

LAMPIRAN



**Lampiran 1. Tabel Kode dan Hasil Uji Kandungan Kalium Pada Jus
Campuran Buah Pepino dan Belimbing**

KODE

Teknik Pengolahan	Waktu Tunggu (Holding Time)	Replikasi		
		1	2	3
<i>Juicing</i> (PJ)	5 menit (W1)	PJW11	PJW12	PJW13
	20 menit (W2)	PJW21	PJW22	PJW23
	35 menit (W3)	PJW31	PJW32	PJW33
	50 menit (W4)	PJW41	PJW42	PJW43
	65 menit (W5)	PJW51	PJW52	PJW53
<i>Blending</i> (PB)	5 menit (W1)	PBW11	PBW12	PBW13
	20 menit (W2)	PBW21	PBW22	PBW23
	35 menit (W3)	PBW31	PBW32	PBW33
	50 menit (W4)	PBW41	PBW42	PBW43
	65 menit (W5)	PBW51	PBW52	PBW53

HASIL UJI KANDUNGAN KALIUM (mg/kg)

Teknik Pengolahan	Waktu Tunggu (Holding Time)	Replikasi			Rata-rata
		1	2	3	
<i>Juicing</i> (PJ)	5 menit (W1)	355.19	605.92	340.83	433.98
	20 menit (W2)	332.58	569.6	322.37	408.18
	35 menit (W3)	359.99	649.44	340.98	450.14
	50 menit (W4)	350.85	705.06	353.7	469.87
	65 menit (W5)	342.18	651.12	336.02	443.11
<i>Blending</i> (PB)	5 menit (W1)	410.53	472.08	448.35	443.65
	20 menit (W2)	389	439.99	422.49	417.16
	35 menit (W3)	432.22	517.82	457.83	469.29
	50 menit (W4)	426.91	490.84	451.56	456.44
	65 menit (W5)	411.47	486.81	453.09	450.46

Lampiran 2. Hasil Laboratorium Uji Kandungan Kalium



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
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LAPORAN HASIL ANALISA

NO : TN.12/ RT.5 / T.1 / R.0 / TT. 150803 / 2014

1. Data konsumen :
 - Nama konsumen : Elvira Wisakhadewi
 - Instansi : Fak. Kedokteran Universitas Brawijaya
 - Alamat : Jl. Veteran Malang
 - Telepon : 085 786 416 298
 - Status : Mahasiswa
 - Keperluan analisis : Uji Kualitas
2. Sampling Dilakukan Oleh : Konsumen
3. Identifikasi sampel
 - Nama sampel : *Jus Campuran Pepino Belimbing*
 - Wujud : Cair
 - Warna : Kuning
 - Bau : Tidak Berbau
4. Prosedur analisa : Dari Lab. Lingkungan Jurusan Kimia FMIPA Unibraw Malang.
5. Penyampaian Laporan hasil analisis : Diambil langsung
6. Tanggal terima sampel : 19 Agustus 2014
7. Data hasil analisa :

No	Kode	Parameter	Hasil Analisa	Metode Analisis		
			Kadar	Satuan	Pereaksi	Metode
1	PJW 11	K	355,19	mg/kg	HNO ₃	AAS
2	PJW 12	K	605,92	mg/kg	HNO ₃	AAS
3	PJW 13	K	340,83	mg/kg	HNO ₃	AAS
4	PJW 21	K	332,58	mg/kg	HNO ₃	AAS
5	PJW 22	K	569,60	mg/kg	HNO ₃	AAS
6	PJW 23	K	322,37	mg/kg	HNO ₃	AAS
7	PJW 31	K	359,99	mg/kg	HNO ₃	AAS
8	PJW 32	K	649,44	mg/kg	HNO ₃	AAS
9	PJW 33	K	340,98	mg/kg	HNO ₃	AAS
10	PJW 41	K	350,85	mg/kg	HNO ₃	AAS
11	PJW 42	K	705,06	mg/kg	HNO ₃	AAS
12	PJW 43	K	353,70	mg/kg	HNO ₃	AAS
13	PJW 51	K	342,18	mg/kg	HNO ₃	AAS
14	PJW 52	K	651,12	mg/kg	HNO ₃	AAS
15	PJW 53	K	336,02	mg/kg	HNO ₃	AAS
16	PBW 11	K	410,53	mg/kg	HNO ₃	AAS
17	PBW 12	K	472,08	mg/kg	HNO ₃	AAS
18	PBW 13	K	448,35	mg/kg	HNO ₃	AAS
19	PBW 21	K	389,00	mg/kg	HNO ₃	AAS
20	PBW 22	K	439,99	mg/kg	HNO ₃	AAS

