

LAMPIRAN

Lampiran 1. Surat Persetujuan Etik



Kementerian Kesehatan
Poltekkes Malang
KOMISI ETIK PENELITIAN KESEHATAN
Jalan Besar Ijen Nomor 77 C Malang
(0341) 566075
komisietik@poltekkes-malang.ac.id

KOMISI ETIK PENELITIAN KESEHATAN
HEALTH RESEARCH ETHICS COMMITTEE
POLITEKNIK KESEHATAN KEMENKES MALANG
STATE POLYTECHNIC OF HEALTH MALANG

KETERANGAN LOLOS KAJI ETIK
DESCRIPTION OF ETHICAL APPROVAL
"ETHICAL APPROVAL"
Reg.No.:815 / KEPK-POLKESMA/ 2024

Protokol penelitian yang diusulkan oleh Faisya Raihanah
The research protocol proposed by

Peneliti Utama Faisya Raihanah
Principal In Investigator

Nama Institusi Poltekkes Kemenkes Malang
Name of the Institution

Dengan Judul
Gambaran Kadar MDA (Malondialdehid) Hewan Uji Coba Kelinci dengan Diet Atherogenic setelah diberikan Serbuk Ekstrak Takokak (Solanum Torvum Swartz)
Description of MDA (Malondialdehyde) Levels in Experimental Rabbits with an Atherogenic Diet after being Given Takokak (Solanum Torvum Swartz) Extract Powder

Dinyatakan layak etik sesuai 7 (tujuh) Standar WHO 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah,

3) Pemerataan Beban dan Manfaat, 4) Risiko, 5) Bujukan/Eksploitasi, 6) Kerahasiaan dan Privacy, dan 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan oleh terpenuhinya indikator setiap standar.

Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards, 1) Social Values, 2) Scientific Values, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and 7) Informed Consent, referring to the 2016 CIOMS Guidelines. This is as indicated by the fulfillment of the indicators of each standard.

Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 23 September 2024 sampai dengan 23 September 2025

This declaration of ethics applies during the period September 23, 2024 until September 23, 2025

Malang, 23 September 2024
Head of Committee



Dr. SUSI MILWATI, S.Kp, M.Pd
NIP. 196312011987032002

Lampiran 2. Data Kadar MDA Setiap Perlakuan

Perlakuan	Pengambilan Darah I				Pengambilan Darah II			
	Kelinci			MDA	Kelinci			MDA
K-	1	0,109		0,7362	1	0,123		1,0340
	2	0,124		1,0553	2	0,122		1,0128
	4	0,148		1,5660	4	0,108		0,7149
	6	0,128		1,1404	6	0,1150		0,8638
	30	0,14		1,3957	30	0,1200		0,9702
	35	0,116		0,8851	35			-1,583
Rata-Rata		0,1275		1,1298		0,1176		0,5021
K+	3	0,144		1,4809	3	0,138		1,3532
	8	0,131		1,2043	8	0,124		1,0553
	17	0,122		1,0128	17	0,111		0,7787
	33	0,117		0,9064	33	0,1200		0,9702
Rata-Rata		0,1214		1,0000		0,12325		1,0394
P1	28	0,117		0,9064	28	0,124		1,0553
	40	0,119		0,9489	40	0,1350		1,2894
Rata-Rata		0,118		0,9277		0,1295		1,1723
P2	29	0,117		0,9064	29	0,1260		1,0979
	45	0,135		1,2894	45	0,11		0,7574
Rata-Rata		0,127333		1,1262		0,1180		0,9277
P3	38	0,125		1,0766	38	0,106		0,6723
	48	0,116		0,8851	48	0,107		0,6936
	49	0,1090		0,7362	49	0,105		0,6511
Rata-Rata		0,116667		0,8993		0,106		0,6723

