

*Lampiran 1***Waktu penelitian :**

No	Kegiatan	Mei				Juni				Juli				Agustus			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.	Aklimatisasi																
2.	Penginduksian fruktosa																
3.	Pemberian jamu B dan Captopril																
4.	Pengukuran tekanan darah																
5.	Euthanasia																
6.	Pengujian antioksidan																

Lampiran 2**1. Dosis 1 Jamu B**

Dosis 1 adalah 1 kali dosis, yaitu untuk tikus dengan berat rata-rata 250 gram

- $\frac{250 \text{ gram} \times 6 \text{ gram}}{50.000 \text{ gram}} = 0,03 \text{ gram}$

Ditimbang 0,5 gram dilarutkan dalam 10 ml air hangat

- $\frac{0,5 \text{ gram}}{10 \text{ ml}} = \frac{0,03 \text{ gram}}{X} = 0,6 \text{ ml}$

Volume pemberian jamu dosis 1 = 0,6 ml

- $0,03 \text{ gram} / 0,25 \text{ kg BB} = 0,12 \text{ g/kg BB}$

2. Dosis 2 Jamu B

Dosis 2 adalah 2 kali dosis pertama = $0,03 \times 2 = 0,06 \text{ gram}$

Ditimbang 0,5 gram dilarutkan dalam 10 ml air hangat

- $\frac{0,5 \text{ gram}}{10 \text{ ml}} = \frac{0,06}{X} = 1,2 \text{ ml}$

Volume pemberian jamu dosis 2 = 1,2 ml

- $0,06 \text{ gram} / 0,25 \text{ kg BB} = 0,24 \text{ g/kg BB}$

3. Dosis 3 Jamu B

Dosis 3 adalah 3 kali dosis pertama = $0,03 \times 3 = 0,09 \text{ gram}$

Ditimbang 0,5 gram dilarutkan dalam 10 ml air hangat

- $\frac{0,5 \text{ gram}}{10 \text{ ml}} = \frac{0,09}{X} = 1,8 \text{ ml}$

Volume pemberian jamu dosis 3 = 1,8 ml

- $0,09 \text{ gram} / 0,25 \text{ kg BB} = 0,36 \text{ g/kg BB}$

Lampiran 3**Dosis Kaptopril :**

Dosis pada manusia dengan berat badan 50 kg = 25 mg (0,025 gram) diminum 2 kali/hari

Berat tikus rata-rata = 250 gram

- $\frac{250 \text{ gram} \times 0,025 \text{ gram}}{50.000 \text{ gram}} = 0,000125 \text{ gram}$

Digerus 1 tablet Captopril, kemudian dilarutkan ke dalam 40 ml air dingin.

- $\frac{0,025 \text{ gram}}{40 \text{ ml}} = \frac{0,000125 \text{ gram}}{x}$

$$0,025 \times x = 0,005 \text{ ml}$$

$$X = 0,2 \text{ ml}$$

Volume pemberian kaptopril = 0,2 ml

$0,000125 \text{ gram} / 0,25 \text{ kg} = 0,0005 \text{ gram/Kg BB}$

Lampiran 4

Perhitungan Pembuatan Fruktosa

$$M1 \times V1 = M2 \times V2$$

$$10\% \times 500 \text{ ml} = 56\% \times V2$$

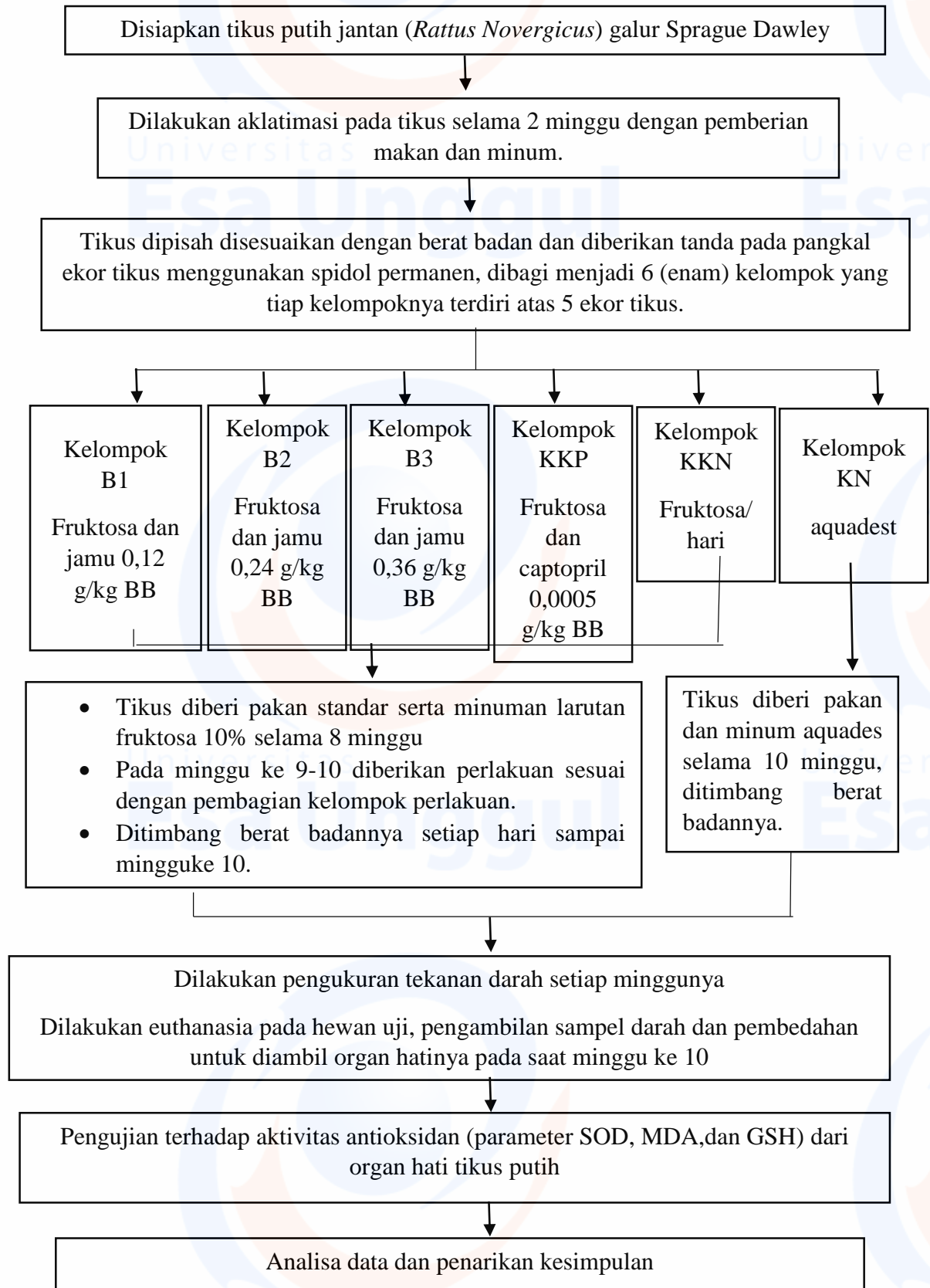
$$5000 = 56 \times V2$$

$$5000/56 = V2$$

$$89 \text{ ml} = V2$$

Lampiran 5

Tahapan Penelitian



Lampiran 6

Uji Normalitas SOD

Tests of Normality

Kelompok Tikus	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Konsentrasi SOD						
B1	,242	5	,200*	,897	5	,392
B2	,232	5	,200*	,881	5	,315
B3	,236	5	,200*	,962	5	,821
KKP	,232	5	,200*	,881	5	,315
KKN	,131	5	,200*	,986	5	,966
KN	,257	5	,200*	,948	5	,721

