

LABORATORIUM TERPADU FIKES

UNIVERSITAS ESA UNGGUL

Jalan Arjuna Utara No.9, RT.1/RW.2, Duri Kepa, Kebon Jeruk, RT.1/RW.2, Duri Kepa, Kb. Jeruk, Kota Jakarta Barat, Daerah Khusus Ibukota Jakarta 11510

HASIL ANALISIS ZAT GIZI

Kode Sampel	Ulangan	Kadar Air (%)	Kadar Abu (%)	Kadar Lemak (%)	Kadar Serat (%)	Kadar Protein (%)
F0	1	13.36	1.89	18.59	2.44	12.51
	2	13.81	1.88	18.69	2.22	12.51
	Rata-rata	13.58	1.88	18.64	2.33	12.51
F1	1	15.21	2.06	19.00	2.88	12.54
	2	15.27	2.03	19.25	2.48	12.51
	Rata-rata	15.24	2.04	19.12	2.68	12.52
F2	1	15.35	1.99	18.93	4.01	12.58
	2	15.77	1.93	18.73	3.57	12.57
	Rata-rata	15.56	1.96	18.83	3.79	12.57
F3	1	16.00	1.91	18.70	4.66	12.63
	2	15.71	1.91	18.63	4.47	12.68
	Rata-rata	15.85	1.91	18.66	4.56	12.65

LAMPIRAN 2 PERHITUNGAN NILAI GIZI

Snack bar F0

Energi	: 204.29 kkal
Protein	: 12.51 g
Lemak	: 18.64 g
Karbohidrat	: 46.53 g
Serat	: 2.33 g

Kalori dalam 50 g snack bar

Protein	: $12.51 \times 4 = 50.04$
Lemak	: $18.64 \times 9 = 167.76$
Karbohidrat	: $46.53 \times 4 = 186.12$
Serat	: $2.33 \times 2 = 4.66$

AKG 2000 kal

Protein	: 10-15 % ($15 \% \times 2000 = 300$ kkal)
Lemak	: 10-15 % ($25 \% \times 2000 = 300$ kkal)
Karbohidrat	: 60-75 % ($60 \% \times 2000 = 1200$ kkal)

AKG Snack bar

Protein	: $(50.04 \times 300 \text{ kkal}) \times 100 \% = 15.01 \%$
Lemak	: $(167.76 \times 300 \text{ kkal}) \times 100 \% = 50 \%$
Karbohidrat	: $(186.12 \times 1200 \text{ kkal}) \times 100 \% = 223.34 \%$

Snack bar F1

Energi	: 208.6 kkal
Protein	: 12.52 g
Lemak	: 19.12 g
Karbohidrat	: 47.42 g
Serat	: 2.68 g

Kalori dalam 50 g snack bar

Protein	: $12.52 \times 4 = 50.08$
Lemak	: $19.12 \times 9 = 172.08$
Karbohidrat	: $47.42 \times 4 = 189.68$
Serat	: $2.68 \times 2 = 5.36$

AKG 2000 kal

Protein	: 10-15 % (15 % x 2000 = 300 kkal)
Lemak	: 10-15 % (25 % x 2000 = 300 kkal)
Karbohidrat	: 60-75 % (60 % x 2000 = 1200 kkal)

AKG Snack bar

Protein	: $(50.08 \times 300 \text{ kkal}) \times 100 \% = 15.02 \%$
Lemak	: $(172.08 \times 300 \text{ kkal}) \times 100 \% = 51.62 \%$
Karbohidrat	: $(189.68 \times 1200 \text{ kkal}) \times 100 \% = 227.61 \%$

Snack bar F2

Energi	: 210.8 kkal
Protein	: 12.57 g
Lemak	: 18.83 g
Karbohidrat	: 48.57 g
Serat	: 3.79 g

Kalori dalam 50 g snack bar

Protein	: $12.57 \times 4 = 50.28$
Lemak	: $18.83 \times 9 = 169.47$
Karbohidrat	: $48.57 \times 4 = 194.28$
Serat	: $3.79 \times 2 = 7.58$

AKG 2000 kal

Protein	: 10-15 % (15 % x 2000 = 300 kkal)
Lemak	: 10-15 % (25 % x 2000 = 300 kkal)
Karbohidrat	: 60-75 % (60 % x 2000 = 1200 kkal)

AKG Snack bar

Protein	: $(50.28 \times 300 \text{ kkal}) \times 100 \% = 15.08 \%$
Lemak	: $(169.47 \times 300 \text{ kkal}) \times 100 \% = 57.62 \%$
Karbohidrat	: $(194.28 \times 1200 \text{ kkal}) \times 100 \% = 233.13 \%$

Snack bar F3

Energi	: 215 kkal
Protein	: 12.65 g
Lemak	: 18.66 g
Karbohidrat	: 50.57 g
Serat	: 4.56 g