Lampiran 3. Data Kadar Kolesterol Setiap Perlakuan

PERLAKUAN	KELINCI	CHOLESTEROL	
		I	II
K-	1	98	100
	2	98	105
	4	100	99
	6	155	498
	30	98	74
	35	91	150
Rata-Rata		106,6667	171
K+	3	123	157
	8	233	282
	17	66	170
	33	337	139
Rata-Rata		189,75	187
P1	28	421	504
	40	345	353
Rata-Rata		383	428,5
P2	29	231	355
	45	101	179
Rata-Rata		166	267
P3	38	76	90
	48	91	380
	49	86	96
Rata-Rata		84,33333	188,6667

Lampiran 4. Data Asupan Makan Kelinci

Minggu Pertama

		17 Juli 2023	18 Juli 2023	19 Juli 2023	20 Juli 2023	21 Juli 2023	22 Juli 2023	23 Juli 2023
Perlakuan	Kelinci	50 gram	50 gram	50 gram	50 gram	50 gram	50 gram	50 gram
K-	1	0,0	37	32	38	35	37	40
	2	50	50	34	28	30	22	28
	4	20	43	50	50	50	50	50
	6	40	50	50	50	50	24	30
	30	20	50	42	44	50	50	50
	35	20	50	44	46,2	46	20	38
Rata-Rata		25	46,6	42	42,7	43,5	33,8	39,3
K+	3	40	50	50	50	50	26	25,9
	8	25	50	29	50	34	33	36,2
	17	25	25	20	18,9	27	38	33,6
	33	23	27,5	27,5	22,5	18,7	23	27,7
Rata-Rata		28,25	38,125	31,625	35,35	32,425	30	30,85
P1	28	50	50	50	50	50	31	50
	40	31	36,7	33,8	21,4	19,5	10	15
Rata-Rata		40,5	43,35	41,9	35,7	34,75	20,5	32,5
P2	29	50	50	50	47	50	44	50
	45	44	50	50	50	50	42	32,3
Rata-Rata		47	50	50	48,5	50	43	41,15
P3	38	48,7	50	50	50	50	47	50
	48	44,3	50	50	50	50	31	46,5
	49	42,3	50	50	50	48,5	48	50
Rata-Rata		45,1	50	50	50	49,5	42	48,83333

Minggu Kedua

		24 Juli 2023	25 Juli 2023	26 Juli 2023	27 Juli 2023	28 Juli 2023	29 Juli 2023	30 Juli 2023
Perlakuan	Kelinci	50 gram	50 gram	50 gram	50 gram	50 gram	50 gram	50 gram
K-	1	50	50	38,6	50	50	50	50
	2	48,3	50	50	50	50	50	50
	4	50	50	48	50	50	47,3	50
	6	7,3	8,2	30	50	41,7	50	50
	30	49,4	50	50	50	50	50	50
	35	7,3	9,2	35,8	50	46	44,3	50
Rata-Rata		35,3	36,2	42,0	50	47,95	48,6	50
K+	3	8	18,6	30,8	38,6	28,6	50	25,9
	8	39,5	50	48,3	50	42,3	42,9	50
	17	25,3	28,8	35,8	12	16,4	22	17,5
	33	22,3	34,2	21,2	28,7	18,4	19,5	6,3
Rata-Rata		23,7	32,9	34,025	32,3	26,4	33,6	24,9
P1	28	50	23,4	18,3	22,5	19	30	50
	40	5,6	9,2	17,1	31,4	19,5	17,2	6,2
Rata-Rata		27,8	16,3	17,7	26,95	19,25	23,6	28,1
P2	29	47,4	50	50	50	38,2	50	50
	45	8	44,3	24,1	50	25,6	40	32,3
Rata-Rata		27,7	47,15	37,05	50	31,9	45	41,15
P3	38	48,7	50	50	50	50	50	50
	48	46,8	50	50	31,3	50	50	50
	49	47,1	50	50	50	48,5	50	50
Rata-Rata		47,5	50	50	43,7	49,5	50	50