No	Kode	Parameter	Hasil Analisa	Metode Analisis		
			Kadar	Satuan	Pereaksi	Metode
21	PBW 23	K	422,49	mg/kg	HNO ₃	AAS
22	PBW 31	K	432,22	mg/kg	HNO ₃	AAS
23	PBW 32	K	517,82	mg/kg	HNO ₃	AAS
24	PBW 33	K	457,83	mg/kg	HNO ₃	AAS
25	PBW 41	K	426,91	mg/kg	HNO ₃	AAS
26	PBW 42	K	490,84	mg/kg	HNO ₃	AAS
27	PBW 43	K	451,56	mg/kg	HNO ₃	AAS
28	PBW 51	K	411,47	mg/kg	HNO ₃	AAS
29	PBW 52	K	486,81	mg/kg	HNO ₃	AAS
30	PBW 53	K	453,09	mg/kg	HNO ₃	AAS

Catatan :

1. Hasil analisa ini adalah nilai rata – rata pengerjaan analisis secara duplo.
2. Hasil analisa ini hanya berlaku untuk sampel yang kami terima dengan kondisi sampel saat itu.

Mengetahui :
Ketua,



Dr. Edi Priyo Utomo, MS.
NIP. 19571227 198603 1 003

Malang, 15 September 2014
Kalab.UPT. Layanan Analisa &
Pengukuran

Dra. Sri Wardhani, MSi
NIP. 19680226 1992032 001



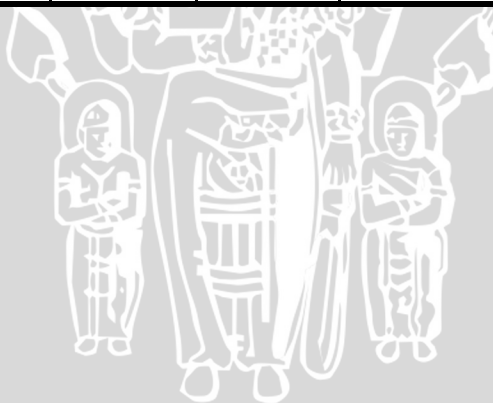
Lampiran 3. Analisis Data SPSS

A. Hasil Descriptive Statistic

Descriptives

Kadar Kalium

Kadar Kalium								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Mean			
					Lower Bound	Upper Bound		
Juicing 5 menit	3	433.9800	149.07741	86.06988	63.6512	804.3088	340.83	605.92
Juicing 20 menit	3	408.1833	139.88412	80.76213	60.6919	755.6747	322.37	569.60
Juicing 35 menit	3	450.1367	172.86327	99.80265	20.7205	879.5528	340.98	649.44
Juicing 50 menit	3	469.8700	203.68550	117.59788	-36.1128	975.8528	350.85	705.06
Juicing 65 menit	3	443.1067	180.17116	104.02187	-4.4633	890.6766	336.02	651.12
Blending 5 menit	3	443.6533	31.04263	17.92247	366.5392	520.7675	410.53	472.08
Blending 20 menit	3	417.1600	25.90949	14.95885	352.7973	481.5227	389.00	439.99
Blending 35 menit	3	469.2900	43.93562	25.36624	360.1479	578.4321	432.22	517.82
Blending 50 menit	3	456.4367	32.24279	18.61538	376.3411	536.5322	426.91	490.84
Blending 65 menit	3	450.4567	37.73897	21.78860	356.7079	544.2055	411.47	486.81
Total	30	444.2273	104.09618	19.00528	405.3572	483.0975	322.37	705.06



B. Pengaruh Metode Juicing dan Blending

➤ Uji Normalitas

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Kadar Kalium	30	100.0%	0	.0%	30	100.0%

Descriptives

		Statistic	Std. Error
Kadar Kalium	Mean	444.2273	19.00528
	95% Confidence Interval for Mean		
	Lower Bound	405.3572	
	Upper Bound	483.0975	
	5% Trimmed Mean	437.3163	
	Median	429.5650	
	Variance	10836.015	
	Std. Deviation	104.09618	
	Minimum	322.37	
	Maximum	705.06	
	Range	382.69	
	Interquartile Range	134.83	
	Skewness	1.022	.427
	Kurtosis	.391	.833