Kalori dalam 50 g snack bar

Protein	: $12.65 \times 4 = 50.6$
Lemak	: $18.66 \times 9 = 167.94$
Karbohidrat	: $50.57 \times 4 = 202.28$
Serat	: $4.56 \times 2 = 9.12$

AKG 2000 kal

Protein	: 10-15 % (15 % x 2000 = 300 kkal)
Lemak	: 10-15 % (25 % x 2000 = 300 kkal)
Karbohidrat	: 60-75 % (60 % x 2000 = 1200 kkal)

AKG Snack bar

Protein	: $(50.6 \times 300 \text{ kkal}) \times 100 \% = 15.18 \%$
Lemak	: $(167.94 \times 300 \text{ kkal}) \times 100 \% = 50.38 \%$
Karbohidrat	: $(202.28 \times 1200 \text{ kkal}) \times 100 \% = 242.73 \%$

LAMPIRAN 3

Formulir Penelitian Organoleptik



LEMBAR PERSETUJUAN PANELIS

Saya adalah mahasiswa Program Studi Ilmu Gizi Fakultas Ilmu-Ilmu Kesehatan Universitas Esa Unggul yang saat ini sedang melakukan pengambilan data untuk uji hedonik dan mutu hedonik pada produk *snack bar* tepung amaps kelapa dan tepung bekatul. Kegiatan ini dilakukan untuk melengkapi data skripsi yang mana menjadi salah satu syarat dalam memperoleh gelar sarjana gizi. Oleh karena itu, saya memohon kesediaan waktu saudara/i untuk menjadi panelis dalam produk makanan yang peneliti uji cobakan.

Informed Consent :

Setelah saya mendapat penjelasan mengenai tujuan dan manfaat pengambilan data tersebut, dengan ini saya :

Nama :

Alamat :

No.Hp :

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

Jakarta, Juli 2017

Panelis

Peneliti

(.....)

(.....)

LAMPIRAN 4

Kuisisioner Uji Mutu Hedonik

Snack Bar Tepung Ampas Kelapa Tepung Bekatul dengan rasa Green Tea

Nama Panelis :

Tanggal : 19 Juli 2017

1. Di hadapan Saudara/i disajikan sampel *Snack Bar Tepung Ampas Kelapa Tepung Bekatul* dengan rasa *Green Tea*
2. Berikan penilaian Saudara/i terhadap warna, aroma, rasa, dan tekstur dengan memberikan garis pada kuisisioner dibawah ini:

Warna



Rasa



Aroma



Tekstur



LAMPIRAN 5

Kuisisioner Uji Hedonik

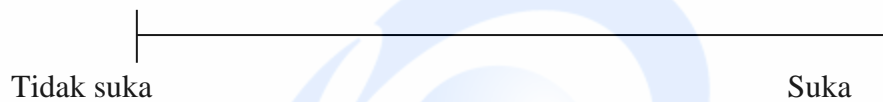
Snack Bar Tepung Ampas Kelapa Tepung Bekatul dengan rasa Green Tea

Nama Panelis :

Tanggal : 19 Juli 2017

1. Di hadapan Saudara/i disajikan sampel *Snack Bar Tepung Ampas Kelapa Tepung Bekatul dengan rasa Green Tea*
2. Berikan penilaian Saudara/i terhadap warna, aroma, rasa, dan tekstur dengan memberikan garis pada kuisisioner dibawah ini:

Warna



Rasa



Aroma



Tekstur



LAMPIRAN 6 OUTPUT UJI ANOVA

Analisis Zat Gizi

Descriptives

Karbohidrat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
F0	2	48.9500	.22627	.16000	46.9170	50.9830	48.79	49.11
F1	2	51.6150	.10607	.07500	50.6620	52.5680	51.54	51.69
F2	2	52.7150	.20506	.14500	50.8726	54.5574	52.57	52.86
F3	2	53.6500	.35355	.25000	50.4734	56.8266	53.40	53.90
Total	8	51.7325	1.89080	.66850	50.1517	53.3133	48.79	53.90

ANOVA

Karbohidrat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.796	3	8.265	144.061	.000
Within Groups	.229	4	.057		
Total	25.026	7			

Karbohidrat

Duncan^a

Perlakuan	N	Subset for alpha = 0.05			
		1	2	3	4
F0	2	48.9500			
F1	2		51.6150		
F2	2			52.7150	
F3	2				53.6500
Sig.		1.000	1.000	1.000	1.000

Descriptives

Protein

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	2		
F1	2	12.5250	.02121	.01500	12.3344	12.7156	12.51	12.54
F2	2	12.5750	.00707	.00500	12.5115	12.6385	12.57	12.58
F3	2	12.6550	.03536	.02500	12.3373	12.9727	12.63	12.68
Total	8	12.5663	.06255	.02211	12.5140	12.6185	12.51	12.68

