

7. LAMPIRAN

7.1. Lampiran 1. Worksheet dan Scoresheet Sensori

Worksheet Uji Rating dan Ranking Hedonik

Tanggal uji :

Jenis sampel : Naan Bread

Identifikasi sampel:

Naan Bread tepung terigu 100%

Naan Bread tepung maizena 40%

Naan Bread tepung mocaf 40%

Naan Bread tepung jagung 40%

Kode

A

B

C

D

Kode kombinasi urutan penyajian:

ABCD : 1

ABDC : 2

ACBD : 3

ACDB : 4

Penyajian:

<i>Both</i>	<i>Panelis</i>	<i>Kode sampel urutan penyajian</i>			
I	#1,5,9,13,17,21,25,29	832	642	456	971 ¹
II	#2,6,10,14,18,22,26,30	943	567	238	783 ²
III	#3,7,11,15,19,23,27,31	886	786	104	543 ³
IV	#4,8,12,16,20,24,28,32	596	359	823	789 ⁴

Rekap kode sampel:

Sampel A	832	943	886	596
Sampel B	642	567	104	789
Sampel C	456	783	786	359
Sampel D	971	238	543	823

UJI RATING HEDONIK

Nama : Tanggal:
 Produk : Naan Bread
 Penilaian untuk : Rasa

Instruksi :

Berkumur-kumurlah dulu sebelum menguji sampel.

Di hadapan Anda terdapat 4 buah sampel naan bread. Cicipi sampel secara berurutan dari kiri ke kanan, rasakan masing-masing. Setelah mencicipi semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

UJI RATING HEDONIK

Nama : Tanggal:
 Produk : Naan Bread
 Penilaian untuk : Tekstur

Instruksi :

Berkumur-kumurlah dulu sebelum menguji sampel.

Di hadapan Anda terdapat 4 buah sampel naan bread. Cicipi sampel secara berurutan dari kiri ke kanan, rasakan tekstur dari masing-masing. Setelah mencicipi semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

UJI RATING HEDONIK

Nama : _____ Tanggal: _____
 Produk : Naan Bread
 Penilaian untuk : Warna

Instruksi :
 Berkumur-kumurlah dulu sebelum menguji sampel.
 Di hadapan Anda terdapat 4 buah sampel naan bread. Amati sampel secara berurutan dari kiri ke kanan. Setelah mengamati semua sampel. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating
_____	_____
_____	_____
_____	_____
_____	_____



Nama : _____ Tanggal: _____
 Produk : Naan Bread
 Penilaian untuk : Aroma

Instruksi :
 Berkumur-kumurlah dulu sebelum menguji sampel.
 Di hadapan Anda terdapat 4 buah sampel naan bread. Rasakan aroma sampel secara berurutan dari kiri ke kanan, rasakan aroma dari masing-masing. Setelah mencoba aroma semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

UJI RATING HEDONIK

Nama : Tanggal:
 Produk : Naan Bread
 Penilaian untuk : *Overall*

Instruksi :

Berkumur-kumurlah dulu sebelum menguji sampel.

Di hadapan Anda terdapat 4 buah sampel naan bread. Cicipi dan bandingkan keseluruhan dari keempat sampel secara berurutan dari kiri ke kanan. Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

UJI RATING HEDONIK

Nama : Tanggal:
 Produk : Naan Bread
 Penilaian untuk : *Rasa*

Instruksi :

Berkumur-kumurlah dulu sebelum menguji sampel.

Di hadapan Anda terdapat 4 buah sampel naan bread. Cicipi sampel secara berurutan dari kiri ke kanan, rasakan masing-masing. Setelah mencicipi semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating
_____	_____
_____	_____
_____	_____
_____	_____

Terima Kasih

UJI RATING HEDONIK

Nama : _____ Tanggal: _____
 Produk : Naan Bread
 Penilaian untuk : Tekstur

Instruksi :
 Berkumur-kumurlah dulu sebelum menguji sampel.
 Di hadapan Anda terdapat 4 buah sampel naan bread. Cicipi sampel secara berurutan dari kiri ke kanan, rasakan tekstur dari masing-masing. Setelah mencicipi semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating

Terima Kasih

UJI RANKING HEDONIK

Nama : _____ Tanggal: _____
 Produk : Naan Bread
 Penilaian untuk : Warna

Instruksi :
 Berkumur-kumurlah dulu sebelum menguji sampel.
 Di hadapan Anda terdapat 4 buah sampel naan bread. Amati sampel secara berurutan dari kiri ke kanan. Setelah mengamati semua sampel. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating

Terima Kasih

UJI RANKING HEDONIK

Nama : _____ Tanggal: _____
 Produk : Naan Bread
 Penilaian untuk : Aroma

Instruksi :
 Berkumur-kumurlah dulu sebelum menguji sampel.

