

Lampiran 1. Lembar Persetujuan Sebagai Panelis

Lembar Persetujuan Sebagai Panelis

Saya adalah mahasiswa program studi ilmu gizi Fakultas kesehatan universitas muhammadiyah gresik yang saat ini sedang melakukan pengambilan data uji kesukaan / organoleptik pada produk cookies. Kegiatan ini dilakukan untuk memperoleh gelar sarjana gizi. Oleh karena itu, saya memohon kesediaan waktu saudara/saudari untuk menjadi panelis tidak terlatih. Perlu saya informasikan keikutsertaan saudara/saudari sebagai panelis bersifat sukarela.

Inform consent :

Setelah saya mendapat penjelasan mengenai tujuan dan manfaat data tersebut.

Dengan ini saya :

Nama :

Alamat :

No hp :

Secara sukarela dan tanpa ada paksaan setuju untuk menjadi panelis tidak terlatih dalam penelitian ini.

Tanda Tangan Panelis

(.....)

Lampiran 2. Formulir Pengujian Organoleptik

Formulir Pengujian Organoleptik

Nama Panelis : Tanggal :

Usia :

Instruksi :

Dihadapan saudara telah tersedia 5 sampel cookies bekatul dengan kode F0, F1, F2, F3, F4. Anda diminta untuk memberikan penilaian terhadap 5 sampel berdasarkan skala numerik dibawah ini :

Atribut	Skala Numerik
Sangat suka	1
Suka	2
Kurang suka	3
Tidak suka	4

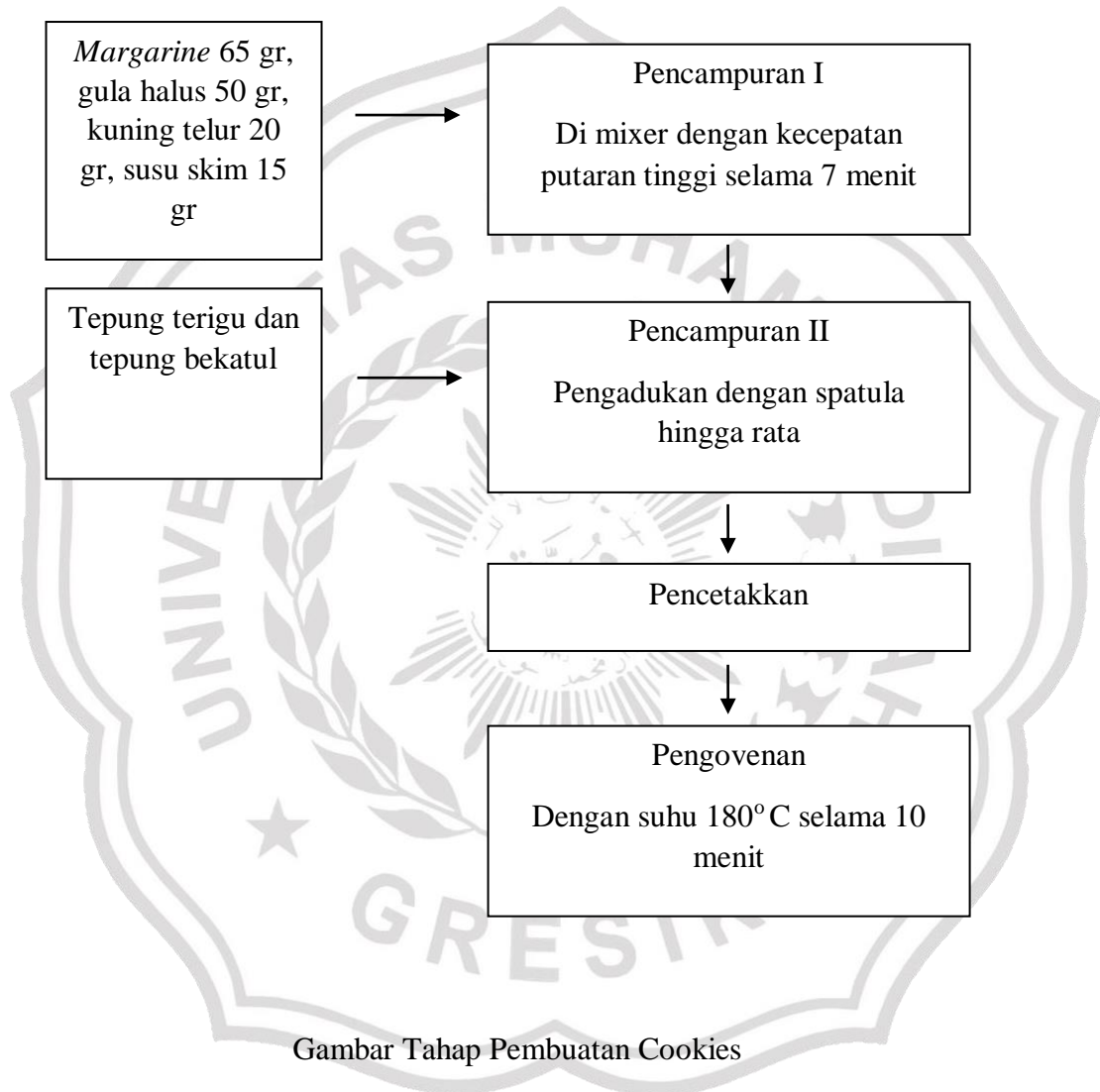
Kode	Penilaian			
	Warna	Aroma	Rasa	Tekstur
F0				
F1				
F2				
F3				
F4				