Minggu Ketiga

		31 Juli 2023	1 Agustus 2023	2 Agustus 2023	3 Agustus 2023	4 Agustus 2023	5 Agustus 2023	6 Agustus 2023
Perlakuan	Kelinci	60 gram	60 gram	60 gram	60 gram	60 gram	60 gram	60 gram
K-	1	60	60	60	60	60	60	60
	2	60	60	14	60	60	60	60
	4	60	60	60	60	60	60	60
	6	60	60	60	60	60	60	60
	30	60	60	60	60	60	60	60
	35	60	60	60	60	60	60	60
Rata-Rata		60	60	52,3	60	60	60	60
K+	3	49	11,5	34	34	47,4	51	56,9
	8	60	60	50	25	60	60	60
	17	22	27,9	30	44	55,4	60	60
	33	24,7	24,6	22	29	50	34	46,7
Rata-Rata		38,925	31	34	33	53,2	51,25	55,9
P1	28	60	49	47	59,7	53,1	60	60
	40	28,7	18	13	28	14,4	16	18,5
Rata-Rata		44,35	33,5	30	43,85	33,75	38	39,25
P2	29	60	48	49	48	38,1	44	60
	45	60	54	53	60	57,3	47	44,3
Rata-Rata		60	51	51	54	47,7	45,5	52,15
P3	38	60	60	60	60	60	60	60
	48	60	60	52	60	50	60	60
	49	60	60	60	60	60	60	60
Rata-Rata		60	60	57,3	60	56,6	60	60

Minggu Keempat

		7 Agustus 2023	8 Agustus 2023	9 Agustus 2023	10 Agustus 2023	11 Agustus 2023	12 Agustus 2023	13 Agustus 2023
Perlakuan	Kelinci	60 gram	60 gram	60 gram	60 gram	60 gram	70 gram	70 gram
K-	1	60	60	60	60	60	70	70
	2	60	60	60	60	60	70	70
	4	60	60	60	60	60	70	70
	6	60	60	60	60	60	70	47,8
	30	60	54,5	60	60	60	70	70
	35	60	60	60	60	60	70	70
Rata-Rata		60	59,0	60	60	60	70	66,3
K+	3	48,9	60	27,1	60	50,9	70	70
	8	60	60	23,7	35	60	70	70
	17	60	46,4	38,9	60	60	70	70
	33	41,6	42,3	40,8	60	60	70	54
Rata-Rata		52,625	52,175	32,625	53,75	57,725	70	66
P1	28	52,2	54,9	56	60	60	70	25,7
	40	20	11	28,4	30	60	32	70
Rata-Rata		36,1	32,95	42,2	45	60	51	47,85
P2	29	60	52,7	40	60	60	70	70
	45	39	60	60	60	60	70	70
Rata-Rata		49,5	56,35	50	60	60	70	70
P3	38	60	60	60	60	60	70	70
	48	60	60	60	60	60	70	70
	49	60	60	60	60	60	70	70
Rata-Rata		60	60	60	60	60	70	70

Minggu Kelima

		14 Agustus 2023	15 Agustus 2023	16 Agustus 2023	17 Agustus 2023	18 Agustus 2023	19 Agustus 2023
Perlakuan	Kelinci	70 gram	70 gram	70 gram	70 gram	70 gram	70 gram
K-	1	70	70	70	70	70	70
	2	70	70	70	70	70	70
	4	70	70	70	70	70	70
	6	70	70	70	70	70	70
	30	70	70	70	70	70	70
	35	70	70	70	70	70	70
Rata-Rata		70	70	70	70	70	70
K+	3	70	70	70	52	53,6	70
	8	70	70	66	70	70	70
	17	70	70	70	70	70	70
	33	70	70	62,1	70	70	70
Rata-Rata		70	70	67,025	65,5	65,9	61,45
P1	28	70	55,3	60,6	70	70	70
	40	70	70	20	70	18	70
Rata-Rata		70	62,65	40,3	70	44	70
P2	29	70	70	70	70	70	70
	45	70	70	60	70	70	70
Rata-Rata		70	70	65	70	70	70
P3	38	70	70	70	70	70	70
	48	70	70	70	70	70	70
	49	70	70	70	70	70	70
Rata-Rata		70	70	70	70	70	70