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

Kelompok Tikus	Based on	Levene			
		Statistic	df1	df2	Sig.
Konsentrasi SOD	Based on Mean	1,227	5	24	,327
	Based on Median	,700	5	24	,628
	Based on Median and with adjusted df	,700	5	12,299	,633
	Based on trimmed mean	1,200	5	24	,339

Uji Anova SOD

ANOVA

Konsentrasi SOD

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	225277,173	5	45055,435	151,690	,000
Within Groups	7128,552	24	297,023		
Total	232405,725	29			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Konsentrasi SOD

LSD

(I) Kelompok Tikus	(J) Kelompok Tikus	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound

B1	B2	-27,930800*	10,899963	,017	-50,42722	-5,43438
	B3	-140,802400*	10,899963	,000	-163,29882	-118,30598
	KKP	-167,240600*	10,899963	,000	-189,73702	-144,74418
	KKN	44,203200*	10,899963	,000	21,70678	66,69962
	KN	-176,096200*	10,899963	,000	-198,59262	-153,59978
	B2	27,930800*	10,899963	,017	5,43438	50,42722
B2	B3	-112,871600*	10,899963	,000	-135,36802	-90,37518
	KKP	-139,309800*	10,899963	,000	-161,80622	-116,81338
	KKN	72,134000*	10,899963	,000	49,63758	94,63042
	KN	-148,165400*	10,899963	,000	-170,66182	-125,66898
	B1	140,802400*	10,899963	,000	118,30598	163,29882
	B2	112,871600*	10,899963	,000	90,37518	135,36802
B3	KKP	-26,438200*	10,899963	,023	-48,93462	-3,94178
	KKN	185,005600*	10,899963	,000	162,50918	207,50202
	KN	-35,293800*	10,899963	,004	-57,79022	-12,79738
	KKP	167,240600*	10,899963	,000	144,74418	189,73702
	B2	139,309800*	10,899963	,000	116,81338	161,80622
KKP	B3	26,438200*	10,899963	,023	3,94178	48,93462
	KKN	211,443800*	10,899963	,000	188,94738	233,94022
	KN	-8,855600	10,899963	,425	-31,35202	13,64082
	B1	-44,203200*	10,899963	,000	-66,69962	-21,70678
	B2	-72,134000*	10,899963	,000	-94,63042	-49,63758
KKN	B3	-185,005600*	10,899963	,000	-207,50202	-162,50918
	KKP	-211,443800*	10,899963	,000	-233,94022	-188,94738
	KN	-220,299400*	10,899963	,000	-242,79582	-197,80298
	B1	176,096200*	10,899963	,000	153,59978	198,59262
	B2	148,165400*	10,899963	,000	125,66898	170,66182
KN	B3	35,293800*	10,899963	,004	12,79738	57,79022
	KKP	8,855600	10,899963	,425	-13,64082	31,35202
	KKN	220,299400*	10,899963	,000	197,80298	242,79582

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

Lampiran 7

Uji Normalitas MDA

Tests of Normality

	Kelompok Tikus	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Konsentrasi MDA	B1	,211	5	,200*	,941	5	,671
	B2	,195	5	,200*	,979	5	,927
	B3	,229	5	,200*	,964	5	,833
	KKP	,273	5	,200*	,888	5	,349
	KKN	,343	5	,054	,804	5	,088
	KN	,215	5	,200*	,960	5	,810

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Konsentrasi MDA	Based on Mean	3,133	5	24	,026
	Based on Median	1,263	5	24	,312
	Based on Median and with adjusted df	1,263	5	5,667	,391
	Based on trimmed mean	2,604	5	24	,051

Uji Anova MDA

ANOVA

Konsentrasi MDA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11,766	5	2,353	31,833	,000
Within Groups	1,774	24	,074		
Total	13,540	29			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Konsentrasi MDA

LSD

Sig. | 95% Confidence Interval

(I) Kelompok Tikus	(J) Kelompok Tikus	Mean Difference (I-J)	Std. Error		Lower Bound	Upper Bound
B1	B2	,8238800*	,1719574	,000	,468977	1,178783
	B3	,9851200*	,1719574	,000	,630217	1,340023
	KKP	1,3233800*	,1719574	,000	,968477	1,678283
	KKN	-,2236400	,1719574	,206	-,578543	,131263
	KN	1,4265600*	,1719574	,000	1,071657	1,781463
B2	B1	-,8238800*	,1719574	,000	-1,178783	-,468977
	B3	,1612400	,1719574	,358	-,193663	,516143
	KKP	,4995000*	,1719574	,008	,144597	,854403
	KKN	-1,0475200*	,1719574	,000	-1,402423	-,692617
	KN	,6026800*	,1719574	,002	,247777	,957583
B3	B1	-,9851200*	,1719574	,000	-1,340023	-,630217
	B2	-,1612400	,1719574	,358	-,516143	,193663
	KKP	,3382600	,1719574	,061	-,016643	,693163
	KKN	-1,2087600*	,1719574	,000	-1,563663	-,853857
	KN	,4414400*	,1719574	,017	,086537	,796343
KKP	B1	-1,3233800*	,1719574	,000	-1,678283	-,968477
	B2	-,4995000*	,1719574	,008	-,854403	-,144597
	B3	-,3382600	,1719574	,061	-,693163	,016643
	KKN	-1,5470200*	,1719574	,000	-1,901923	-1,192117
	KN	,1031800	,1719574	,554	-,251723	,458083
KKN	B1	,2236400	,1719574	,206	-,131263	,578543
	B2	1,0475200*	,1719574	,000	,692617	1,402423
	B3	1,2087600*	,1719574	,000	,853857	1,563663
	KKP	1,5470200*	,1719574	,000	1,192117	1,901923
	KN	1,6502000*	,1719574	,000	1,295297	2,005103
KN	B1	-1,4265600*	,1719574	,000	-1,781463	-1,071657
	B2	-,6026800*	,1719574	,002	-,957583	-,247777
	B3	-,4414400*	,1719574	,017	-,796343	-,086537
	KKP	-,1031800	,1719574	,554	-,458083	,251723
	KKN	-1,6502000*	,1719574	,000	-2,005103	-1,295297