Tanda Tangan Panelis

(.....)

Lampiran 3. Tahap-Tahap Pembuatan Cookies Bekatul

1. Proses pembuatan tepung bekatul yang meliputi
Bekatul diayak dengan ayakan 40 mesh, kemudian disangrai dengan api sedang selama 10 menit kemudian didinginkan.
2. Dibawah ini merupakan bagan proses pembuatan cookies yang meliputi :



Gambar Tahap Pembuatan Cookies

Lampiran 4. Gambar Cookies



Kode F0



Kode F1



Kode F2



Kode F3



Kode F4

Lampiran 5. Rata-rata hasil uji kimia cookies

Kadar Protein				
Perlakuan	Ulangan			
	1	2	3	4
1	3.62	3.71	3.49	3.56
2	4.53	4.44	4.65	4.48
3	6.27	6.32	6.36	6.32
4	7.61	7.66	7.61	7.67
5	8.19	8.25	8.15	8.2
Rata-rata	6.044	6.076	6.052	6.046
Kadar Karbohidrat				
Perlakuan	Ulangan			
	1	2	3	4
1	78.63	78.91	78.67	79.02
2	67.64	67.05	68.05	68
3	63.29	64.05	63.91	63.78
4	61.35	61.13	61.59	61.34
5	58.79	58.65	58.87	58.64
Rata-rata	65.94	65.958	66.218	66.156
Kadar Vitamin B1				
Perlakuan	Ulangan			
	1	2	3	4
1	0.078	0.082	0.067	0.075
2	0.525	0.735	0.585	0.651
3	0.731	0.815	0.796	0.802
4	0.995	1.035	0.987	1.012
5	1.373	1.436	1.257	1.357
Rata-rata	0.7404	0.8206	0.7384	0.7794
Kadar Serat Kasar				

Perlakuan	Ulangan			
	1	2	3	4
1	0.43	0.39	0.51	0.47
2	6.21	6.18	6.11	6.16
3	8.45	8.41	8.49	8.53
4	9.66	9.64	9.68	9.73
5	11.23	11.21	11.26	11.3
Rata-rata	7.196	7.166	7.21	7.238