Lampiran 5. Data Berat Badan Kelinci

		12 Juli 2023	19 Juli 2023	26 Juli 2023	2 Agustus 2023	9 Agustus 2023	16 Agustus 2023
Perlakuan	Kelinci	Berat Badan (Kg)					
K-	1	375	337	498	694	754	945
	2	340	343	453	509	693	800
	4	500	515	661	616	699	855
	5	435	501	586	723	818	Mati
	6	440	297	506	642	724	826
	30	410	406	522	815	803	960
	34	319	319	Mati	Mati	Mati	Mati
	35	347	347	398	572	644	800
	36	419	419	306	Mati	Mati	Mati
Rata-Rata		398,3	387,1	491,25	653	733,5	864,3
K+	3	340	350	356	375	448	532
	7	570	350	418	441	610	830
	8	380	365	437	552	698	825
	9	505	525	485	633	731	Mati
	17	500	385	436	393	533	720
	31	444	444	424	Mati	Mati	Mati
	32	335	335	Mati	Mati	Mati	Mati
	33	367	367	410	400	462	680
Rata-Rata		430,125	390,125	423,7	465,6	580,3	717,4
P1	28	410	422	488	620	683	816
	37	484	484	490	Mati	Mati	Mati

	39	400	400	Mati	Mati	Mati	Mati
	40	350	350	290	278	418	529
	41	445	445	368	431	Mati	Mati
	50	419	419	Mati	Mati	Mati	Mati
Rata-Rata		418	420	409	443	550,5	672,5
P2	29	525	533	665	804	944	1160
	42	400	400	338	Mati	Mati	Mati
	43	388	388	320	430	418	283
	44	480	480	Mati	Mati	Mati	Mati
	45	431	431	495	576	684	955
	46	362	362	Mati	Mati	Mati	Mati
Rata-Rata		431	432,3	454,5	603,3	682	799,3
P3	38	541	541	735	889	960	1054
	47	323	323	1564 (Baru)	Mati	Mati	Mati
	48	333	333	480	592	663	847
	49	566	566	766	953	1034	1174
	51		340	1528 (Baru)	1304	1039	Mati
	52	Mati	Mati	Mati	Mati	Mati	Mati
Rata-Rata		440,75	440,75	660,3	811,3	885,6	1025

Lampiran 6. Data Hasil Uji Statistik

A. Asupan Makan Kelinci

1. Selisih Asupan Makan Setiap Perlakuan

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	kelompok	Statistic	df	Sig.	Statistic	df	Sig.
ratarataselisih	1	.140	5	.200*	.992	5	.986
	2	.233	5	.200*	.910	5	.465
	3	.210	5	.200*	.906	5	.447
	4	.225	5	.200*	.971	5	.882

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

a. Lilliefors Significance Correction

ANOVA

ratarataselisih						
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	69092.950	3	23030.983	10.364	.000	
Within Groups	35555.600	16	2222.225			
Total	104648.550	19				

B. Berat Badan Kelinci

1. Pre-Post Berat Badan

		Tests of Normality					
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	kelompok	Statistic	df	Sig.	Statistic	df	Sig.
prepostbb	darah 1	.205	17	.055	.864	17	.018
	darah 2	.153	17	.200*	.953	17	.500

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

a. Lilliefors Significance Correction

Paired Samples Test

Pair	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
1 prepostbb - kelompok	626.91	265.773	45.580	534.179	719.644	13.754	33	.000

2. Selisih Berat Badan Setiap Perlakuan

ANOVA

selisihbb

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	186533.402	4	46633.350	4.752	.016
Within Groups	117762.833	12	9813.569		
Total	304296.235	16			

C. Kadar MDA

1. Uji Deskriptif

a. Pengambilan Darah Pertama

Descriptives

hasil

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
K-	6	11297.83	3103.014	1266.800	8041.42	14554.25	7362	15660
K+	4	11511.00	2520.603	1260.302	7500.16	15521.84	9064	14809
P1	2	9276.50	300.520	212.500	6576.43	11976.57	9064	9489
P2	2	10979.00	2708.219	1915.000	-13353.38	35311.38	9064	12894
P3	3	8993.00	1706.437	985.212	4753.98	13232.02	7362	10766
Total	17	10665.94	2476.867	600.729	9392.45	11939.43	7362	15660

b. Pengambilan Darah Kedua

Descriptives

hasil

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					K-	6		
K+	4	10393.50	2390.790	1195.395	6589.22	14197.78	7787	13532
P1	2	11723.50	1655.337	1170.500	-3149.11	26596.11	10553	12894
P2	2	9276.50	2407.699	1702.500	-12355.81	30908.81	7574	10979
P3	3	6723.33	212.500	122.687	6195.45	7251.21	6511	6936
Total	17	8165.41	3816.234	925.573	6203.29	10127.54	-1583	13532

