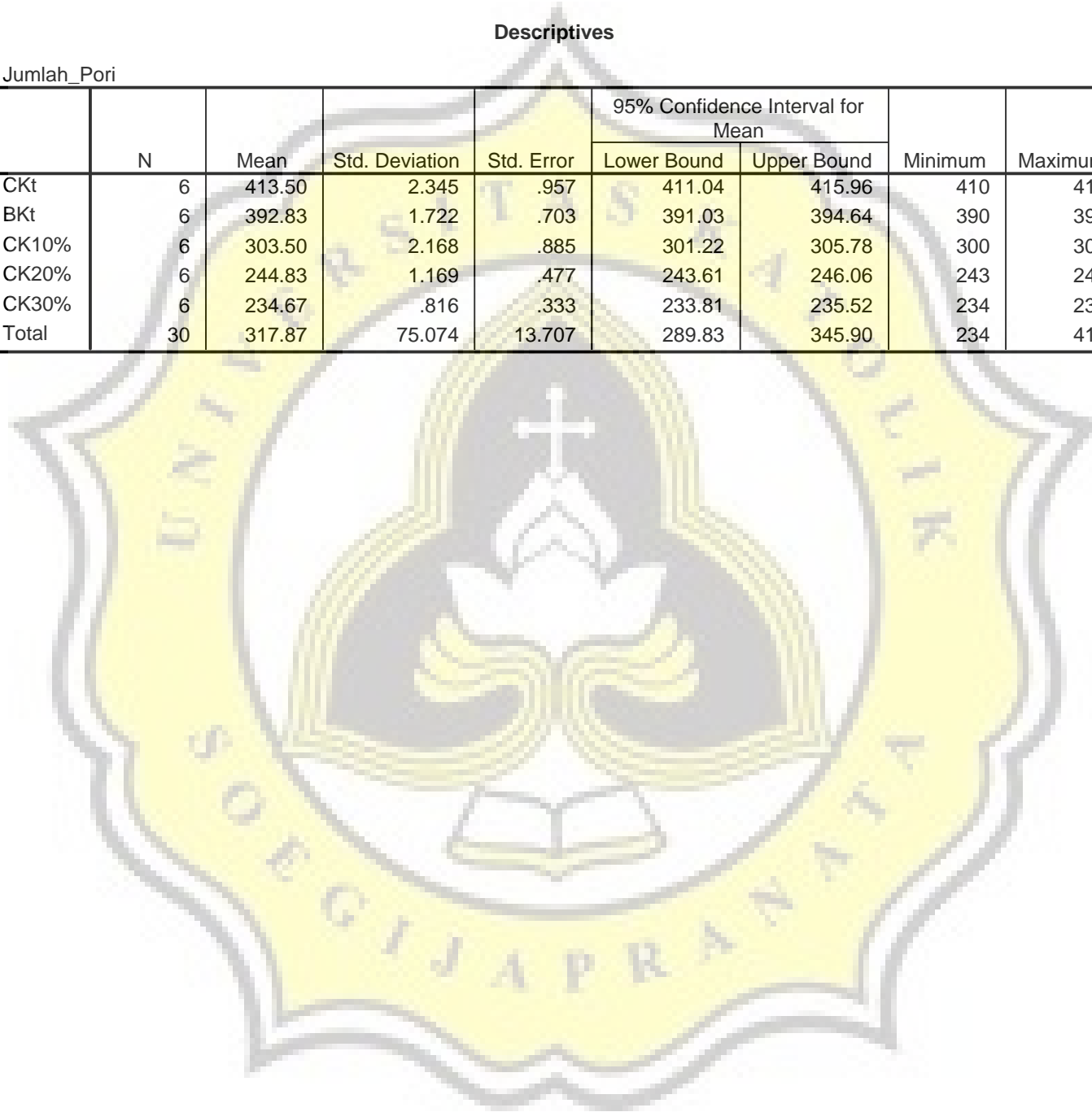
## Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Vol_Pengembangan	CKt	614.9133	39.01671	15.92851	573.9677	655.8588	567.67	653.86
	BKt	483.0944	9.21754	3.76304	473.4211	492.7676	468.65	493.98
	CK10%	441.8530	30.96033	12.63950	409.3621	474.3439	397.19	487.02
	CK20%	377.3254	6.62947	2.70647	370.3682	384.2826	370.42	384.66
	CK30%	313.0328	27.47973	11.21855	284.1946	341.8710	272.67	353.11
	Total	30	446.0438	106.79542	19.49809	406.1657	485.9218	272.67
Porositas	CKt	2.3933	.05785	.02362	2.3326	2.4540	2.32	2.46
	BKt	2.5300	.06197	.02530	2.4650	2.5950	2.46	2.61
	CK10%	3.2517	.10048	.04102	3.1462	3.3571	3.15	3.42
	CK20%	4.0533	.21869	.08928	3.8238	4.2828	3.85	4.38
	CK30%	4.2250	.20686	.08445	4.0079	4.4421	3.92	4.42
	Total	30	3.2907	.77858	.14215	2.9999	3.5814	2.32

