

## DAFTAR PUSTAKA

- Aparicio, V. A. *et al.* (2013) 'Dietas hiperproteicas y estado renal en ratas', *Nutricion Hospitalaria*, 28(1), pp. 232–237. doi: 10.3305/nh.2013.28.1.6165.
- Arifin, W. N. and Zahiruddin, W. M. (2017) 'Sample size calculation in animal studies using resource equation approach', *Malaysian Journal of Medical Sciences*, 24(5), pp. 101–105. doi: 10.21315/mjms2017.24.5.11.
- Beyer, P., 2004. Digestion, absorption, transport, and excretion of nutrients. In: S. Escott-stump & L. Mahan, eds. *Krause's food, nutrition, and diet therapy. 11th edition*. Philadelphia: Saunders, pp. 2-20.
- Biesalski, H. & Grimm, P., 2006. Introduction. In: *Pocket atlas of nutrition. 2nd edition*. Stuttgart: Thieme, pp. 1-54.
- Biesalski, H. & Grimm, P., 2006. The nutrients. In: *Pocket atlas of nutrition. 2nd edition*. Stuttgart: Thieme, pp. 56-302.
- Carpentier, Y. & Sobotka, L., 2004. Lipid metabolism. In: L. Sobotka, et al. eds. *Basics in clinical nutrition. 3rd edition*. Prague: Galen, pp. 72-8.
- Cerioti, F. *et al.* (2008) 'Reference intervals for serum creatinine concentrations: Assessment of available data for global application', *Clinical Chemistry*, 54(3), pp. 559–566. doi: 10.1373/clinchem.2007.099648.
- Chen, X. *et al.* (2016) 'The associations of plant protein intake with all-cause mortality in CKD', *American Journal of Kidney Diseases*. Elsevier Inc, 67(3), pp. 423–430. doi: 10.1053/j.ajkd.2015.10.018.
- Devries, M. C. *et al.* (2018) 'Changes in Kidney Function Do Not Differ between Healthy Adults Consuming Higher- Compared with Lower- or Normal-

- Protein Diets: A Systematic Review and Meta-Analysis', *Journal of Nutrition*, 148(11), pp. 1760–1775. doi: 10.1093/jn/nxy197.
- El-deen, A. E. N., Mansour, A. E. and Taha, A. (2018) 'High Protein Diet that Cause Weight Loss and Lower Blood Glucose Level Have a Serious Impact on the Kidney Functions of Male Diabetic Obese Albino Rats', pp. 1174–1191. doi: 10.4236/fns.2018.910085.
- Effendi, I. & Markum, H., 2014. Pemeriksaan Penunjang pada Penyakit Ginjal. In: *Buku Ajar Ilmu Penyakit Dalam Jilid II Edisi VI*. Jakarta: Interna Publishing, pp. 2049-2060.
- Gounden, V., Bhatt, H. and Jialal, I. (2020) *Renal Function Tests*, StatPearls. StatPearls Publishing. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/29939598> (Accessed: 27 July 2020).
- He, Q. *et al.* (2017) 'Sex-specific reference intervals of hematologic and biochemical analytes in Sprague-Dawley rats using the nonparametric rank percentile method', *PLoS ONE*, 12(12), pp. 1–18. doi: 10.1371/journal.pone.0189837.
- Helal, I. *et al.* (2012) 'Glomerular hyperfiltration: Definitions, mechanisms and clinical implications', *Nature Reviews Nephrology*. Nature Publishing Group, 8(5), pp. 293–300. doi: 10.1038/nrneph.2012.19.
- Hill NR, Fatoba ST, Oke JL, Hirst JA, O'Callaghan CA, Lasserson DS, *et al.* (2016) Global Prevalence of Chronic Kidney Disease – A Systematic Review and Meta-Analysis. *PLoS ONE* 11 (7): e0158765. doi:10.1371/journal.pone.0158765
- Hu, T. *et al.* (2012) 'Effects of low-carbohydrate diets versus low-fat diets on