2. Pre-Post Kadar MDA

Tests of Normality

	kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
prepostmda	darah 1	.153	17	.200*	.926	17	.189
	darah 2	.357	17	.000	.571	17	.000

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

a. Lilliefors Significance Correction

Paired Samples Test

Pair	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
				1	9268.8			
kelompok	53					3		

3. Selisih Kadar MDA Setiap Perlakuan

Kruskal-Wallis Test

Ranks			
	kelompok	N	Mean Rank
selisihmda	K-	6	6.83
	K+	4	9.75
	P1	2	15.50
	P2	2	9.00
	P3	3	8.00
	Total	17	

Test Statistics^{a,b}

selisihmda	
Kruskal-Wallis H	4.624
df	4
Asymp. Sig.	.328

a. Kruskal Wallis Test

b. Grouping Variable: kelompok

D. Kadar Kolesterol

1. Descriptives

a. Pengambilan Darah Pertama

Descriptives

prekolesterol

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
K-	6	106.67	23.880	9.749	81.61	131.73	91	155
K+	4	189.75	120.170	60.085	-1.47	380.97	66	337
P1	2	383.00	53.740	38.000	-99.84	865.84	345	421
P2	2	166.00	91.924	65.000	-659.90	991.90	101	231
P3	3	84.33	7.638	4.410	65.36	103.31	76	91
Total	17	161.76	110.366	26.768	105.02	218.51	66	421

b. Pengambilan Darah Kedua

Descriptives

postkolesterol

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
K-	6	171.00	162.086	66.171	.90	341.10	74	498
K+	4	187.00	64.596	32.298	84.21	289.79	139	282
P1	2	428.50	106.773	75.500	-530.82	1387.82	353	504
P2	2	267.00	124.451	88.000	-851.15	1385.15	179	355
P3	3	188.67	165.727	95.682	-223.02	600.35	90	380
Total	17	219.47	145.508	35.291	144.66	294.28	74	504

2. Pre-Post Kadar Kolesterol

Tests of Normality

	kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
prepostkolesterol	darah 1	.297	17	.000	.764	17	.001
	darah 2	.257	17	.004	.835	17	.006

a. Lilliefors Significance Correction

Mann-Whitney Test

Ranks

	kelompok	N	Mean Rank	Sum of Ranks
prepostkolesterol	darah 1	17	14.85	252.50
	darah 2	17	20.15	342.50
	Total	34		

Test Statistics^a

	prepostkolesterol
Mann-Whitney U	99.500
Wilcoxon W	252.500
Z	-1.551
Asymp. Sig. (2-tailed)	.121
Exact Sig. [2*(1-tailed Sig.)]	.122 ^b

a. Grouping Variable: kelompok

b. Not corrected for ties.

3. Selisih Kadar Kolesterol Setiap Perlakuan

Kruskal-Wallis Test

Ranks

	kelompok	N	Mean Rank
selisih	K-	6	7.00
	K+	4	8.50
	P1	2	9.50
	P2	2	13.50
	P3	3	10.33
	Total		17

Test Statistics^{a,b}

selisih	
Kruskal-Wallis H	2.797
df	4
Asymp. Sig.	.592

a. Kruskal Wallis Test

b. Grouping Variable: kelompok

Lampiran 7. Dokumentasi

1. Hewan Uji Coba Kelinci



2. Kegiatan Pemeliharaan Kelinci di Laboratorium Hewan



3. Pengambilan Sampel Darah Kelinci di Laboratorium Hewan