Lampiran 6. Hasil Uji Normalitas Data

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Warna_f0	.282	25	.000	.691	25	.000
Warna_f1	.243	25	.001	.810	25	.000
Warna_f2	.223	25	.002	.842	25	.001
Warna_f3	.310	25	.000	.824	25	.001
Warna_f4	.222	25	.003	.861	25	.003
Aroma_f0	.322	25	.000	.752	25	.000
Aroma_f1	.272	25	.000	.800	25	.000
Aroma_f2	.281	25	.000	.786	25	.000
Aroma_f3	.333	25	.000	.721	25	.000
Aroma_f4	.287	25	.000	.832	25	.001
Rasa_f0	.329	25	.000	.733	25	.000
Rasa_f1	.336	25	.000	.757	25	.000
Rasa_f2	.347	25	.000	.727	25	.000
Rasa_f3	.215	25	.004	.865	25	.003
Rasa_f4	.264	25	.000	.848	25	.002
Tekstur_f0	.259	25	.000	.862	25	.003
Tekstur_f1	.280	25	.000	.847	25	.002
Tekstur_f2	.304	25	.000	.756	25	.000
Tekstur_f3	.284	25	.000	.801	25	.000
Tekstur_f4	.244	25	.001	.874	25	.005

a. Lilliefors Significance Correction



Lampiran 7. Hasil Uji Statistik Friedman Data Organoleptik Menggunakan SPSS

Descriptive Statistics

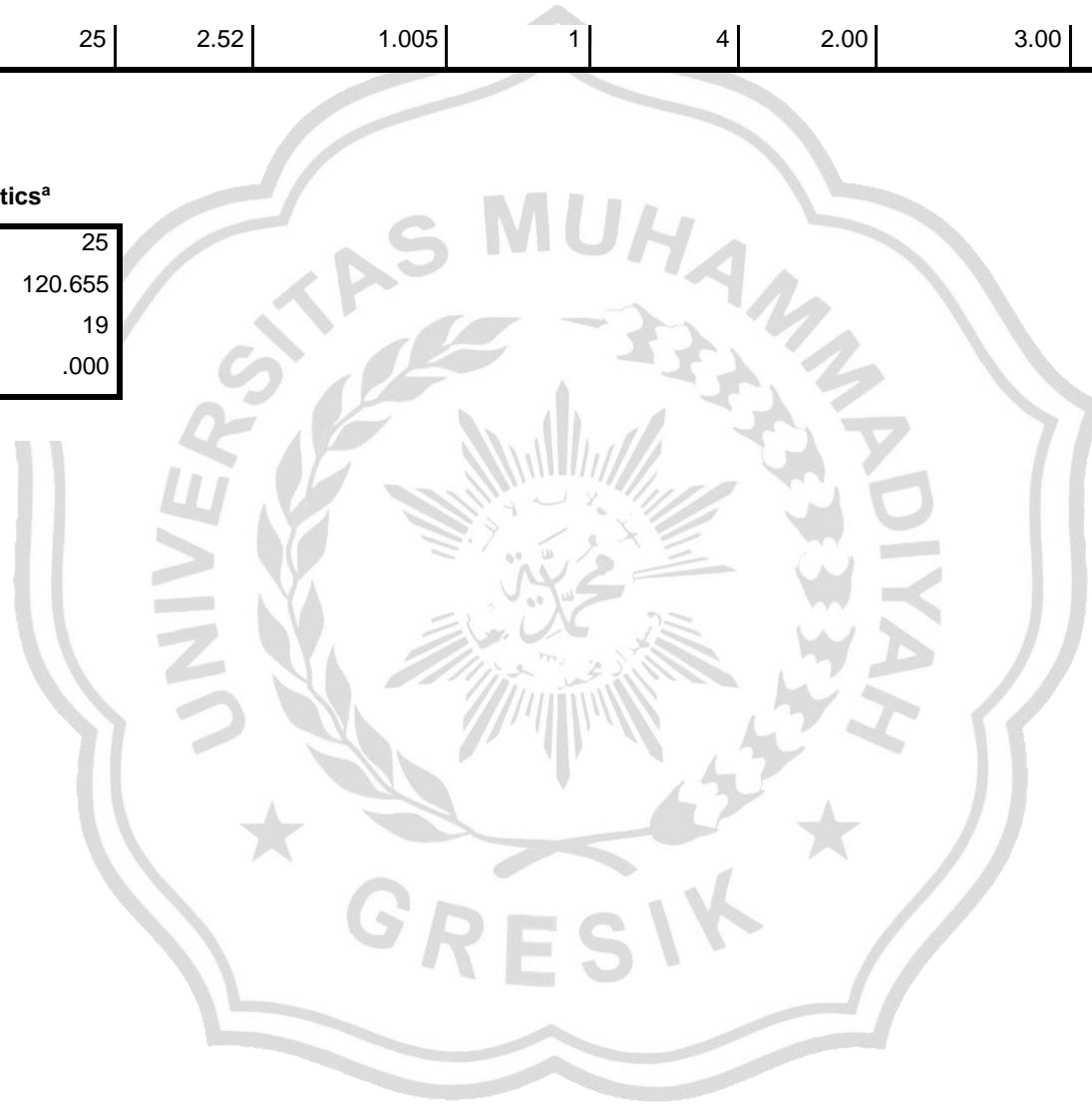
	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles		
						25 th	50th (Median)	75th
Warna_f0	25	3.40	.707	1	4	3.00	3.00	4.00
Warna_f1	25	3.20	.816	1	4	3.00	3.00	4.00
Warna_f2	25	3.08	.862	1	4	2.50	3.00	4.00
Warna_f3	25	2.52	.770	1	4	2.00	2.00	3.00
Warna_f4	25	2.20	.866	1	4	1.50	2.00	3.00
Aroma_f0	25	3.40	.707	2	4	3.00	4.00	4.00
Aroma_f1	25	3.16	.688	2	4	3.00	3.00	4.00
Aroma_f2	25	3.24	.663	2	4	3.00	3.00	4.00
Aroma_f3	25	2.48	.586	1	3	2.00	3.00	3.00
Aroma_f4	25	2.48	.714	1	4	2.00	3.00	3.00
Rasa_f0	25	3.40	.816	1	4	3.00	4.00	4.00
Rasa_f1	25	3.24	.597	2	4	3.00	3.00	4.00
Rasa_f2	25	3.48	.653	2	4	3.00	4.00	4.00
Rasa_f3	25	2.84	.850	1	4	2.00	3.00	3.50
Rasa_f4	25	2.40	.764	1	4	2.00	2.00	3.00
Tekstur_f0	25	2.84	.800	1	4	2.00	3.00	3.00
Tekstur_f1	25	2.96	.790	1	4	2.50	3.00	3.50
Tekstur_f2	25	3.40	.645	2	4	3.00	3.00	4.00
Tekstur_f3	25	3.04	.676	2	4	3.00	3.00	3.50