Di hadapan Anda terdapat 4 buah sampel naan bread. Rasakan aroma sampel secara berurutan dari kiri ke kanan, rasakan aroma dari masing-masing. Setelah mencoba aroma semua sampel, Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating

Terima Kasih

UJI RANKING HEDONIK

Nama : _____ Tanggal: _____
 Produk : Naan Bread
 Penilaian untuk : *Overall*

Instruksi :
 Berkumur-kumurlah dulu sebelum menguji sampel.

Di hadapan Anda terdapat 4 buah sampel naan bread. Cicipi dan bandingkan keseluruhan dari keempat sampel secara berurutan dari kiri ke kanan. Anda boleh mengulang sesering yang Anda perlukan. Urutkan sampel dari yang paling Anda sukai (=4) hingga sampel yang paling kurang Anda sukai (=1)

Sampel	Rating

Terima Kasih

7.2. Lampiran 2. Hasil Pengolahan SPSS

7.2.1. Uji Sensori

Test Statistics^{b,c}

	rasa	textur	warna	aroma	overall
Chi-Square	29.170	11.104	25.105	2.425	30.376
df	3	3	3	3	3
Asymp. Sig.	.000	.011	.000	.489	.000
Monte Carlo Sig.	.000 ^a	.010 ^a	.000 ^a	.494 ^a	.000 ^a
95% Confidence Interval	Lower Bound	.000	.009	.000	.485
	Upper Bound	.000	.012	.000	.504

a. Based on 10000 sampled tables with starting seed 2000000.

b. Kruskal Wallis Test

c. Grouping Variable: perlakuan

7.2.1.1.Rasa

7.2.1.1.1. Kontrol & Maizena

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
rasa kontrol 40%	30	29.77	893.00
maizena 40%	30	31.23	937.00
Total	60		

Test Statistics^b

	rasa	
Mann-Whitney U	428.000	
Wilcoxon W	893.000	
Z	-.346	
Asymp. Sig. (2-tailed)	.729	
Monte Carlo Sig. (2-tailed)	.756 ^a	
95% Confidence Interval	Lower Bound	.747
	Upper Bound	.764
Monte Carlo Sig. (1-tailed)	Lower Bound	.373
	Upper Bound	.392
Sig.	.382 ^a	

a. Based on 10000 sampled tables with starting seed 334431365.

b. Grouping Variable: perlakuan

7.2.1.1.2. Kontrol & Mocaf

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
rasa	kontrol 40%	30	35.13	1054.00
	mocaf 40%	30	25.87	776.00
Total		60		

Test Statistics^b

				rasa
Mann-Whitney U				311.000
Wilcoxon W				776.000
Z				-2.141
Asymp. Sig. (2-tailed)				.032
Monte Carlo Sig. (2-tailed)	Sig.			.034 ^a
	95% Confidence Interval	Lower Bound		.031
		Upper Bound		.038
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound		.015
		Upper Bound		.020
	Sig.			.017 ^a

a. Based on 10000 sampled tables with starting seed 1502173562.

b. Grouping Variable: perlakuan

7.2.1.1.3. Kontrol & Jagung

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
rasa	kontrol 40%	30	40.27	1208.00
	jagung 40%	30	20.73	622.00
Total		60		

Test Statistics^b

				rasa
Mann-Whitney U				157.000
Wilcoxon W				622.000
Z				-4.477
Asymp. Sig. (2-tailed)				.000
Monte Carlo Sig. (2-tailed)	Sig.			.000 ^a
	95% Confidence Interval	Lower Bound		.000
		Upper Bound		.000
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound		.000
		Upper Bound		.000
	Sig.			.000 ^a

a. Based on 10000 sampled tables with starting seed 743671174.