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

Lampiran 8

Uji Normalitas GSH

Tests of Normality

	Kelompok Tikus	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Konsentrasi GSH	B1	,287	5	,200*	,865	5	,247
	B2	,231	5	,200*	,937	5	,642
	B3	,247	5	,200*	,908	5	,453
	KKP	,281	5	,200*	,815	5	,107
	KKN	,349	5	,046	,771	5	,046
	KN	,238	5	,200*	,918	5	,514

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

a. Lilliefors Significance Correction

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Konsentrasi GSH	Based on Mean	3,733	5	24	,012
	Based on Median	1,354	5	24	,276
	Based on Median and with adjusted df	1,354	5	9,906	,319
	Based on trimmed mean	3,470	5	24	,017

Uji Akruskal wallis GSH

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Konsentrasi GSH	30	,35760	,128501	,141	,570
Kelompok Tikus	30	3,50	1,737	1	6

Ranks

		Kelompok Tikus	N	Mean Rank
Konsentrasi GSH	B1		5	8,00
	B2		5	13,20
	B3		5	20,00
	KKP		5	23,30

KKN	5	3,00
KN	5	25,50
Total	30	

Test Statistics^{a,b}

Konsentrasi GSH	
Kruskal-Wallis H	25,769
df	5
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok Tikus

Post Hoc dun Tests

Independent-Samples Kruskal-Wallis Test Summary

Total N	30
Test Statistic	25,769 ^a
Degree Of Freedom	5
Asymptotic Sig.(2-sided test)	,000

a. The test statistic is adjusted for ties.

Pairwise Comparisons of Kelompok Tikus

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig. ^a
KKN-B1	5,000	5,564	,899	,369	1,000
KKN-B2	10,200	5,564	1,833	,067	1,000
KKN-B3	17,000	5,564	3,055	,002	,034
KKN-KKP	20,300	5,564	3,648	,000	,004
KKN-KN	-22,500	5,564	-4,044	,000	,001
B1-B2	-5,200	5,564	-,935	,350	1,000
B1-B3	-12,000	5,564	-2,157	,031	,465
B1-KKP	-15,300	5,564	-2,750	,006	,089
B1-KN	-17,500	5,564	-3,145	,002	,025
B2-B3	-6,800	5,564	-1,222	,222	1,000
B2-KKP	-10,100	5,564	-1,815	,069	1,000

B2-KN	-12,300	5,564	-2,211	,027	,406
B3-KKP	-3,300	5,564	-,593	,553	1,000
B3-KN	-5,500	5,564	-,988	,323	1,000
KKP-KN	-2,200	5,564	-,395	,693	1,000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is ,05.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Lampiran 9

Tekanan darah Sistolik

Uji Normalitas tekanan darah sistolik

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Indukasi Minggu 1	30	115.8890	10.83194	90.00	138.00
Indukasi Minggu 2	30	114.6400	12.12983	95.70	150.00
Indukasi Minggu 3	30	118.0657	10.47403	96.50	143.50
Indukasi Minggu 4	30	124.2000	11.00592	105.00	144.30
Indukasi Minggu 5	30	119.3233	16.84069	84.00	148.00
Indukasi Minggu 6	30	125.3667	14.69706	97.50	163.30
Indukasi Minggu 7	30	130.9500	14.68311	100.00	154.30
Indukasi Minggu 8	30	133.6890	19.06664	80.00	163.00
Treat Minggu 1	30	135.1967	17.95040	99.00	155.00
Treat Minggu 2	30	124.9467	13.65596	100.00	155.00

One-Sample Kolmogorov-Smirnov Test

		Indukasi Minggu 1	Indukasi Minggu 2	Indukasi Minggu 3	Indukasi Minggu 4	Indukasi Minggu 5	Indukasi Minggu 6	Indukasi Minggu 7	Indukasi Minggu 8	Treat Minggu 1	Treat Minggu 2
N		30	30	30	30	30	30	30	30	30	30
Normal Parameters ^{a,b}	Mean	115.8890	114.6400	118.0657	124.2000	119.3233	125.3667	130.9500	133.6890	135.1967	124.9467
	Std. Deviation	10.83194	12.12983	10.47403	11.00592	16.84069	14.69706	14.68311	19.06664	17.95040	13.65596
Most Extreme Differences	Absolute	.110	.137	.114	.101	.070	.089	.114	.115	.211	.199
	Positive	.110	.137	.085	.097	.064	.089	.056	.099	.135	.199
	Negative	-.073	-.096	-.114	-.101	-.070	-.057	-.114	-.115	-.211	-.124
Test Statistic		.110	.137	.114	.101	.070	.089	.114	.115	.211	.199

Asymp. Sig. (2-tailed)	.200 ^c _d	.154 ^c	.200 ^c _d	.200 ^c _d	.200 ^c _d	.200 ^c _d	.200 ^c _d	.200 ^c _d	.001 ^c	.004 ^c
------------------------	--------------------------------	-------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------------	-------------------	-------------------

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Uji Multivariant Tekanan Darah Sistolik

Within-Subjects Factors

Measure: klmpk

Minggu	Dependent Variable
1	Minggu1
2	Minggu2
3	Minggu3
4	Minggu4
5	Minggu5
6	Minggu6
7	Minggu7
8	Minggu8
9	Minggu9
10	Minggu10

Descriptive Statistics

	Mean	Std. Deviation	N
Indukasi Minggu 1	115.8890	10.83194	30
Indukasi Minggu 2	114.6400	12.12983	30
Indukasi Minggu 3	118.0657	10.47403	30
Indukasi Minggu 4	124.2000	11.00592	30
Indukasi Minggu 5	119.3233	16.84069	30
Indukasi Minggu 6	125.3667	14.69706	30
Indukasi Minggu 7	130.9500	14.68311	30
Indukasi Minggu 8	133.6890	19.06664	30
Treat Minggu 1	135.1967	17.95040	30
Treat Minggu 2	124.9467	13.65596	30

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.
Minggu	Pillai's Trace	.715	5.844 ^b	9.000	21.000	.000
	Wilks' Lambda	.285	5.844 ^b	9.000	21.000	.000
	Hotelling's Trace	2.505	5.844 ^b	9.000	21.000	.000
	Roy's Largest Root	2.505	5.844 ^b	9.000	21.000	.000