- metabolic risk factors: A meta-analysis of randomized controlled clinical trials', *American Journal of Epidemiology*, 176(SUPPL. 7). doi: 10.1093/aje/kws264.
- Infodatin, 2017. *Situasi Penyakit Ginjal Kronis*, Jakarta: Kementerian Kesehatan Republik Indonesia.
- Institute of Medicine (2002) *Dietary Reference Intakes for energy, carbohydrates, fiber, fat, fatty acids, cholesterol, protein and amino acids*.
- Jee Ko, G. *et al.* (2017) 'Dietary protein intake and chronic kidney disease', *Current Opinion in Clinical Nutrition and Metabolic Care*, 20(1), pp. 77–85. doi: 10.1097/MCO.0000000000000342.
- Jha, V. *et al.* (2013) 'Chronic kidney disease: Global dimension and perspectives', *The Lancet*. Elsevier Ltd, 382(9888), pp. 260–272. doi: 10.1016/S0140-6736(13)60687-X.
- Jhee, J. H. *et al.* (2019) 'High-protein diet with renal hyperfiltration is associated with rapid decline rate of renal function: a community-based prospective cohort study', *Nephrology Dialysis Transplantation*, pp. 1–9. doi: 10.1093/ndt/gfz115.
- Kamper, A.-L. and Strandgaard, S. (2017) 'Long-Term Effects of High-Protein Diets on Renal Function', *Annual Review of Nutrition*, 37(1), pp. 347–369. doi: 10.1146/annurev-nutr-071714-034426.
- Kashani, K., Rosner, M. H. and Ostermann, M. (2020) 'Creatinine: From physiology to clinical application', *European Journal of Internal Medicine*, 72(October), pp. 9–14. doi: 10.1016/j.ejim.2019.10.025.
- Kaufman, D., Basit, H. & Knohl, S., 2020. Glomerular Filtration Rate (GFR). In:

- StatPearls [Internet]*. Treasure Island (FL): StatPearls Publishing, p.  
Available from: <https://www.ncbi.nlm.nih.gov/books/NBK500032>.
- Kostogry's, R. B. *et al.* (2015) 'Effect of low carbohydrate high protein (LCHP) diet on lipid metabolism, liver and kidney function in rats', *Environmental Toxicology and Pharmacology*, 39(2), pp. 713–719. doi: 10.1016/j.etap.2015.01.008.
- Lacroix, M. *et al.* (2004) 'A long-term high-protein diet markedly reduces adipose tissue without major side effects in Wistar male rats', *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, 287(4 56-4), pp. 934–942. doi: 10.1152/ajpregu.00100.2004.
- Lydia, A. & Nugroho, P., 2014. Tes Fungsi Ginjal. In: *Buku Ajar Ilmu Penyakit Dalam Jilid I Edisi VI*. Jakarta: Interna Publishing, pp. 250-254.
- Marckmann, P. *et al.* (2015) 'High-Protein Diets and Renal Health', *Journal of Renal Nutrition*. National Kidney Foundation, Inc., 25(1), pp. 1–5. doi: 10.1053/j.jrn.2014.06.002.
- Martin, W. F., Armstrong, L. E. and Rodriguez, N. R. (2005) 'Nutrition & Metabolism Dietary protein intake and renal function', 9, pp. 1–9. doi: 10.1186/1743-7075-2-25.
- Meltzer, J. S. (2018) *Renal physiology*. Second Edi, *Pharmacology and Physiology for Anesthesia: Foundations and Clinical Application*. Second Edi. Elsevier Inc. doi: 10.1016/B978-0-323-48110-6.00040-5.
- Nielsen, J. V., Westerlund, P. and Bygren, P. (2006) 'A low-carbohydrate diet may prevent end-stage renal failure in type 2 diabetes. A case report', *Nutrition and Metabolism*, 3, pp. 1–5. doi: 10.1186/1743-7075-3-23.

- Oh R, Gilani B, Uppaluri KR. Low Carbohydrate Diet. [Updated 2020 Jul 9]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK537084/?report=classic>
- Oyabu, C. *et al.* (2016) 'Impact of low-carbohydrate diet on renal function: A meta-analysis of over 1000 individuals from nine randomised controlled trials', *British Journal of Nutrition*, 116(4), pp. 632–638. doi: 10.1017/S0007114516002178.
- Palsson, R. and Waikar, S. S. (2018) 'Renal Functional Reserve Revisited', *Advances in Chronic Kidney Disease*. Elsevier Ltd, 25(3), pp. e1–e8. doi: 10.1053/j.ackd.2018.03.001.
- Pesta, D. H. & Samuel, V. T., 2014. A high-protein diet for reducing body fat: mechanisms and possible caveats. *Nutrition & Metabolism*, Volume 11:53.
- Ratih, P., Dewi, P. and Normasari, R. (2016) 'Pengaruh Stres Fisik terhadap Kadar Kreatinin Serum Tikus Wistar Jantan ( *Rattus norvegicus* ) ( The Effect of Physical Stress on Serum Creatinine of Male *Rattus norvegicus* )', *Jurnal Pustaka Kesehatan*, 4(2), pp. 218–221.
- Riskesdas (Riset Kesehatan Dasar), 2018. Kementrian Kesehatan Republik Indonesia. Hasil Utama Riset Kesehatan Dasar [Internet]. URL: [https://kesmas.kemkes.go.id/assets/upload/dir\\_519d41d8cd98f00/files/Hasil-riskesdas-2018\\_1274.pdf](https://kesmas.kemkes.go.id/assets/upload/dir_519d41d8cd98f00/files/Hasil-riskesdas-2018_1274.pdf)
- Rolfes, S., Pinna, K. & Whitney, E., 2009. Metabolism: transformations and interactions. In: *Understanding normal and clinical nutrition. 8th edition*. Belmont: Wadsworth, pp. 213-247.