b. Grouping Variable: perlakuan

7.2.1.1.4. Maizena & Mocaf

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
rasa maizena 40%	30	35.57	1067.00
mocaf 40%	30	25.43	763.00
Total	60		

Test Statistics^b

			rasa
Mann-Whitney U			298.000
Wilcoxon W			763.000
Z			-2.348
Asymp. Sig. (2-tailed)			.019
Monte Carlo Sig. (2-tailed)	Sig.		.021 ^a
	95% Confidence Interval	Lower Bound	.018
		Upper Bound	.024
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.008
		Upper Bound	.012
	Sig.		.010 ^a

a. Based on 10000 sampled tables with starting seed 957002199.

b. Grouping Variable: perlakuan

7.2.1.1.5. Maizena & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
rasa maizena 40%	30	40.47	1214.00
jagung 40%	30	20.53	616.00
Total	60		

Test Statistics^b

			rasa
Mann-Whitney U			151.000
Wilcoxon W			616.000
Z			-4.569
Asymp. Sig. (2-tailed)			.000
Monte Carlo Sig. (2-tailed)	Sig.		.000 ^a
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
	Sig.		.000 ^a

a. Based on 10000 sampled tables with starting seed 112562564.

b. Grouping Variable: perlakuan

7.2.1.1.6. Mocaf & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
rasa mocaf 40%	30	36.17	1085.00
rasa jagung 40%	30	24.83	745.00
Total	60		

Test Statistics^b

			rasa
Mann-Whitney U			280.000
Wilcoxon W			745.000
Z			-2.637
Asymp. Sig. (2-tailed)			.008
Monte Carlo Sig. (2-tailed)	Sig.		.009 ^a
	95% Confidence Interval	Lower Bound	.007
		Upper Bound	.010
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.003
		Upper Bound	.006
	Sig.		.004 ^a

a. Based on 10000 sampled tables with starting seed 221623949.

b. Grouping Variable: perlakuan

7.2.1.2. Tekstur

7.2.1.2.1. Kontrol & Maizena

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
tekstur kontrol 40%	30	30.37	911.00
tekstur maizena 40%	30	30.63	919.00
Total	60		

Test Statistics^b

			textur
Mann-Whitney U			446.000
Wilcoxon W			911.000
Z			-.063
Asymp. Sig. (2-tailed)			.950
Monte Carlo Sig. (2-tailed)	Sig.		.966 ^a
	95% Confidence Interval	Lower Bound	.962
		Upper Bound	.969
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.475
		Upper Bound	.494
	Sig.		.484 ^a

a. Based on 10000 sampled tables with starting seed 303130861.

b. Grouping Variable: perlakuan

7.2.1.2.2. Kontrol & Mocaf

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
textur	kontrol 40%	30	34.30	1029.00
	mocaf 40%	30	26.70	801.00
	Total	60		

Test Statistics^b

			textur
Mann-Whitney U			336.000
Wilcoxon W			801.000
Z			-1.753
Asymp. Sig. (2-tailed)			.080
Monte Carlo Sig. (2-tailed)	Sig.		.082 ^a
	95% Confidence Interval	Lower Bound	.077
		Upper Bound	.088
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.037
		Upper Bound	.045
	Sig.		.041 ^a

a. Based on 10000 sampled tables with starting seed 92208573.

b. Grouping Variable: perlakuan

7.2.1.2.3. Kontrol & Jagung

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
textur	kontrol 40%	30	36.10	1083.00
	jagung 40%	30	24.90	747.00
	Total	60		

Test Statistics^b

			textur
Mann-Whitney U			282.000
Wilcoxon W			747.000
Z			-2.572
Asymp. Sig. (2-tailed)			.010
Monte Carlo Sig. (2-tailed)	Sig.		.010 ^a
	95% Confidence Interval	Lower Bound	.008
		Upper Bound	.012
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.003
		Upper Bound	.006
	Sig.		.005 ^a

a. Based on 10000 sampled tables with starting seed 1335104164.

b. Grouping Variable: perlakuan

7.2.1.2.4. Maizena & Mocaf

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
textur	maizena 40%	30	34.42	1032.50
	mocaf 40%	30	26.58	797.50
	Total	60		