- a. Design: Intercept
Within Subjects Design: Minggu
- b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: klmk

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Minggu	.032	88.788	44	.000	.617	.780	.111

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

- a. Design: Intercept
Within Subjects Design: Minggu
- b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: klmk

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Minggu	Sphericity Assumed	14409.601	9	1601.067	9.777	.000
	Greenhouse-Geisser	14409.601	5.553	2594.900	9.777	.000
	Huynh-Feldt	14409.601	7.020	2052.727	9.777	.000
	Lower-bound	14409.601	1.000	14409.601	9.777	.004
Error(Minggu)	Sphericity Assumed	42743.116	261	163.767		
	Greenhouse-Geisser	42743.116	161.038	265.422		
	Huynh-Feldt	42743.116	203.572	209.965		
	Lower-bound	42743.116	29.000	1473.901		

Tests of Within-Subjects Contrasts

Measure: klmpk

Source	Minggu	Type III Sum of Squares	df	Mean Square	F	Sig.
Minggu	Linear	9889.543	1	9889.543	39.297	.000
	Quadratic	597.583	1	597.583	3.212	.084
	Cubic	1893.826	1	1893.826	13.103	.001
	Order 4	772.203	1	772.203	4.287	.047
	Order 5	442.934	1	442.934	2.672	.113
	Order 6	193.409	1	193.409	1.776	.193
	Order 7	27.311	1	27.311	.174	.679
	Order 8	384.544	1	384.544	5.097	.032
	Order 9	208.248	1	208.248	1.016	.322
Error(Minggu)	Linear	7298.098	29	251.659		
	Quadratic	5396.117	29	186.073		
	Cubic	4191.400	29	144.531		
	Order 4	5224.251	29	180.147		
	Order 5	4806.628	29	165.746		
	Order 6	3157.300	29	108.872		
	Order 7	4540.039	29	156.553		
	Order 8	2188.111	29	75.452		
	Order 9	5941.172	29	204.868		

Tests of Between-Subjects Effects

Measure: klmpk

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	4629681.898	1	4629681.898	7604.054	.000
Error	17656.474	29	608.844		

Estimated Marginal Means

1. Grand Mean

Measure: klmpk

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
124.227	1.425	121.313	127.140

2. Minggu

Estimates

Measure: klmpk

Minggu	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	115.889	1.978	111.844	119.934
2	114.640	2.215	110.111	119.169
3	118.066	1.912	114.155	121.977
4	124.200	2.009	120.090	128.310
5	119.323	3.075	113.035	125.612
6	125.367	2.683	119.879	130.855
7	130.950	2.681	125.467	136.433
8	133.689	3.481	126.569	140.809
9	135.197	3.277	128.494	141.899
10	124.947	2.493	119.847	130.046

Pairwise Comparisons

Measure: klmpk

(I) Minggu	(J) Minggu	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	1.249	3.372	1.000	-10.956	13.454
	3	-2.177	2.828	1.000	-12.414	8.061
	4	-8.311	2.727	.220	-18.184	1.562
	5	-3.434	2.568	1.000	-12.730	5.861
	6	-9.478	3.520	.525	-22.220	3.264
	7	-15.061 [*]	2.819	.000	-25.263	-4.859
	8	-17.800 [*]	3.221	.000	-29.459	-6.141
	9	-19.308 [*]	3.674	.001	-32.608	-6.008
	10	-9.058	2.745	.116	-18.994	.878
	2	1	-1.249	3.372	1.000	-13.454
3		-3.426	3.012	1.000	-14.328	7.476
4		-9.560	3.143	.223	-20.937	1.817
5		-4.683	4.397	1.000	-20.600	11.233
6		-10.727	3.639	.282	-23.901	2.447
7		-16.310 [*]	3.945	.012	-30.590	-2.030
8		-19.049 [*]	4.351	.006	-34.797	-3.301
9		-20.557 [*]	4.531	.004	-36.959	-4.154
10		-10.307	3.807	.506	-24.087	3.474

3	1	2.177	2.828	1.000	-8.061	12.414
	2	3.426	3.012	1.000	-7.476	14.328
	4	-6.134	2.749	1.000	-16.083	3.815
	5	-1.258	2.932	1.000	-11.869	9.354
	6	-7.301	3.322	1.000	-19.325	4.723
	7	-12.884 ⁺	2.873	.005	-23.285	-2.483
	8	-15.623 ⁺	3.610	.007	-28.692	-2.555
	9	-17.131 ⁺	2.872	.000	-27.528	-6.734
	10	-6.881	2.241	.207	-14.991	1.229
	4	1	8.311	2.727	.220	-1.562
2		9.560	3.143	.223	-1.817	20.937
3		6.134	2.749	1.000	-3.815	16.083
5		4.877	3.356	1.000	-7.272	17.025
6		-1.167	2.309	1.000	-9.525	7.192
7		-6.750	2.502	.518	-15.807	2.307
8		-9.489	3.226	.286	-21.165	2.187
9		-10.997	3.657	.243	-24.234	2.240
10		-.747	2.960	1.000	-11.460	9.967
5		1	3.434	2.568	1.000	-5.861
	2	4.683	4.397	1.000	-11.233	20.600
	3	1.258	2.932	1.000	-9.354	11.869
	4	-4.877	3.356	1.000	-17.025	7.272
	6	-6.043	3.768	1.000	-19.681	7.594
	7	-11.627 ⁺	2.721	.009	-21.476	-1.778
	8	-14.366 ⁺	3.490	.013	-27.000	-1.731
	9	-15.873 ⁺	3.507	.004	-28.569	-3.178
	10	-5.623	2.817	1.000	-15.819	4.572
	6	1	9.478	3.520	.525	-3.264
2		10.727	3.639	.282	-2.447	23.901
3		7.301	3.322	1.000	-4.723	19.325
4		1.167	2.309	1.000	-7.192	9.525
5		6.043	3.768	1.000	-7.594	19.681
7		-5.583	2.321	1.000	-13.983	2.817
8		-8.322	4.083	1.000	-23.102	6.457
9		-9.830	4.213	1.000	-25.079	5.419
10		.420	3.647	1.000	-12.782	13.622
7		1	15.061 ⁺	2.819	.000	4.859
	2	16.310 ⁺	3.945	.012	2.030	30.590
	3	12.884 ⁺	2.873	.005	2.483	23.285