ANOVA

Protein

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.026	3	.009	19.533	.007
Within Groups	.002	4	.000		
Total	.027	7			

Protein

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F0	2	12.5100		
F1	2	12.5250	12.5250	
F2	2		12.5750	
F3	2			12.6550
Sig.		.513	.075	1.000

Descriptives

Lemak

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	2		
F1	2	19.1250	.17678	.12500	17.5367	20.7133	19.00	19.25
F2	2	18.8300	.14142	.10000	17.5594	20.1006	18.73	18.93
F3	2	18.6650	.04950	.03500	18.2203	19.1097	18.63	18.70
Total	8	18.8150	.22602	.07991	18.6260	19.0040	18.59	19.25

ANOVA

Lemak

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.299	3	.100	6.789	.048
Within Groups	.059	4	.015		
Total	.358	7			

Lemak

Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
F0	2	18.6400	
F3	2	18.6650	
F2	2	18.8300	18.8300
F1	2		19.1250
Sig.		.198	.072

Descriptives

Serat

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	2		
F1	2	2.6800	.28284	.20000	.1388	5.2212	2.48	2.88
F2	2	3.7900	.31113	.22000	.9946	6.5854	3.57	4.01
F3	2	4.5650	.13435	.09500	3.3579	5.7721	4.47	4.66
Total	8	3.3412	.96634	.34165	2.5334	4.1491	2.22	4.66

ANOVA

Serat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.318	3	2.106	38.455	.002
Within Groups	.219	4	.055		
Total	6.537	7			

Serat

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F0	2	2.3300		
F1	2	2.6800		
F2	2		3.7900	
F3	2			4.5650
Sig.		.209	1.000	1.000

Descriptives

Kadar Air

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
F0	2	13.5850	.31820	.22500	10.7261	16.4439	13.36	13.81
F1	2	15.2400	.04243	.03000	14.8588	15.6212	15.21	15.27
F2	2	15.5600	.29698	.21000	12.8917	18.2283	15.35	15.77
F3	2	15.8550	.20506	.14500	14.0126	17.6974	15.71	16.00
Total	8	15.0600	.95718	.33842	14.2598	15.8602	13.36	16.00

ANOVA

Kadar Air

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.180	3	2.060	35.320	.002
Within Groups	.233	4	.058		
Total	6.413	7			

Kadar Air

Duncan^a

Perlakuan	N	Subset for alpha = 0.05	
		1	2
F0	2	13.5850	
F1	2		15.2400
F2	2		15.5600
F3	2		15.8550
Sig.		1.000	.067

Descriptives

Kadar Abu

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	2		
F1	2	2.0450	.02121	.01500	1.8544	2.2356	2.03	2.06
F2	2	1.9600	.04243	.03000	1.5788	2.3412	1.93	1.99
F3	2	1.9100	.00000	.00000	1.9100	1.9100	1.91	1.91
Total	8	1.9500	.06782	.02398	1.8933	2.0067	1.88	2.06

ANOVA

Kadar Abu

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.030	3	.010	17.333	.009
Within Groups	.002	4	.001		
Total	.032	7			

Kadar Abu

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F0	2	1.8850		
F3	2	1.9100	1.9100	
F2	2		1.9600	
F1	2			2.0450
Sig.		.356	.105	1.000

Analisis Mutu Hedonik

Descriptives

Warna

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.1033	1.00875	.18417	5.7267	6.4800	3.00	7.50
F2	30	6.4300	.76436	.13955	6.1446	6.7154	5.00	7.70
F3	30	7.2233	1.07437	.19615	6.8222	7.6245	5.70	9.80
Total	120	6.1117	1.38298	.12625	5.8617	6.3617	2.00	9.80

ANOVA

Warna

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	100.750	3	33.583	30.710	.000
Within Groups	126.853	116	1.094		
Total	227.604	119			

Warna

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
F0	30	4.690		
F1	30		6.103	
F2	30		6.430	
F3	30			7.223
Sig.		1.000	.229	1.000

Descriptives

Rasa

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.3100	.97108	.17729	5.9474	6.6726	4.60	8.00
F2	30	6.9067	1.57062	.28675	6.3202	7.4931	4.00	9.50
F3	30	6.6500	1.73200	.31622	6.0033	7.2967	1.00	9.20
Total	120	6.1900	1.53368	.14001	5.9128	6.4672	1.00	9.50

ANOVA

Rasa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	72.629	3	24.210	13.548	.000
Within Groups	207.279	116	1.787		
Total	279.908	119			

Rasa

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F0	30	4.893	
F1	30		6.310
F3	30		6.650
F2	30		6.907
Sig.		1.000	.105