Test Statistics^b

			textur
Mann-Whitney U			332.500
Wilcoxon W			797.500
Z			-1.814
Asymp. Sig. (2-tailed)			.070
Monte Carlo Sig. (2-tailed)	Sig.		.079 ^a
	95% Confidence Interval	Lower Bound	.074
		Upper Bound	.084
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.034
		Upper Bound	.042
	Sig.		.038 ^a

a. Based on 10000 sampled tables with starting seed 329836257.

b. Grouping Variable: perlakuan

7.2.1.2.5. Maizena & jagung

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
textur	maizena 40%	30	36.45	1093.50
	jagung 40%	30	24.55	736.50
	Total	60		

Test Statistics^b

			textur
Mann-Whitney U			271.500
Wilcoxon W			736.500
Z			-2.737
Asymp. Sig. (2-tailed)			.006
Monte Carlo Sig. (2-tailed)	Sig.		.006 ^a
	95% Confidence Interval	Lower Bound	.004
		Upper Bound	.007
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.002
		Upper Bound	.004
	Sig.		.003 ^a

a. Based on 10000 sampled tables with starting seed 1535910591.

b. Grouping Variable: perlakuan

7.2.1.2.6. Mocaf & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
textur mocaf 40%	30	33.30	999.00
jagung 40%	30	27.70	831.00
Total	60		

Test Statistics^b

			textur
Mann-Whitney U			366.000
Wilcoxon W			831.000
Z			-1.289
Asymp. Sig. (2-tailed)			.198
Monte Carlo Sig. (2-tailed)	Sig.		.201 ^a
	95% Confidence Interval	Lower Bound	.193
		Upper Bound	.209
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.098
		Upper Bound	.110
	Sig.		.104 ^a

a. Based on 10000 sampled tables with starting seed 1993510611.

b. Grouping Variable: perlakuan

7.2.1.3. Warna

7.2.1.3.1. Kontrol & Maizena

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
warna kontrol 40%	30	29.38	881.50
maizena 40%	30	31.62	948.50
Total	60		

Test Statistics^b

			warna
Mann-Whitney U			416.500
Wilcoxon W			881.500
Z			-.533
Asymp. Sig. (2-tailed)			.594
Monte Carlo Sig. (2-tailed)	Sig.		.612 ^a
	95% Confidence Interval	Lower Bound	.603
		Upper Bound	.622
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.299
		Upper Bound	.317
	Sig.		.308 ^a

a. Based on 10000 sampled tables with starting seed 1241531719.

b. Grouping Variable: perlakuan

7.2.1.3.2. Kontrol & Mocaf

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
warna kontrol 40%	30	38.03	1141.00
mocaf 40%	30	22.97	689.00
Total	60		

Test Statistics^b

			warna
Mann-Whitney U			224.000
Wilcoxon W			689.000
Z			-3.453
Asymp. Sig. (2-tailed)			.001
Monte Carlo Sig. (2-tailed)	Sig.		.000 ^a
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.001
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
	Sig.		.000 ^a

a. Based on 10000 sampled tables with starting seed 562334227.

b. Grouping Variable: perlakuan

7.2.1.3.3. Kontrol & Jagung

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
warna	kontrol 40%	30	37.38	1121.50
	jagung 40%	30	23.62	708.50
	Total	60		

Test Statistics^b

				warna
Mann-Whitney U				243.500
Wilcoxon W				708.500
Z				-3.165
Asymp. Sig. (2-tailed)				.002
Monte Carlo Sig. (2-tailed)	Sig.			.002 ^a
	95% Confidence Interval	Lower Bound		.001
		Upper Bound		.003
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound		.000
		Upper Bound		.001
	Sig.			.001 ^a

a. Based on 10000 sampled tables with starting seed 1556559737.

b. Grouping Variable: perlakuan

7.2.1.3.4. Maizena & Mocaf

Ranks

perlakuan		N	Mean Rank	Sum of Ranks
warna	maizena 40%	30	38.95	1168.50
	mocaf 40%	30	22.05	661.50
	Total	60		

Test Statistics^b

				warna
Mann-Whitney U				196.500
Wilcoxon W				661.500
Z				-3.882
Asymp. Sig. (2-tailed)				.000
Monte Carlo Sig. (2-tailed)	Sig.			.000 ^a
	95% Confidence Interval	Lower Bound		.000
		Upper Bound		.000
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound		.000
		Upper Bound		.000
	Sig.			.000 ^a

a. Based on 10000 sampled tables with starting seed 79654295.