## Descriptives

Jumlah\_Pori

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
CKt	6	413.50	2.345	.957	411.04	415.96	410	416
BKt	6	392.83	1.722	.703	391.03	394.64	390	395
CK10%	6	303.50	2.168	.885	301.22	305.78	300	306
CK20%	6	244.83	1.169	.477	243.61	246.06	243	246
CK30%	6	234.67	.816	.333	233.81	235.52	234	236
Total	30	317.87	75.074	13.707	289.83	345.90	234	416



### Descriptive Statistics

Dependent Variable: Hardness

Perlakuan	Hari	Mean	Std. Deviation	N
CKt	0	188.1260	4.09064	6
	1	245.6339	8.90040	6
	2	281.2180	6.80581	6
	3	356.9069	10.08560	6
	Total	267.9712	62.89238	24
BKt	0	208.4593	11.04133	6
	1	218.9673	5.64163	6
	2	268.2180	7.25154	6
	3	361.9069	17.39063	6
	Total	264.3879	62.84478	24
CK10%	0	217.4962	11.37643	6
	1	249.8998	11.00007	6
	2	281.3028	11.07930	6
	3	320.2138	9.14978	6
	Total	267.2282	40.08639	24
CK20%	0	221.2981	8.04162	6
	1	263.9769	11.70148	6
	2	281.5377	10.92639	6
	3	322.7243	7.67098	6
	Total	272.3843	38.27215	24
CK30%	0	277.6427	13.42874	6
	1	324.0881	21.55518	6
	2	356.9543	11.32735	6
	3	364.1692	7.59244	6
	Total	330.7136	37.39577	24
Total	0	222.6045	31.75360	30
	1	260.5132	37.53215	30
	2	293.8462	33.72975	30
	3	345.1842	22.32565	30
	Total	280.5370	55.07407	120

### Descriptive Statistics

Dependent Variable: Springiness

Perlakuan	Hari	Mean	Std. Deviation	N
CKt	0	3.6300	.06870	6
	1	3.6117	.04750	6
	2	3.5617	.07083	6
	3	3.4300	.04050	6
	Total	3.5583	.09667	24
BKt	0	3.6083	.05845	6
	1	3.4200	.07376	6
	2	3.3350	.05128	6
	3	3.1700	.05099	6
	Total	3.3833	.17059	24
CK10%	0	3.5250	.08826	6
	1	3.4183	.06338	6
	2	3.2683	.06824	6
	3	3.0800	.05831	6
	Total	3.3229	.18308	24
CK20%	0	3.5400	.08532	6
	1	3.4667	.07967	6
	2	3.2700	.08198	6
	3	2.9117	.04708	6
	Total	3.2971	.25835	24
CK30%	0	3.1917	.06401	6
	1	2.9000	.06066	6
	2	2.8600	.06450	6
	3	2.5850	.06834	6
	Total	2.8842	.22769	24
Total	0	3.4990	.17539	30
	1	3.3633	.25382	30
	2	3.2590	.23901	30
	3	3.0353	.28986	30
	Total	3.2892	.29420	120



## Lampiran 10. Hasil Uji Beda

Tabel 15. Hasil Test *Kruskal Wallis* Uji Sensori

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

	Warna	Tekstur	Rasa
Chi-Square	141.890	129.540	139.081
df	4	4	4
Asymp. Sig.	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Perlakuan

Tabel 16. Hasil Uji Beda Nyata antar Perlakuan pada Uji Warna, Tekstur dan Rasa (dengan *Mann-Whitney*)

CKt dibandingkan BKt

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CKt	50	65.65	3282.50
	BKt	50	35.35	1767.50
	Total	100		
Tekstur	CKt	50	68.51	3425.50
	BKt	50	32.49	1624.50
	Total	100		
Rasa	CKt	50	68.94	3447.00
	BKt	50	32.06	1603.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	492.500	349.500	328.000
Wilcoxon W	1767.500	1624.500	1603.000
Z	-5.628	-6.688	-6.842
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