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kadar Kalium	.148	30	.092	.890	30	.005

a. Lilliefors Significance Correction

➤ Uji Normalitas Hasil Transformasi Data

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
transformasi kadar kalium	30	100.0%	0	.0%	30	100.0%

Descriptives

		Statistic	Std. Error
transformasi kadar kalium	Mean	2.6371	.01743
	95% Confidence Interval for Mean		
	Lower Bound	2.6014	
	Upper Bound	2.6727	
	5% Trimmed Mean	2.6329	
	Median	2.6330	
	Variance	.009	
	Std. Deviation	.09545	
	Minimum	2.51	
	Maximum	2.85	
	Range	.34	
	Interquartile Range	.14	
	Skewness	.626	.427
	Kurtosis	-.377	.833

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
transformasi kadar kalium	.135	30	.174	.929	30	.045

a. Lilliefors Significance Correction

➤ Uji Mann-Whitney *Juicing* dan *Blending* 5 menit

Ranks				
Kategori Perlakuan		N	Mean Rank	Sum of Ranks
Kadar Kalium	Juicing 5 menit	3	3.00	9.00
	Blending 5 menit	3	4.00	12.00
	Total	6		

Test Statistics ^b	
	Kadar Kalium
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^a

a. Not corrected for ties.

b. Grouping Variable: Kategori Perlakuan

➤ Uji Mann-Whitney *Juicing* dan *Blending* 20 menit

Ranks				
Kategori Perlakuan		N	Mean Rank	Sum of Ranks
Kadar Kalium	Juicing 20 menit	3	3.00	9.00
	Blending 20 menit	3	4.00	12.00
	Total	6		

Test Statistics ^b	
	Kadar Kalium
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^a

a. Not corrected for ties.

b. Grouping Variable: Kategori Perlakuan

➤ Uji Mann-Whitney *Juicing* dan *Blending* 35 menit

Ranks			
Kategori Perlakuan	N	Mean Rank	Sum of Ranks
Kadar Kalium Juicing 35 menit	3	3.00	9.00
Blending 35 menit	3	4.00	12.00
Total	6		

Test Statistics ^b	
	Kadar Kalium
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^a

a. Not corrected for ties.

b. Grouping Variable: Kategori Perlakuan

➤ Uji Mann-Whitney *Juicing* dan *Blending* 50 menit

Ranks			
Kategori Perlakuan	N	Mean Rank	Sum of Ranks
Kadar Kalium Juicing 50 menit	3	3.00	9.00
Blending 50 menit	3	4.00	12.00
Total	6		

Test Statistics ^b	
	Kadar Kalium
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^a

a. Not corrected for ties.

b. Grouping Variable: Kategori Perlakuan

➤ Uji Mann-Whitney *Juicing* dan *Blending* 65 menit

Ranks

Kategori Perlakuan	N	Mean Rank	Sum of Ranks
Kadar Kalium <i>Juicing</i> 65 menit	3	3.00	9.00
<i>Blending</i> 65 menit	3	4.00	12.00
Total	6		

Test Statistics^b

	Kadar Kalium
Mann-Whitney U	3.000
Wilcoxon W	9.000
Z	-.655
Asymp. Sig. (2-tailed)	.513
Exact Sig. [2*(1-tailed Sig.)]	.700 ^a

a. Not corrected for ties.

b. Grouping Variable: Kategori Perlakuan



C. Pengaruh Metode Juicing Berdasarkan Waktu Tunggu Konsumsi

(Holding Time)

➤ Uji Normalitas

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Kadar Kalium Juicing	15	100.0%	0	.0%	15	100.0%

Descriptives

			Statistic	Std. Error
Kadar Kalium Juicing	Mean		441.0553	37.63157
	95% Confidence Interval for Mean	Lower Bound	360.3436	
		Upper Bound	521.7670	
	5% Trimmed Mean		432.9820	
	Median		353.7000	
	Variance		21242.024	
	Std. Deviation		145.74644	
	Minimum		322.37	
	Maximum		705.06	
	Range		382.69	
	Interquartile Range		265.09	
	Skewness		.896	.580
	Kurtosis		-1.168	1.121

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kadar Kalium Juicing	.378	15	.000	.721	15	.000

a. Lilliefors Significance Correction

➤ Uji Normalitas Hasil Transformasi Data

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
tranformasi data juicing	15	100.0%	0	.0%	15	100.0%