	4	6.750	2.502	.518	-2.307	15.807
	5	11.627*	2.721	.009	1.778	21.476
	6	5.583	2.321	1.000	-2.817	13.983
	8	-2.739	3.074	1.000	-13.865	8.387
	9	-4.247	3.477	1.000	-16.832	8.339
	10	6.003	3.271	1.000	-5.837	17.844
8	1	17.800*	3.221	.000	6.141	29.459
	2	19.049*	4.351	.006	3.301	34.797
	3	15.623*	3.610	.007	2.555	28.692
	4	9.489	3.226	.286	-2.187	21.165
	5	14.366*	3.490	.013	1.731	27.000
	6	8.322	4.083	1.000	-6.457	23.102
	7	2.739	3.074	1.000	-8.387	13.865
	9	-1.508	3.631	1.000	-14.651	11.636
	10	8.742	2.804	.184	-1.406	18.891
9	1	19.308*	3.674	.001	6.008	32.608
	2	20.557*	4.531	.004	4.154	36.959
	3	17.131*	2.872	.000	6.734	27.528
	4	10.997	3.657	.243	-2.240	24.234
	5	15.873*	3.507	.004	3.178	28.569
	6	9.830	4.213	1.000	-5.419	25.079
	7	4.247	3.477	1.000	-8.339	16.832
	8	1.508	3.631	1.000	-11.636	14.651
	10	10.250*	2.751	.038	.291	20.209
10	1	9.058	2.745	.116	-.878	18.994
	2	10.307	3.807	.506	-3.474	24.087
	3	6.881	2.241	.207	-1.229	14.991
	4	.747	2.960	1.000	-9.967	11.460
	5	5.623	2.817	1.000	-4.572	15.819
	6	-.420	3.647	1.000	-13.622	12.782
	7	-6.003	3.271	1.000	-17.844	5.837
	8	-8.742	2.804	.184	-18.891	1.406
	9	-10.250*	2.751	.038	-20.209	-.291

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

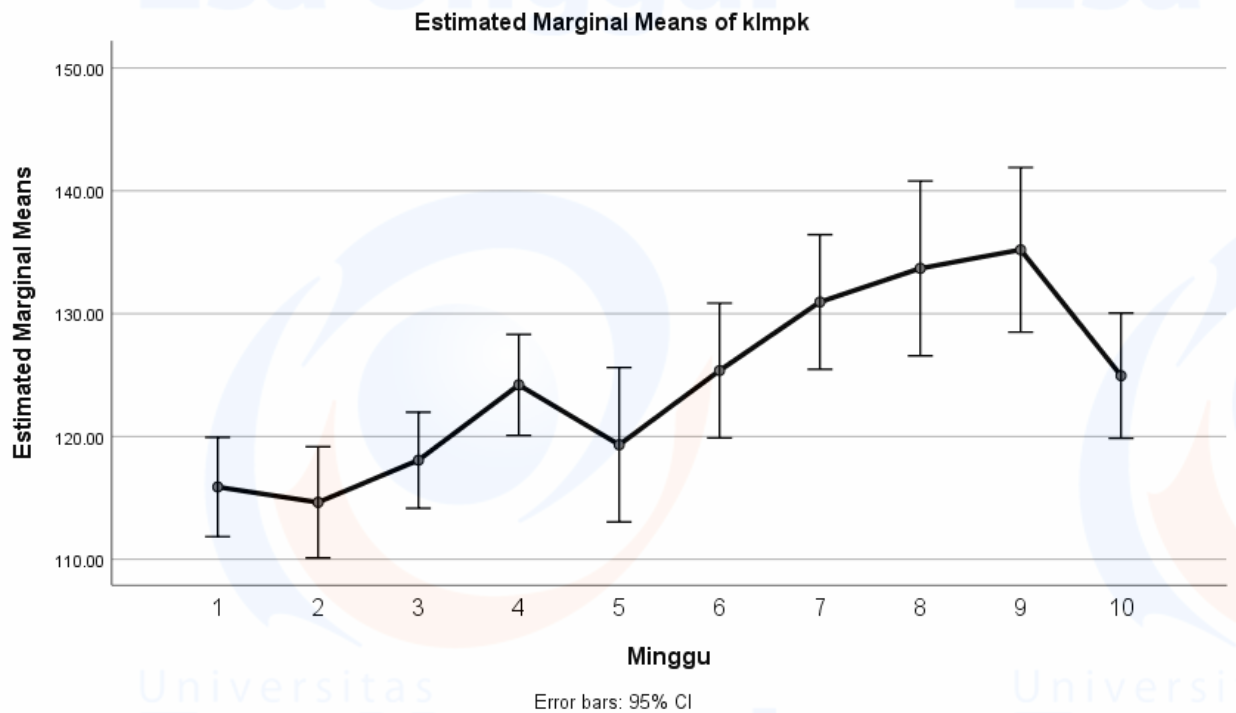
b. Adjustment for multiple comparisons: Bonferroni.

Multivariate Tests

	Value	F	Hypothesis df	Error df	Sig.
Pillai's trace	.715	5.844 ^a	9.000	21.000	.000
Wilks' lambda	.285	5.844 ^a	9.000	21.000	.000
Hotelling's trace	2.505	5.844 ^a	9.000	21.000	.000
Roy's largest root	2.505	5.844 ^a	9.000	21.000	.000

Each F tests the multivariate effect of Minggu. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

a. Exact statistic



Lampiran 10

LAMPIRAN 10

Tekanan Darah Diastolik

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Indukasi Minggu 1	30	86.3407	11.05418	62.50	115.70
Indukasi Minggu 2	30	85.4033	10.68855	69.70	112.00
Indukasi Minggu 3	30	92.6500	11.79102	70.30	114.50
Indukasi Minggu 4	30	98.9000	11.24452	73.00	116.00
Indukasi Minggu 5	30	97.0567	24.49425	62.00	196.40
Indukasi Minggu 6	30	100.6767	23.62285	65.50	197.70
Indukasi Minggu 7	30	103.9567	14.42562	73.70	129.30
Indukasi Minggu 8	30	129.4633	149.30552	50.00	915.00
Treat Minggu 1	30	104.5083	17.70102	67.55	134.30
Treat Minggu 2	30	95.8233	13.21800	73.30	128.30

One-Sample Kolmogorov-Smirnov Test

		Indukasi Minggu 1	Indukasi Minggu 2	Indukasi Minggu 3	Indukasi Minggu 4	Indukasi Minggu 5	Indukasi Minggu 6	Indukasi Minggu 7	Indukasi Minggu 8	Treat Minggu 1	Treat Minggu 2
N		30	30	30	30	30	30	30	30	30	30
Normal Parameters ^{a,b}	Mean	86.3407	85.4033	92.6500	98.9000	97.0567	100.6767	103.9567	129.4633	104.5083	95.8233
	Std. Deviation	11.05418	10.68855	11.79102	11.24452	24.49425	23.62285	14.42562	149.30552	17.70102	13.21800
Most Extreme Differences	Absolute	.118	.168	.112	.137	.195	.201	.118	.470	.118	.131
	Positive	.118	.168	.098	.077	.195	.201	.081	.470	.062	.131
	Negative	-.091	-.071	-.112	-.137	-.076	-.102	-.118	-.321	-.118	-.128
Test Statistic		.118	.168	.112	.137	.195	.201	.118	.470	.118	.131