Descriptives

Aroma

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.4067	.75701	.13821	6.1240	6.6893	5.00	7.70
F2	30	7.2133	1.08460	.19802	6.8083	7.6183	5.70	9.80
F3	30	6.1367	1.02166	.18653	5.7552	6.5182	3.00	7.50
Total	120	6.4783	1.26333	.11533	6.2500	6.7067	2.50	9.80

ANOVA

Aroma

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	22.967	3	7.656	5.319	.002
Within Groups	166.957	116	1.439		
Total	189.924	119			

Aroma

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F3	30	6.137	
F0	30	6.157	
F1	30	6.407	
F2	30		7.213
Sig.		.416	1.000

Descriptives

Tekstur

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.4067	.99860	.18232	6.0338	6.7795	3.40	8.30
F2	30	6.3133	1.67471	.30576	5.6880	6.9387	2.00	9.00
F3	30	5.1967	1.36899	.24994	4.6855	5.7079	2.00	7.20
Total	120	6.0350	1.37753	.12575	5.7860	6.2840	2.00	9.00

ANOVA

Tekstur

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	28.616	3	9.539	5.611	.001
Within Groups	197.197	116	1.700		
Total	225.813	119			

Tekstur

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F3	30	5.197	
F0	30		6.223
F2	30		6.313
F1	30		6.407
Sig.		1.000	.612

Analisis Sifat Hedonik

Descriptives

Warna

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
F0	30	5.6033	1.55884	.28460	5.0213	6.1854	2.00	7.80
F1	30	6.2233	1.06015	.19356	5.8275	6.6192	4.00	8.00
F2	30	6.4067	.99860	.18232	6.0338	6.7795	3.40	8.30
F3	30	6.9067	1.48090	.27037	6.3537	7.4596	4.50	9.50
Total	120	6.2850	1.36484	.12459	6.0383	6.5317	2.00	9.50

ANOVA

Warna

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	26.092	3	8.697	5.159	.002
Within Groups	195.581	116	1.686		
Total	221.673	119			

Warna

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F0	30	5.603	
F1	30	6.223	6.223
F2	30		6.407
F3	30		6.907
Sig.		.067	.055

Descriptives

Rasa

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.5967	.76315	.13933	6.3117	6.8816	4.50	7.60
F2	30	6.9700	.99209	.18113	6.5995	7.3405	4.70	8.80
F3	30	6.9667	1.32466	.24185	6.4720	7.4613	4.00	9.50
Total	120	6.1150	1.67330	.15275	5.8125	6.4175	1.00	9.50

ANOVA

Rasa

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	194.315	3	64.772	54.102	.000
Within Groups	138.878	116	1.197		
Total	333.193	119			

Rasa

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F0	30	3.927	
F1	30		6.597
F3	30		6.967
F2	30		6.970
Sig.		1.000	.217

Descriptives

Aroma

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.3100	.97108	.17729	5.9474	6.6726	4.60	8.00
F2	30	6.6333	1.52685	.27876	6.0632	7.2035	3.30	9.10
F3	30	6.1967	1.17341	.21423	5.7585	6.6348	4.00	8.30
Total	120	5.9800	1.35315	.12353	5.7354	6.2246	3.00	9.10

ANOVA

Aroma

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	60.681	3	20.227	14.925	.000
Within Groups	157.211	116	1.355		
Total	217.892	119			

Aroma

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F0	30	4.780	
F3	30		6.197
F1	30		6.310
F2	30		6.633
Sig.		1.000	.174

Descriptives

Tekstur

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					F0	30		
F1	30	6.1033	1.00875	.18417	5.7267	6.4800	3.00	7.50
F2	30	7.2233	1.07437	.19615	6.8222	7.6245	5.70	9.80
F3	30	6.4300	.76436	.13955	6.1446	6.7154	5.00	7.70
Total	120	6.4892	1.26476	.11546	6.2606	6.7178	2.50	9.80

ANOVA

Tekstur

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.250	3	7.750	5.380	.002
Within Groups	167.106	116	1.441		
Total	190.356	119			

Tekstur

Duncan^a

Jenis Perlakuan	N	Subset for alpha = 0.05	
		1	2
F1	30	6.103	
F0	30	6.200	
F3	30	6.430	
F2	30		7.223
Sig.		.325	1.000

LAMPIRAN 7

Dokumentasi Bahan dan Hasil *Snack Bar*



Tepung Ampas Kelapa



Tepung Bekatul



Bubuk *Green Tea*



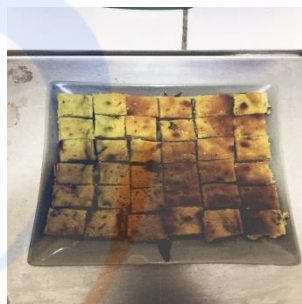
F0



F1



F2



F3

LAMPIRAN 8
DOKUMENTASI UJI ORGANOLEPTIK