CKt dibandingkan CK10%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CKt	50	66.11	3305.50
	CK10%	50	34.89	1744.50
	Total	100		
Tekstur	CKt	50	67.50	3375.00
	CK10%	50	33.50	1675.00
	Total	100		
Rasa	CKt	50	69.88	3494.00
	CK10%	50	31.12	1556.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	469.500	400.000	281.000
Wilcoxon W	1744.500	1675.000	1556.000
Z	-5.726	-6.192	-7.000
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

CKt dibandingkan CK20%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CKt	50	72.39	3619.50
	CK20%	50	28.61	1430.50
	Total	100		
Tekstur	CKt	50	72.98	3649.00
	CK20%	50	28.02	1401.00
	Total	100		
Rasa	CKt	50	68.10	3405.00
	CK20%	50	32.90	1645.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	155.500	126.000	370.000
Wilcoxon W	1430.500	1401.000	1645.000
Z	-7.829	-8.099	-6.394
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

CKt dibandingkan CK30%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CKt	50	73.85	3692.50
	CK30%	50	27.15	1357.50
	Total	100		
Tekstur	CKt	50	72.01	3600.50
	CK30%	50	28.99	1449.50
	Total	100		
Rasa	CKt	50	74.08	3704.00
	CK30%	50	26.92	1346.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	82.500	174.500	71.000
Wilcoxon W	1357.500	1449.500	1346.000
Z	-8.438	-7.895	-8.549
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

BKt dibandingkan CK10%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	BKt	50	54.04	2702.00
	CK10%	50	46.96	2348.00
	Total	100		
Tekstur	BKt	50	55.74	2787.00
	CK10%	50	45.26	2263.00
	Total	100		
Rasa	BKt	50	62.64	3132.00
	CK10%	50	38.36	1918.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	1073.000	988.000	643.000
Wilcoxon W	2348.000	2263.000	1918.000
Z	-1.277	-1.890	-4.334
Asymp. Sig. (2-tailed)	.202	.059	.000

a. Grouping Variable: Perlakuan

BKt dibandingkan CK20%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	BKt	50	65.53	3276.50
	CK20%	50	35.47	1773.50
	Total	100		
Tekstur	BKt	50	64.94	3247.00
	CK20%	50	36.06	1803.00
	Total	100		
Rasa	BKt	50	55.74	2787.00
	CK20%	50	45.26	2263.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	498.500	528.000	988.000
Wilcoxon W	1773.500	1803.000	2263.000
Z	-5.432	-5.238	-1.912
Asymp. Sig. (2-tailed)	.000	.000	.056

a. Grouping Variable: Perlakuan

BKt dibandingkan CK30%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	BKt	50	71.08	3554.00
	CK30%	50	29.92	1496.00
	Total	100		
Tekstur	BKt	50	67.83	3391.50
	CK30%	50	33.17	1658.50
	Total	100		
Rasa	BKt	50	70.56	3528.00
	CK30%	50	30.44	1522.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	221.000	383.500	247.000
Wilcoxon W	1496.000	1658.500	1522.000
Z	-7.423	-6.368	-7.312
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

CK10% dibandingkan CK20%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CK10%	50	66.24	3312.00
	CK20%	50	34.76	1738.00
	Total	100		
Tekstur	CK10%	50	62.82	3141.00
	CK20%	50	38.18	1909.00
	Total	100		
Rasa	CK10%	50	38.08	1904.00
	CK20%	50	62.92	3146.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	463.000	634.000	629.000
Wilcoxon W	1738.000	1909.000	1904.000
Z	-5.734	-4.539	-4.514
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

CK10% dibandingkan CK 30%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CK10%	50	70.91	3545.50
	CK30%	50	30.09	1504.50
	Total	100		
Tekstur	CK10%	50	68.42	3421.00
	CK30%	50	32.58	1629.00
	Total	100		
Rasa	CK10%	50	65.44	3272.00
	CK30%	50	35.56	1778.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	229.500	354.000	503.000
Wilcoxon W	1504.500	1629.000	1778.000
Z	-7.452	-6.524	-5.583
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

CK 20% dibandingkan CK 30%

**Ranks**

	Perlakuan	N	Mean Rank	Sum of Ranks
Warna	CK20%	50	64.16	3208.00
	CK30%	50	36.84	1842.00
	Total	100		
Tekstur	CK20%	50	65.74	3287.00
	CK30%	50	35.26	1763.00
	Total	100		
Rasa	CK20%	50	71.92	3596.00
	CK30%	50	29.08	1454.00
	Total	100		