Tekstur_f4	25	2.52	1.005	1	4	2.00	3.00	3.00
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Test Statistics^a

N	25
Chi-Square	120.655
Df	19
Asymp. Sig.	.000

a. Friedman Test



Lampiran 9. Uji Normalitas Data Uji Kimia

Tests of Normality

Perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
protein_f0	.146	4	.	.995	4	.983
protein_f1	.228	4	.	.936	4	.628
protein_f2	.277	4	.	.939	4	.647
protein_f3	.305	4	.	.799	4	.100
protein_f4	.226	4	.	.976	4	.880
kh_f0	.268	4	.	.894	4	.402
kh_f1	.253	4	.	.875	4	.319
kh_f2	.277	4	.	.902	4	.443
kh_f3	.255	4	.	.952	4	.730
kh_f4	.283	4	.	.878	4	.329
vit_f0	.219	4	.	.965	4	.813
vit_f1	.167	4	.	.990	4	.956
vit_f2	.355	4	.	.817	4	.136
vit_f3	.218	4	.	.948	4	.706
vit_f4	.257	4	.	.958	4	.765
serat_f0	.151	4	.	.993	4	.972
serat_f1	.203	4	.	.980	4	.899
serat_f2	.151	4	.	.993	4	.972
serat_f3	.224	4	.	.949	4	.712
serat_f4	.195	4	.	.971	4	.850

a. Lilliefors Significance Correction



Lampiran 10. Uji Homogenitas Data Uji Kimia

Test of Homogeneity of Variances

protein

Levene Statistic	df1	df2	Sig.
1.681	4	15	.207

Test of Homogeneity of Variances

karbohidrat

Levene Statistic	df1	df2	Sig.
3.843	4	15	.024

Test of Homogeneity of Variances

vitamin_b1

Levene Statistic	df1	df2	Sig.
2.963	4	15	.055

Test of Homogeneity of Variances

serat

Levene Statistic	df1	df2	Sig.
.296	4	15	.876

Lampiran 11. Uji Anova Data Uji Kimia

ANOVA

PROTEIN

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	62.224	4	15.556	3690.633	.000
Within Groups	.063	15	.004		
Total	62.287	19			