- Sardesai, V., 2003. Introduction: fundamentals of nutrition. In: *Introduction to clinical nutrition. 2nd edition*. New York: Marcel Dekker, pp. 1-15.
- S.K., P. *et al.* (2011) 'High-carbohydrate, high-fat diet-induced metabolic syndrome and cardiovascular remodeling in rats', *Journal of Cardiovascular Pharmacology*, 57(5), pp. 611–624. doi: 10.1097/FJC.0b013e3181feb90a.
- Salim, H. M., Kurnia, L. F. and Bintarti, T. W. (2018) 'The Effects of High-fat Diet on Histological Changes of Kidneys in Rats', 01(02), pp. 109–112.
- Sharma, A., Mucino, M. J. and Ronco, C. (2014) 'Renal functional reserve and renal recovery after acute kidney injury', *Nephron - Clinical Practice*, 127(1–4), pp. 94–100. doi: 10.1159/000363721.
- Sherwood, L., 2014. Sistem Kemih. In: *Fisiologi Manusia : Dari sel ke Sistem Edisi 8*. Jakarta: EGC, pp. 537-583.
- Soetedjo, N. N., 2014. Metabolisme nutrisi. In: *Buku Ajar Ilmu Penyakit Dalam. Jilid I. Edisi VI*. Jakarta: Interna Publishing, pp. 410-419.
- Stoker, H. S., 2013. Protein Metabolism. In: *General, Organic, and Biological Chemistry 6th edition*. USA: Brooks/Cole, Cengage Learning, pp. 953-970.
- Tappy, L., 2004. Carbohydrate metabolism. In: L. Sobotka, et al. eds. *Basics in clinical nutrition. 3rd edition*. Prague: Galen, pp. 66-71.
- Tobias, D. K. *et al.* (2015) 'Effect of low-fat diet interventions versus other diet interventions on long-term weight change in adults: A systematic review and meta-analysis', *The Lancet Diabetes and Endocrinology*. Elsevier Ltd, 3(12), pp. 968–979. doi: 10.1016/S2213-8587(15)00367-8.
- Wang, H. *et al.* (2016) 'Global, regional, and national life expectancy, all-cause

mortality, and cause-specific mortality for 249 causes of death, 1980–2015: a systematic analysis for the Global Burden of Disease Study 2015’, *The Lancet*, 388(10053), pp. 1459–1544. doi:10.1016/S0140-6736(16)31012-1.

## LAMPIRAN

### Lampiran 1 : Biodata Diri Penulis



Nama : Siti Afifah

Tempat/Tanggal lahir : Manado, 11 Juli 1999

Pekerjaan : Mahasiswa

Agama : Islam

Alamat : Grand Rahmani Residence G/2

Nomor telepon : 085232353839 / 082311142107

Orang tua : Drs. Muhammad Nasir Tenteng, M.Ec.Dev.  
Seha Sahel, S.Ag.

Riwayat Pendidikan : RA Al-Mourky (2003 – 2005)  
MIM Wumialo Kota Gorontalo (2005 – 2011)  
MTs. Negeri Kota Gorontalo (2011 – 2014)  
SMA Negeri 3 Gorontalo (2014 – 2017)  
Pendidikan Dokter FK UNHAS (2017 – sekarang)

Riwayat Organisasi : Anggota MYRC FK UNHAS (2019 – sekarang)



## Lampiran 2 : Pemeriksaan Proksimat Pakan Diet TPRKRL



**LABORATORIUM KIMIA MAKANAN TERNAK  
JURUSAN NUTRISI DAN MAKANAN TERNAK  
FAKULTAS PETERNAKAN  
UNIVERSITAS HASANUDDIN**