Asymp. Sig. (2-tailed)	.200 ^c _d	.030 ^c	.200 ^c _d	.158 ^c	.005 ^c	.003 ^c	.200 ^c _d	.000 ^c	.200 ^c _d	.199 ^c
------------------------	--------------------------------	-------------------	--------------------------------	-------------------	-------------------	-------------------	--------------------------------	-------------------	--------------------------------	-------------------

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Uji Multivariant Tekanan Darah Diastolik

Within-Subjects Factors

Measure: Klmpk

Minggu	Dependent Variable
1	Minggu1
2	Minggu2
3	Minggu3
4	Minggu4
5	Minggu5
6	Minggu6
7	Minggu7
8	Minggu8
9	Minggu9
10	Minggu10

Descriptive Statistics

	Mean	Std. Deviation	N
Indukasi Minggu 1	86.3407	11.05418	30
Indukasi Minggu 2	85.4033	10.68855	30
Indukasi Minggu 3	92.6500	11.79102	30
Indukasi Minggu 4	98.9000	11.24452	30
Indukasi Minggu 5	97.0567	24.49425	30
Indukasi Minggu 6	100.6767	23.62285	30
Indukasi Minggu 7	103.9567	14.42562	30
Indukasi Minggu 8	102.0133	16.85665	30
Treat Minggu 1	104.5083	17.70102	30
Treat Minggu 2	95.8233	13.21800	30

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.
Minggu	Pillai's Trace	.631	3.991 ^b	9.000	21.000	.004
	Wilks' Lambda	.369	3.991 ^b	9.000	21.000	.004
	Hotelling's Trace	1.710	3.991 ^b	9.000	21.000	.004
	Roy's Largest Root	1.710	3.991 ^b	9.000	21.000	.004

- a. Design: Intercept
Within Subjects Design: Minggu
- b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: Klmpk

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Minggu	.044	80.784	44	.001	.594	.744	.111

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

- a. Design: Intercept
Within Subjects Design: Minggu
- b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: Klmpk

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Minggu	Sphericity Assumed	12441.977	9	1382.442	6.121	.000
	Greenhouse-Geisser	12441.977	5.347	2327.125	6.121	.000
	Huynh-Feldt	12441.977	6.696	1857.989	6.121	.000
	Lower-bound	12441.977	1.000	12441.977	6.121	.019
Error(Minggu)	Sphericity Assumed	58949.917	261	225.862		
	Greenhouse-Geisser	58949.917	155.049	380.203		
	Huynh-Feldt	58949.917	194.198	303.556		
	Lower-bound	58949.917	29.000	2032.756		

Tests of Within-Subjects Contrasts

Measure: Klmpk

Source	Minggu	Type III Sum of		Mean Square	F	Sig.
		Squares	df			
Minggu	Linear	7367.812	1	7367.812	28.409	.000
	Quadratic	3347.293	1	3347.293	9.397	.005
	Cubic	551.390	1	551.390	3.581	.068
	Order 4	17.300	1	17.300	.066	.799
	Order 5	590.120	1	590.120	4.899	.035
	Order 6	70.456	1	70.456	.427	.519
	Order 7	183.524	1	183.524	.886	.354
	Order 8	287.904	1	287.904	2.557	.121
	Order 9	26.179	1	26.179	.066	.799
Error(Minggu)	Linear	7521.096	29	259.348		
	Quadratic	10330.308	29	356.218		
	Cubic	4465.244	29	153.974		
	Order 4	7620.846	29	262.788		
	Order 5	3493.442	29	120.464		
	Order 6	4788.381	29	165.117		
	Order 7	6003.955	29	207.033		
	Order 8	3265.725	29	112.611		
	Order 9	11460.920	29	395.204		

Tests of Between-Subjects Effects

Measure: Klmpk

Transformed Variable: Average

Source	Type III Sum of		Mean Square	F	Sig.
	Squares	df			
Intercept	2807176.183	1	2807176.183	4621.279	.000
Error	17615.927	29	607.446		

Estimated Marginal Means

1. Grand Mean

Measure: Klmpk

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
96.733	1.423	93.823	99.643

2. Minggu

Estimates

Measure: Klmpk

Minggu	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	86.341	2.018	82.213	90.468
2	85.403	1.951	81.412	89.395
3	92.650	2.153	88.247	97.053
4	98.900	2.053	94.701	103.099
5	97.057	4.472	87.910	106.203
6	100.677	4.313	91.856	109.498
7	103.957	2.634	98.570	109.343
8	102.013	3.078	95.719	108.308
9	104.508	3.232	97.899	111.118
10	95.823	2.413	90.888	100.759

Pairwise Comparisons

Measure: Klmpk

(I) Minggu	(J) Minggu	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
1	2	.937	2.540	1.000	-8.258	10.133
	3	-6.309	2.976	1.000	-17.082	4.463
	4	-12.559 [*]	3.092	.015	-23.751	-1.368
	5	-10.716	4.575	1.000	-27.277	5.845
	6	-14.336	4.807	.259	-31.736	3.064
	7	-17.616 [*]	3.117	.000	-28.899	-6.333
	8	-15.673 [*]	3.323	.003	-27.701	-3.644
	9	-18.168 [*]	4.055	.005	-32.846	-3.489
	10	-9.483	3.116	.222	-20.760	1.795
	2	1	-.937	2.540	1.000	-10.133
3		-7.247	2.698	.532	-17.011	2.518
4		-13.497 [*]	2.998	.005	-24.350	-2.644
5		-11.653	5.013	1.000	-29.798	6.492
6		-15.273	5.137	.265	-33.868	3.321
7		-18.553 [*]	3.433	.000	-30.980	-6.126