b. Grouping Variable: perlakuan

7.2.1.3.5. Maizena & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
warna maizena 40%	30	38.23	1147.00
jagung 40%	30	22.77	683.00
Total	60		

Test Statistics^b

			warna
Mann-Whitney U			218.000
Wilcoxon W			683.000
Z			-3.566
Asymp. Sig. (2-tailed)			.000
Monte Carlo Sig. (2-tailed)	Sig.		.000 ^a
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.001
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
	Sig.		.000 ^a

a. Based on 10000 sampled tables with starting seed 215962969.

b. Grouping Variable: perlakuan

7.2.1.3.6. Mocaf & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
warna mocaf 40%	30	30.98	929.50
jagung 40%	30	30.02	900.50
Total	60		

Test Statistics^b

			warna
Mann-Whitney U			435.500
Wilcoxon W			900.500
Z			-.225
Asymp. Sig. (2-tailed)			.822
Monte Carlo Sig. (2-tailed)	Sig.		.844 ^a
	95% Confidence Interval	Lower Bound	.837
		Upper Bound	.851
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.407
		Upper Bound	.426
	Sig.		.416 ^a

a. Based on 10000 sampled tables with starting seed 1573343031.

b. Grouping Variable: perlakuan

7.2.1.4.Overall

7.2.1.4.1. Kontrol & Maizena

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
overall kontrol 40%	30	29.93	898.00
maizena 40%	30	31.07	932.00
Total	60		

Test Statistics^b

	overall
Mann-Whitney U	433.000
Wilcoxon W	898.000
Z	-.273
Asymp. Sig. (2-tailed)	.785
Monte Carlo Sig. (2-tailed)	.802 ^a
	95% Confidence Interval
	Lower Bound
	Upper Bound
Monte Carlo Sig. (1-tailed)	.380
	95% Confidence Interval
	Lower Bound
	Upper Bound
	.399
	Sig.
	.390 ^a

a. Based on 10000 sampled tables with starting seed 484067124.

b. Grouping Variable: perlakuan

7.2.1.4.2. Kontrol & Mocaf

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
overall kontrol 40%	30	36.85	1105.50
mocaf 40%	30	24.15	724.50
Total	60		

Test Statistics^b

	overall
Mann-Whitney U	259.500
Wilcoxon W	724.500
Z	-2.941
Asymp. Sig. (2-tailed)	.003
Monte Carlo Sig. (2-tailed)	.003 ^a
	95% Confidence Interval
	Lower Bound
	Upper Bound
Monte Carlo Sig. (1-tailed)	.001
	95% Confidence Interval
	Lower Bound
	Upper Bound
	.002
	Sig.
	.001 ^a

a. Based on 10000 sampled tables with starting seed 475497203.

b. Grouping Variable: perlakuan

7.2.1.4.3. Kontrol & Jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
overall kontrol 40%	30	40.00	1200.00
jagung 40%	30	21.00	630.00
Total	60		

Test Statistics^b

			overall
Mann-Whitney U			165.000
Wilcoxon W			630.000
Z			-4.379
Asymp. Sig. (2-tailed)			.000
Monte Carlo Sig. (2-tailed)	Sig.		.000 ^a
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
	Sig.		.000 ^a

a. Based on 10000 sampled tables with starting seed 1310155034.

b. Grouping Variable: perlakuan

7.2.1.4.4. Maizena & Mocaf

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
overall maizena 40%	30	37.12	1113.50
mocaf 40%	30	23.88	716.50
Total	60		

Test Statistics^b

			overall
Mann-Whitney U			251.500
Wilcoxon W			716.500
Z			-3.086
Asymp. Sig. (2-tailed)			.002
Monte Carlo Sig. (2-tailed)	Sig.		.002 ^a
	95% Confidence Interval	Lower Bound	.001
		Upper Bound	.003
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.002
	Sig.		.001 ^a

a. Based on 10000 sampled tables with starting seed 2048628469.

b. Grouping Variable: perlakuan

7.2.1.4.5. Maizena & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
overall maizena 40%	30	40.27	1208.00
jagung 40%	30	20.73	622.00
Total	60		