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

	Warna	Tekstur	Rasa
Mann-Whitney U	567.000	488.000	179.000
Wilcoxon W	1842.000	1763.000	1454.000
Z	-5.082	-5.633	-7.735
Asymp. Sig. (2-tailed)	.000	.000	.000

a. Grouping Variable: Perlakuan

Tabel 17. Post Hoc Uji Karakteristik Fisik

**Vol\_Pengembangan**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
CK30%	6	313.0328				
CK20%	6		377.3254			
CK10%	6			441.8530		
BKt	6				483.0944	
CKt	6					614.9133
Sig.		1.000	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
CKt	6	2.1583		
BKt	6	2.2800		
CK10%	6		2.9300	
CK20%	6			3.6517
CK30%	6			3.8050
Sig.		.121	1.000	.054

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

**Jumlah\_Pori**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
CK30%	6	234.67				
CK20%	6		244.83			
CK10%	6			303.50		
BKt	6				392.83	
CKt	6					413.50
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Tabel 18. Post Hoc Uji Karakteristik Kimia

**Kdr\_Air**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
CKt	6	21.1650				
BKt	6		22.8608			
CK10%	6			23.3749		
CK20%	6				25.4306	
CK30%	6					27.8536
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

**Kdr\_Abu**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05			
		1	2	3	4
BKt	6	1.6149			
CKt	6		1.7894		
CK10%	6		1.7996		
CK20%	6			2.2187	
CK30%	6				2.5111
Sig.		1.000	.555	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

**Kdr\_Lemak**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05			
		1	2	3	4
CKt	6	13.7918			
BKt	6		17.3190		
CK10%	6			19.7374	
CK20%	6			19.8992	
CK30%	6				21.1765
Sig.		1.000	1.000	.589	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.



**Kdr\_Protein**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
BKt	6	15.6170				
CKt	6		16.5134			
CK10%	6			19.8991		
CK20%	6				22.1930	
CK30%	6					24.6690
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

**Kdr\_KH**Duncan<sup>a</sup>

Perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
CK30%	6	24.1348				
CK20%	6		30.7985			
CK10%	6			36.3473		
BKt	6				44.8508	
CKt	6					45.4947
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 6.000.

Tabel 19. Post Hoc Uji Karakteristik Fisik Setelah Penyimpanan 3 hari

**Hardness**Duncan<sup>a,b</sup>

Perlakuan	N	Subset		
		1	2	3
BKt	24	264.3879		
CK10%	24	267.2282	267.2282	
CKt	24	267.9712	267.9712	
CK20%	24		272.3843	
CK30%	24			330.7136
Sig.		.292	.128	1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 121.019.

a. Uses Harmonic Mean Sample Size = 24.000.

b. Alpha = .05.

**Hardness**Duncan<sup>a,b</sup>

Hari	N	Subset			
		1	2	3	4
0	30	222.6045			
1	30		260.5132		
2	30			293.8462	
3	30				345.1842
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) = 121.019.

a. Uses Harmonic Mean Sample Size = 30.000.

b. Alpha = .05.

**Springiness**Duncan<sup>a,b</sup>

Perlakuan	N	Subset			
		1	2	3	4
CKt	24	2.8838			
BKt	24		3.2967		
CK10%	24		3.3242		
CK20%	24			3.3840	
CK30%	24				3.5586
Sig.		1.000	.151	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) = .004.

a. Uses Harmonic Mean Sample Size = 24.000.

b. Alpha = .05.

**Springiness**Duncan<sup>a,b</sup>

Hari	N	Subset			
		1	2	3	4
0	30	3.0349			
1	30		3.2598		
2	30			3.3637	
3	30				3.4995
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) = .004.

a. Uses Harmonic Mean Sample Size = 30.000.

b. Alpha = .05.

Tabel 20. Post Hoc Uji Karakteristik Kimia Setelah Penyimpanan 3 hari

**Akt\_Antioksidan**Duncan<sup>a,b</sup>

Perlakuan	N	Subset				
		1	2	3	4	5
BKt	24	9.6907				
CKt	24		11.6215			
CK10%	24			12.3650		
CK20%	24				13.4144	
CK30%	24					16.9723
Sig.		1.000	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) = .024.

a. Uses Harmonic Mean Sample Size = 24.000.

b. Alpha = .05.

**Akt\_Antioksidan**Duncan<sup>a,b</sup>

Hari	N	Subset			
		1	2	3	4
3	30	8.9065			
2	30		10.4378		
1	30			12.0411	
0	30				19.8656
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) = .024.

a. Uses Harmonic Mean Sample Size = 30.000.

b. Alpha = .05.