	8	-16.610 ⁺	3.534	.003	-29.401	-3.819
	9	-19.105 ⁺	4.043	.002	-33.740	-4.470
	10	-10.420	2.942	.061	-21.069	.229
3	1	6.309	2.976	1.000	-4.463	17.082
	2	7.247	2.698	.532	-2.518	17.011
	4	-6.250	3.149	1.000	-17.649	5.149
	5	-4.407	4.409	1.000	-20.365	11.552
	6	-8.027	5.305	1.000	-27.229	11.175
	7	-11.307 ⁺	2.943	.028	-21.960	-.654
	8	-9.363	3.556	.604	-22.236	3.510
	9	-11.858 ⁺	3.271	.049	-23.699	-.017
	10	-3.173	2.406	1.000	-11.884	5.537
4	1	12.559 ⁺	3.092	.015	1.368	23.751
	2	13.497 ⁺	2.998	.005	2.644	24.350
	3	6.250	3.149	1.000	-5.149	17.649
	5	1.843	4.681	1.000	-15.102	18.789
	6	-1.777	3.972	1.000	-16.154	12.601
	7	-5.057	2.697	1.000	-14.817	4.704
	8	-3.113	3.263	1.000	-14.925	8.699
	9	-5.608	4.033	1.000	-20.206	8.990
	10	3.077	3.010	1.000	-7.820	13.973
5	1	10.716	4.575	1.000	-5.845	27.277
	2	11.653	5.013	1.000	-6.492	29.798
	3	4.407	4.409	1.000	-11.552	20.365
	4	-1.843	4.681	1.000	-18.789	15.102
	6	-3.620	5.456	1.000	-23.368	16.128
	7	-6.900	3.791	1.000	-20.624	6.824
	8	-4.957	4.472	1.000	-21.144	11.230
	9	-7.452	5.387	1.000	-26.952	12.049
	10	1.233	4.803	1.000	-16.152	18.619
6	1	14.336	4.807	.259	-3.064	31.736
	2	15.273	5.137	.265	-3.321	33.868
	3	8.027	5.305	1.000	-11.175	27.229
	4	1.777	3.972	1.000	-12.601	16.154
	5	3.620	5.456	1.000	-16.128	23.368
	7	-3.280	3.995	1.000	-17.741	11.181
	8	-1.337	4.876	1.000	-18.988	16.315
	9	-3.832	5.275	1.000	-22.926	15.263
	10	4.853	4.982	1.000	-13.182	22.888

7	1	17.616*	3.117	.000	6.333	28.899
	2	18.553*	3.433	.000	6.126	30.980
	3	11.307*	2.943	.028	.654	21.960
	4	5.057	2.697	1.000	-4.704	14.817
	5	6.900	3.791	1.000	-6.824	20.624
	6	3.280	3.995	1.000	-11.181	17.741
	8	1.943	2.643	1.000	-7.624	11.511
	9	-.552	3.521	1.000	-13.296	12.193
	10	8.133	2.805	.317	-2.018	18.285
	8	1	15.673*	3.323	.003	3.644
2		16.610*	3.534	.003	3.819	29.401
3		9.363	3.556	.604	-3.510	22.236
4		3.113	3.263	1.000	-8.699	14.925
5		4.957	4.472	1.000	-11.230	21.144
6		1.337	4.876	1.000	-16.315	18.988
7		-1.943	2.643	1.000	-11.511	7.624
9		-2.495	3.994	1.000	-16.952	11.962
10		6.190	2.759	1.000	-3.796	16.176
9		1	18.168*	4.055	.005	3.489
	2	19.105*	4.043	.002	4.470	33.740
	3	11.858*	3.271	.049	.017	23.699
	4	5.608	4.033	1.000	-8.990	20.206
	5	7.452	5.387	1.000	-12.049	26.952
	6	3.832	5.275	1.000	-15.263	22.926
	7	.552	3.521	1.000	-12.193	13.296
	8	2.495	3.994	1.000	-11.962	16.952
	10	8.685	3.009	.328	-2.207	19.577
	10	1	9.483	3.116	.222	-1.795
2		10.420	2.942	.061	-.229	21.069
3		3.173	2.406	1.000	-5.537	11.884
4		-3.077	3.010	1.000	-13.973	7.820
5		-1.233	4.803	1.000	-18.619	16.152
6		-4.853	4.982	1.000	-22.888	13.182
7		-8.133	2.805	.317	-18.285	2.018
8		-6.190	2.759	1.000	-16.176	3.796
9		-8.685	3.009	.328	-19.577	2.207

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Bonferroni.

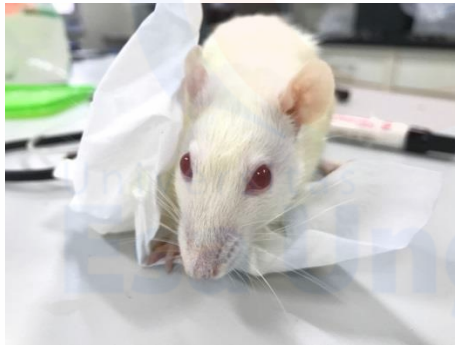
Lampiran 11

Rangkaian Proses Penelitian

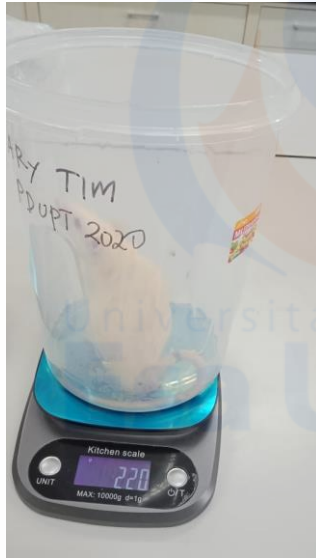
- Tikus yang baru datang diberikan penandaan pada pangkal ekor dan dimasukkan kedalam kandang tikus untuk diaklimatisasi