ANOVA

KARBOHIDRAT

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	981.847	4	245.462	2757.583	.000
Within Groups	1.335	15	.089		
Total	983.182	19			

ANOVA

VITAMIN B1

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	3.613	4	.903	291.019	.000
Within Groups	.047	15	.003		
Total	3.660	19			

ANOVA

SERAT

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	283.148	4	70.787	34956.593	.000
Within Groups	.030	15	.002		
Total	283.179	19			

Lampiran 12. Uji Lanjut BNT (Beda Nyata Terkecil) Data Uji Kimia

Multiple Comparisons

Dependent Variable: **Protein**

LSD

(I) perlakuan	(J) perlakuan	Mean Difference (I- J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f0	f1	-.93000*	.04591	.000	-1.0278	-.8322
	f2	-2.72250*	.04591	.000	-2.8203	-2.6247
	f3	-4.04250*	.04591	.000	-4.1403	-3.9447
	f4	-4.60250*	.04591	.000	-4.7003	-4.5047
f1	f0	.93000*	.04591	.000	.8322	1.0278
	f2	-1.79250*	.04591	.000	-1.8903	-1.6947
	f3	-3.11250*	.04591	.000	-3.2103	-3.0147
	f4	-3.67250*	.04591	.000	-3.7703	-3.5747
f2	f0	2.72250*	.04591	.000	2.6247	2.8203
	f1	1.79250*	.04591	.000	1.6947	1.8903
	f3	-1.32000*	.04591	.000	-1.4178	-1.2222
	f4	-1.88000*	.04591	.000	-1.9778	-1.7822
f3	f0	4.04250*	.04591	.000	3.9447	4.1403
	f1	3.11250*	.04591	.000	3.0147	3.2103
	f2	1.32000*	.04591	.000	1.2222	1.4178
	f4	-.56000*	.04591	.000	-.6578	-.4622
f4	f0	4.60250*	.04591	.000	4.5047	4.7003
	f1	3.67250*	.04591	.000	3.5747	3.7703
	f2	1.88000*	.04591	.000	1.7822	1.9778
	f3	.56000*	.04591	.000	.4622	.6578

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: **Karbohidrat**

LSD

(I)	(J)	Mean	Std. Error	Sig.	95% Confidence Interval
-----	-----	------	------------	------	-------------------------

perlakuan	perlakuan	Difference (I-J)			Lower Bound	Upper Bound
f0	f1	11.37250*	.21097	.000	10.9228	11.8222
	f2	15.05000*	.21097	.000	14.6003	15.4997
	f3	17.45500*	.21097	.000	17.0053	17.9047
	f4	20.07000*	.21097	.000	19.6203	20.5197
f1	f0	-11.37250*	.21097	.000	-11.8222	-10.9228
	f2	3.67750*	.21097	.000	3.2278	4.1272
	f3	6.08250*	.21097	.000	5.6328	6.5322
	f4	8.69750*	.21097	.000	8.2478	9.1472
f2	f0	-15.05000*	.21097	.000	-15.4997	-14.6003
	f1	-3.67750*	.21097	.000	-4.1272	-3.2278
	f3	2.40500*	.21097	.000	1.9553	2.8547
	f4	5.02000*	.21097	.000	4.5703	5.4697
f3	f0	-17.45500*	.21097	.000	-17.9047	-17.0053
	f1	-6.08250*	.21097	.000	-6.5322	-5.6328
	f2	-2.40500*	.21097	.000	-2.8547	-1.9553
	f4	2.61500*	.21097	.000	2.1653	3.0647
f4	f0	-20.07000*	.21097	.000	-20.5197	-19.6203
	f1	-8.69750*	.21097	.000	-9.1472	-8.2478
	f2	-5.02000*	.21097	.000	-5.4697	-4.5703
	f3	-2.61500*	.21097	.000	-3.0647	-2.1653