Descriptives

		Statistic	Std. Error
tranformasi data juicing	Mean	2.6246	.03410
	95% Confidence Interval for Mean	2.5515	
	Lower Bound	2.6977	
	Upper Bound	2.6186	
	5% Trimmed Mean	2.5486	
	Median	.017	
	Variance	.13206	
	Std. Deviation	2.51	
	Minimum	2.85	
	Maximum	.34	
	Range	.25	
	Interquartile Range	.830	.580
	Skewness	-1.362	1.121
	Kurtosis		

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
tranformasi data juicing	.364	15	.000	.730	15	.001

a. Lilliefors Significance Correction

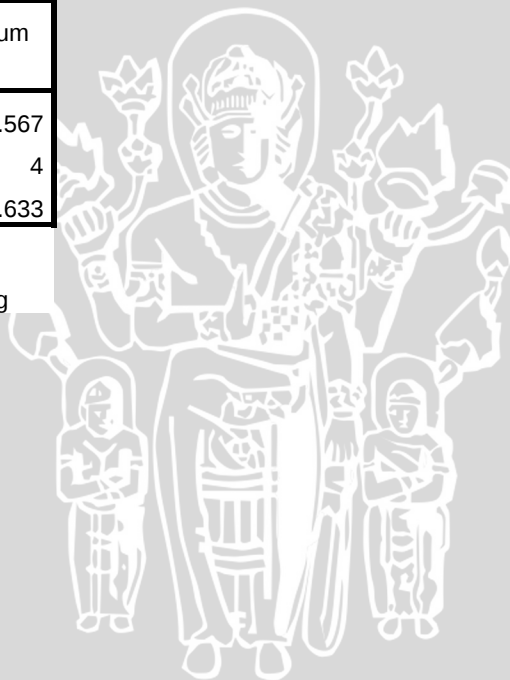
➤ Uji Kruskal-Wallis

Ranks			
Juicing		N	Mean Rank
Kadar Kalium Juicing	Juicing 5 menit	3	8.33
	Juicing 20 menit	3	4.67
	Juicing 35 menit	3	9.33
	Juicing 50 menit	3	10.00
	Juicing 65 menit	3	7.67
Total		15	

Test Statistics ^{a,b}	
	Kadar Kalium Juicing
Chi-square	2.567
df	4
Asymp. Sig.	.633

a. Kruskal Wallis Test

b. Grouping Variable: Juicing



D. Pengaruh Metode *Blending* Berdasarkan Waktu Tunggu Konsumsi

(*Holding Time*)

➤ Uji Normalitas

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Kadar Kalium Blending	15	100.0%	0	.0%	15	100.0%

Descriptives

			Statistic	Std. Error
Kadar Kalium Blending	Mean		447.3993	8.87861
	95% Confidence Interval for Mean	Lower Bound	428.3566	
		Upper Bound	466.4421	
	5% Trimmed Mean		446.7315	
	Median		448.3500	
	Variance		1182.446	
	Std. Deviation		34.38671	
	Minimum		389.00	
	Maximum		517.82	
	Range		128.82	
	Interquartile Range		49.59	
	Skewness		.375	.580
	Kurtosis		-.098	1.121

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kadar Kalium Blending	.114	15	.200*	.982	15	.983

a. Lilliefors Significance Correction

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

➤ Uji One-way ANOVA

Test of Homogeneity of Variances

Kadar Kalium Blending

Levene Statistic	df1	df2	Sig.
.282	4	10	.883

ANOVA

Kadar Kalium Blending

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4496.015	4	1124.004	.932	.484
Within Groups	12058.225	10	1205.822		
Total	16554.240	14			



Lampiran 4. Pernyataan Keaslian Tulisan

Saya yang bertanda tangan di bawah ini :

Nama : Elvira Wisakhadewi

NIM : 135070309111018

Program Studi : Program Studi Ilmu Gizi

Fakultas Kedokteran Universitas Brawijaya

menyatakan dengan sebenarnya bahwa Tugas Akhir yang saya tulis ini benar-benar hasil karya saya sendiri, bukan merupakan pengambil alihan tulisan atau pikiran orang lain yang saya akui sebagai tulisan atau pikiran saya sendiri. Apabila di kemudian hari dapat dibuktikan bahwa Tugas Akhir ini adalah hasil jiplakan, maka saya bersedia menerima sanksi atas perbuatan tersebut.

Malang, Januari 2015

(Elvira Wisakhadewi)

NIM. 135070309111018