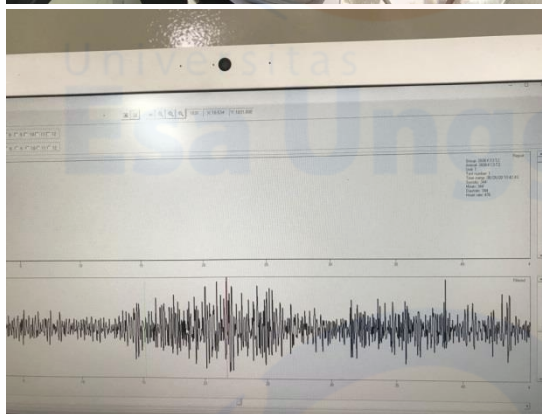
- Tikus yang digunakan



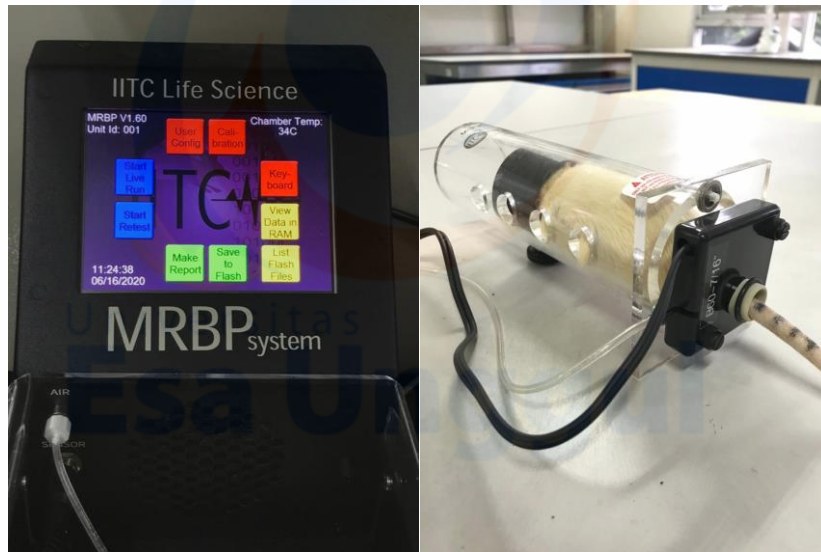
- Tikus ditimbang berat badan



- Tikus diukur tekanan darahnya



- Alat pengukur tekanan darah



- Tikus diberikan fruktosa pada minggu induksi selama 8 minggu



- Larutan fruktosa 96%





- Larutan fruktosa 10%



- Tikus diberikan perlakuan dengan menggunakan jamu B



- Larutan jamu B dan kaptopril





- Dilakukan pembedahan tikus



- Tikus yang sudah dibedah



- Organ hati tikus



Lampiran 12

Surat Kode Etik



DEWAN PENEGAKAN KODE ETIK UNIVERSITAS ESA UNGGUL
KOMISI ETIK PENELITIAN
Jl. Arjuna Utara No.9 Kebon Jeruk Jakarta Barat 11510
Telp. 021-5674223 email: dpke@esaunggul.ac.id

Nomor : 0161-20.152/DPKE-KEP/FINAL EA/UEU/V/2020

KETERANGAN LOLOS KAJI ETIK
ETHICAL APPROVAL

Komisi Etik Penelitian Universitas Esa Unggul dalam upaya melindungi hak asasi dan kesejahteraan subyek penelitian kesehatan, telah mengkaji dengan teliti protokol berjudul:

**SAINTIFIKASI DAN UJI PREKLINIK JAMU ANTIHIPERTENSI DENGAN MEKANISME KERJA
SEBAGAI ACE INHIBITOR**

Peneliti Utama : Dr. Aprilita Rina Yanti Eff., M.Biomed., Apt.

Nama Institusi : Universitas Esa Unggul

dan telah menyetujui protokol tersebut di atas.

Jakarta, 30 Mei 2020

Ketua

Universitas Esa Unggul
Dewan Penegakan Kode Etik

Dr. Rokiah Kusumapradja, SKM., MHA

- * *Ethical approval* berlaku satu tahun dari tanggal persetujuan.
- ** Peneliti berkewajiban
 1. Menjaga kerahasiaan identitas subyek penelitian
 2. Memberitahukan status penelitian apabila:
 - a. Setelah masa berlakunya keterangan lolos kaji etik, penelitian masih belum selesai, dalam hal ini *ethical approval* harus diperpanjang
 - b. Penelitian berhenti di tengah jalan
 3. Melaporkan kejadian serius yang tidak diinginkan (*serious adverse events*).
 4. Peneliti tidak boleh melakukan tindakan apapun pada subyek sebelum penelitian lolos kaji etik dan *informed consent*.

Lampiran 13

Persentase perubahan berat badan tikus selama 8 minggu induksi dan setelah 2 minggu diberikan perlakuan

Minggu Perlakuan	Berat rata-rata Kelompok Tikus (gram)					
	B1	B2	B3	KKP	KKN	KN
Minggu 1	200	213	202	203	217	210
Minggu 2	205	231	215	213	227	248
Minggu 3	225	232	220	226	238	241
Minggu 4	234	235	229	239	269	245
Minggu 5	247	241	239	257	269	269
Minggu 6	259	255	251	267	270	248
Minggu 7	265	262	258	270	270	244
Minggu 8	275	273	269	264	270	248
Perubahan rata-rata selama 8 minggu induksi	37.50 %	28.17 %	33.17 %	30.05 %	24.42 %	18.10 %
Minggu 9	279	278	273	271	270	248
Minggu 10	288	290	287	277	261	248
Rata-rata perminggu	4.69 %	3.52 %	4.15 %	3.76 %	3.05 %	2.26 %

Lampiran 14

Persentase perubahan tekanan darah diastolik tikus selama 8 minggu induksi dan setelah 2 minggu diberikan perlakuan

Minggu perlakuan	TD	B1	B2	B3	KKP	KKN	KN
	(mm Hg)						
1	TDD	83.2	83.27	78.66	84.63	91.84	96.44
2	TDD	80.54	83.8	79.46	87.66	83.76	97.2
3	TDD	90.5	90.5	82	100.2	101.68	91.02
4	TDD	101.08	104.8	102.94	99.34	96.2	89.04
5	TDD	102.54	94.32	85.12	117.82	97.5	85.04
6	TDD	117.54	100.64	103.6	101.6	91.94	88.74
7	TDD	105.94	103.48	98.32	116.86	110.4	88.74
8	TDD	95.5	97.52	100.8	114.3	115.22	88.74
perubahan rata-rata TDD selama 8 minggu induksi		1.54 %	1.78 %	2.77%	3.71 %	2.92 %	-0.96 %
9	TDD	112.52	91.03	112.78	106.76	115.22	88.74
10	TDD	95.7	89	93.56	92.72	115.22	88.74
Penurunan TDD setelah 2 minggu perlakuan		16.82 %	2.03 %	19.22 %	14.04 %	0 %	0 %

Lampiran 15

Persentase perubahan tekanan darah sistolik tikus selama 8 minggu induksi dan setelah 2 minggu diberikan perlakuan

Minggu perlakuan	TD (mm Hg)	B1	B2	B3	KKP	KKN	KN
Minggu 1	TDS	115.74	116.9	112.66	114.33	122.24	113.46
Minggu 2	TDS	109.74	113.18	110.34	117.84	109.8	126.94
Minggu 3	TDS	112.6	112.6	111.67	130.04	125.28	116.2
Minggu 4	TDS	124.64	128.14	125.8	128.42	125.46	112.74
Minggu 5	TDS	129.16	112.82	107.2	126.2	129.8	110.76
Minggu 6	TDS	129.72	128.46	126.6	134.96	118.4	114.06
Minggu 7	TDS	138.34	130.16	128.68	146.56	127.9	114.06
Minggu 8	TDS	135.3	125.64	130.84	144.59	151.7	114.06
perubahan rata-rata TDS selama 8 minggu induksi		2.45 %	1.09 %	2.27 %	3.78 %	3.68 %	0.08 %
Minggu 9	TDS	140.08	118.94	139.56	146.84	151.7	114.06
Minggu 10	TDS	121.46	117.86	118.26	126.34	151.7	114.06
penurunan rata-rata TDS selama 2 minggu perlakuan		18.62 %	1.08 %	21.3 %	20.5 %	0 %	0 %