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: **Vitamin_B1**

LSD

(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f0	f1	-.54850*	.03939	.000	-.6325	-.4645
	f2	-.71050*	.03939	.000	-.7945	-.6265
	f3	-.93175*	.03939	.000	-1.0157	-.8478
	f4	-1.28025*	.03939	.000	-1.3642	-1.1963
f1	f0	.54850*	.03939	.000	.4645	.6325
	f2	-.16200*	.03939	.001	-.2460	-.0780
	f3	-.38325*	.03939	.000	-.4672	-.2993

f2	f4	-.73175*	.03939	.000	-.8157	-.6478
	f0	.71050*	.03939	.000	.6265	.7945
	f1	.16200*	.03939	.001	.0780	.2460
	f3	-.22125*	.03939	.000	-.3052	-.1373
f3	f4	-.56975*	.03939	.000	-.6537	-.4858
	f0	.93175*	.03939	.000	.8478	1.0157
	f1	.38325*	.03939	.000	.2993	.4672
	f2	.22125*	.03939	.000	.1373	.3052
f4	f4	-.34850*	.03939	.000	-.4325	-.2645
	f0	1.28025*	.03939	.000	1.1963	1.3642
	f1	.73175*	.03939	.000	.6478	.8157
	f2	.56975*	.03939	.000	.4858	.6537
	f3	.34850*	.03939	.000	.2645	.4325

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Dependent Variable: **Serat**

LSD

(I) perlakuan	(J) perlakuan	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
f0	f1	-5.71500*	.03182	.000	-5.7828	-5.6472
	f2	-8.02000*	.03182	.000	-8.0878	-7.9522
	f3	-9.22750*	.03182	.000	-9.2953	-9.1597
	f4	-10.80000*	.03182	.000	-10.8678	-10.7322
f1	f0	5.71500*	.03182	.000	5.6472	5.7828
	f2	-2.30500*	.03182	.000	-2.3728	-2.2372
	f3	-3.51250*	.03182	.000	-3.5803	-3.4447
	f4	-5.08500*	.03182	.000	-5.1528	-5.0172
f2	f0	8.02000*	.03182	.000	7.9522	8.0878
	f1	2.30500*	.03182	.000	2.2372	2.3728
	f3	-1.20750*	.03182	.000	-1.2753	-1.1397
	f4	-2.78000*	.03182	.000	-2.8478	-2.7122
f3	f0	9.22750*	.03182	.000	9.1597	9.2953
	f1	3.51250*	.03182	.000	3.4447	3.5803
	f2	1.20750*	.03182	.000	1.1397	1.2753
	f4	-1.57250*	.03182	.000	-1.6403	-1.5047

	f0	10.80000*	.03182	.000	10.7322	10.8678
f4	f1	5.08500*	.03182	.000	5.0172	5.1528
	f2	2.78000*	.03182	.000	2.7122	2.8478
	f3	1.57250*	.03182	.000	1.5047	1.6403

*. The mean difference is significant at the 0.05 level.

Lampiran 13. Uji Lanjut DMRT Data Uji Kimia

protein

Duncan^a

perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
f0	4	3.5950				
f1	4		4.5250			
f2	4			6.3175		
f3	4				7.6375	
f4	4					8.1975
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 = 4.000.

karbohidrat

Duncan^a

perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
f4	4	58.7375				
f3	4		61.3525			
f2	4			63.7575		
f1	4				67.6850	
f0	4					78.8075
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 = 4.000.

vitamin_b1

Duncan^a

perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
0	4	.0755				
1	4		.6240			
2	4			.7860		
3	4				1.0073	
4	4					1.3558
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 = 4.000.

Serat

Duncan^a

perlakuan	N	Subset for alpha = 0.05				
		1	2	3	4	5
f0	4	.4500				
f1	4		6.1650			
f2	4			8.4700		
f3	4				9.6775	
f4	4					11.2500
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 = 4.000.