Test Statistics^b

			overall
Mann-Whitney U			157.000
Wilcoxon W			622.000
Z			-4.496
Asymp. Sig. (2-tailed)			.000
Monte Carlo Sig. (2-tailed)	Sig.		.000 ^a
	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.000
		Upper Bound	.000
	Sig.		.000 ^a

a. Based on 10000 sampled tables with starting seed 508741944.

b. Grouping Variable: perlakuan

7.2.1.4.6. Mocaf & jagung

Ranks

perlakuan	N	Mean Rank	Sum of Ranks
overall mocaf 40%	30	34.10	1023.00
jagung 40%	30	26.90	807.00
Total	60		

Test Statistics^b

			overall
Mann-Whitney U			342.000
Wilcoxon W			807.000
Z			-1.697
Asymp. Sig. (2-tailed)			.090
Monte Carlo Sig. (2-tailed)	Sig.		.086 ^a
	95% Confidence Interval	Lower Bound	.081
		Upper Bound	.092
Monte Carlo Sig. (1-tailed)	95% Confidence Interval	Lower Bound	.040
		Upper Bound	.048
	Sig.		.044 ^a

a. Based on 10000 sampled tables with starting seed 726961337.

b. Grouping Variable: perlakuan

7.2.2. Hasil Karakteristik Kekerasan

Tests of Normality

perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
hardness kontrol	.231	6	.200 [*]	.928	6	.566
maizena	.206	6	.200 [*]	.968	6	.881
mocaf	.230	6	.200 [*]	.893	6	.334
jagung	.181	6	.200 [*]	.904	6	.397

a. Lilliefors Significance Correction

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

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
hardness	Based on Mean	4.244	3	20	.018
	Based on Median	3.497	3	20	.035
	Based on Median and with adjusted df	3.497	3	11.114	.053
	Based on trimmed mean	4.241	3	20	.018

Descriptives

hardness	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
kontrol	6	8.9921E2	56.8265211	2.3199E1	839.575941	958.847494	821.5489	965.1576
maizena	6	8.6690E2	26.7210680	1.0908E1	838.866526	894.950608	826.0391	906.4043
mocaf	6	6.4182E2	32.5473381	1.3287E1	607.665529	675.978202	603.4451	681.1419
jagung	6	3.3492E2	20.8924822	8.5293E0	312.999523	356.850154	312.6272	361.8677
Total	24	6.8571E2	232.8975592	4.7540E1	587.372733	784.060761	312.6272	965.1576

ANOVA

hardness	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1220353.811	3	406784.604	299.156	.000
Within Groups	27195.470	20	1359.774		
Total	1247549.281	23			

7.2.3. Hasil Karakteristik Kimia

Tests of Normality

perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
kadar_air	kontrol	.232	6	.200*	.916	6	.480
	maizena 40%	.252	6	.200*	.875	6	.249
kadar_abu	kontrol	.288	6	.131	.832	6	.112
	maizena 40%	.287	6	.133	.862	6	.196
kadar_lemak	kontrol	.305	6	.086	.836	6	.122
	maizena 40%	.203	6	.200*	.904	6	.399
kadar_protein	kontrol	.279	6	.158	.821	6	.089
	maizena 40%	.197	6	.200*	.932	6	.592
kadar_karbohidrat	kontrol	.219	6	.200*	.887	6	.301
	maizena 40%	.303	6	.090	.783	6	.041
total_kalori	kontrol	.239	6	.200*	.909	6	.432
	maizena 40%	.263	6	.200*	.877	6	.257

a. Lilliefors Significance Correction

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

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
kadar_air	Based on Mean	.234	1	10	.639
	Based on Median	.214	1	10	.653
	Based on Median and with adjusted df	.214	1	6.080	.659
	Based on trimmed mean	.233	1	10	.640
kadar_abu	Based on Mean	.708	1	10	.420
	Based on Median	.155	1	10	.702
	Based on Median and with adjusted df	.155	1	9.678	.702
	Based on trimmed mean	.677	1	10	.430
kadar_lemak	Based on Mean	12.830	1	10	.005
	Based on Median	2.392	1	10	.153
	Based on Median and with adjusted df	2.392	1	5.405	.178
	Based on trimmed mean	11.763	1	10	.006
kadar_protein	Based on Mean	.507	1	10	.493
	Based on Median	.438	1	10	.523
	Based on Median and with adjusted df	.438	1	9.826	.523
	Based on trimmed mean	.534	1	10	.482
kadar_karbohidrat	Based on Mean	.126	1	10	.730
	Based on Median	.116	1	10	.741
	Based on Median and with adjusted df	.116	1	8.242	.742
	Based on trimmed mean	.126	1	10	.730
total_kalori	Based on Mean	.529	1	10	.484
	Based on Median	.449	1	10	.518
	Based on Median and with adjusted df	.449	1	7.822	.522
	Based on trimmed mean	.529	1	10	.484

Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
					Lower Bound	Upper Bound			
kadar_air	kontrol	6	3.1665E1	.6550492	.2674227	30.978068	32.352932	30.5020	32.3860
	maizena 40%	6	2.4101E1	.4377212	.1786989	23.642306	24.561027	23.5750	24.5800
	Total	12	2.7883E1	3.9856352	1.1505E0	25.351232	30.415935	23.5750	32.3860
kadar_abu	kontrol	6	3.8822E0	.1496927	.0611118	3.725110	4.039296	3.6038	4.0110
	maizena 40%	6	3.4309E0	.1706130	.0696524	3.251940	3.610034	3.2530	3.6730
	Total	12	3.6565E0	.2809677	.0811084	3.479077	3.835114	3.2530	4.0110
kadar_lemak	kontrol	6	7.9253E0	.2427053	.0990840	7.670630	8.180037	7.5930	8.1780
	maizena 40%	6	5.9800E0	.0661272	.0269963	5.910604	6.049396	5.9080	6.0680
	Total	12	6.9526E0	1.0299761	.2973285	6.298251	7.607082	5.9080	8.1780
kadar_protein	kontrol	6	9.5052E0	.1768545	.0722005	9.319681	9.690876	9.1673	9.6663
	maizena 40%	6	4.6337E0	.2112035	.0862235	4.412075	4.855364	4.3464	4.8800
	Total	12	7.0694E0	2.5508587	.7363695	5.448761	8.690237	4.3464	9.6663
kadar_karbohidrat	kontrol	6	4.8934E1	1.9515811	.7967297	46.886738	50.982856	46.5958	51.1455
	maizena 40%	6	6.3585E1	1.8078418	.7380483	61.688252	65.482679	61.8807	65.6350
	Total	12	5.6260E1	7.8584701	2.2685E0	51.267097	61.253165	46.5958	65.6350
total_kalori	kontrol	6	3.0508E2	8.4517617	3.4504E0	296.218720	313.957880	294.4291	314.8976
	maizena 40%	6	3.2669E2	7.0516181	2.8788E0	319.296520	334.096959	318.7020	335.5897
	Total	12	3.1589E2	13.5060992	3.8988E0	307.311154	324.473886	294.4291	335.5897

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
kadar_air	Between Groups	171.635	1	171.635	553.045	.000
	Within Groups	3.103	10	.310		
	Total	174.738	11			
kadar_abu	Between Groups	.611	1	.611	23.712	.001
	Within Groups	.258	10	.026		
	Total	.868	11			
kadar_lemak	Between Groups	11.353	1	11.353	358.824	.000
	Within Groups	.316	10	.032		
	Total	11.669	11			
kadar_protein	Between Groups	71.196	1	71.196	1.876E3	.000
	Within Groups	.379	10	.038		
	Total	71.576	11			
kadar_karbohidrat	Between Groups	643.926	1	643.926	181.978	.000
	Within Groups	35.385	10	3.538		
	Total	679.311	11			
total_kalori	Between Groups	1400.774	1	1400.774	23.123	.001
	Within Groups	605.788	10	60.579		
	Total	2006.562	11			

7.3. Lampiran 3. Perhitungan Nilai Kalori

7.3.1. Rumus Perhitungan Nilai Kalori Naan Bread

$$(\text{Kadar karbohidrat} \times 4) + (\text{Kadar protein} \times 4) + (\text{Kadar lemak} \times 9)$$

7.3.1.1. Naan bread Kontrol

$$(48,935 \times 4) + (9,505 \times 4) + (7,925 \times 9) = 305,088$$

7.3.1.1. Naan bread Maizena

$$(63,585 \times 4) + (4,634 \times 4) + (5,980 \times 9) = 326,697$$