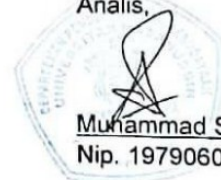
### HASIL ANALISIS BAHAN

No	Kode Sampel	KOMPOSISI (%)			
		Air	Protein Kasar	Lemak Kasar	Karbohidrat
1	PAKAN	46,73	70,49	14,55	11,67

Ket. : 1. Kecuali Air, Semua Fraksi Dinyatakan Dalam Bahan Kering

Makassar, 13 November 2019

Analisis,



Muhammad Syahrul

Nip. 19790603 2001 12 1 001

## Lampiran 3 : Hasil Pemeriksaan Ureum Tikus

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```

13/12/2019
Operator
HUMA
012 - Urea
Type           :End Point
Zero           :Blank
Measure unit   : mg/dl
Temperature    :37°
Calibration    :Standard
Standard       :80.00
Factor         :178.6
V sample       : 50 uL
V reagent 1    : 450 uL
V reagent 2    : 400 uL
Incub. time    : 10 sec.
Filter 1       : 578 nm
Filter 2       : --- nm
Normal Max     :50.00
Normal Min     :10.00
Linearity      :400.0
Max ABS        :2.500
Min ABS        :0.001

```

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ID	ABS	Result
STD	0.459	80.00 mg/dl
0033	0.197	34.35 mg/dl T
0034	0.193	33.58 mg/dl T
0035	0.197	34.40 mg/dl T
0036	0.193	33.62 mg/dl T
0037	0.202	35.18 mg/dl T
0038	0.267	46.57 mg/dl T
0039	0.187	32.51 mg/dl T
0040	0.176	30.62 mg/dl T
0041	0.195	34.06 mg/dl T
0042	0.123	21.52 mg/dl T
0043	0.307	53.51 mg/dl H
0044	0.141	24.58 mg/dl T
0045	0.167	29.02 mg/dl T

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#### Lampiran 4 : Hasil Pemeriksaan Kreatinin Tikus

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13/12/2019
Operator
HUMA
014 - Crea
Type :Fixed T.
Zero :Blank
Measure unit : ug/l
Temperature :37°
Calibration :Standard
Standard :2.000
Factor :46.17
U sample : 50 uL
U reagent 1 : 450 uL
U reagent 2 : 20 uL
Incub. time : 30 sec.
Reading time : 60 sec.
Filter 1 : 505 nm
Normal Max :1.100
Normal Min :0.500
Linearity :20.00
Max ABS :2.500
Min ABS :0.001

```

ID	ABS	Result
0001	0.039	1.755 ug/l D
0002	0.007	0.328 ug/l D
0003	0.031	1.391 ug/l D
0004	0.026	1.189 ug/l D
0005	0.030	1.331 ug/l D
0006	0.021	0.948 ug/l D
0007	0.071	3.170 ug/l D
0008	0.025	1.123 ug/l D
0009	0.026	1.148 ug/l D
0010	0.023	1.033 ug/l D
0011	0.015	0.656 ug/l D
0012	0.011	0.511 ug/l D
0013	0.021	0.924 ug/l D
0014	0.013	0.570 ug/l D
0015	0.026	1.167 ug/l D
0016	0.015	0.660 ug/l D
0017	0.019	0.915 ug/l D
0018	0.011	0.506 ug/l D
0019	0.035	1.561 ug/l D
0020	0.027	1.204 ug/l D
0021	0.016	0.713 ug/l D
0022	0.014	0.617 ug/l D
0023	0.011	0.489 ug/l D
0024	0.007	0.308 ug/l D
0025	0.018	0.788 ug/l D
0026	0.010	0.427 ug/l D
0027	0.025	1.130 ug/l D
0028	0.020	0.904 ug/l D

### Lampiran 5 : Hasil Analisis Ureum Tikus dengan SPSS

#### Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Ureum TPRKRL	6	14.06	32.51	46.57	35.9683	2.15108	5.26905	27.763
Ureum AD2	6	31.99	21.52	53.51	32.2183	4.62713	11.33410	128.462
Valid N (listwise)	6							

#### Tests of Normality

	Kelompok	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Pengukuran Ureum	TPRKRL	.393	6	.004	.658	6	.002
Ureum	AD2	.269	6	.200*	.850	6	.159

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

a. Lilliefors Significance Correction

#### Test of Homogeneity of Variances

Hasil Pengukuran Ureum

Levene Statistic	df1	df2	Sig.
1.498	1	10	.249

#### Test Statistics<sup>a</sup>

	Hasil Pengukuran Ureum
Mann-Whitney U	9.000
Wilcoxon W	30.000
Z	-1.441
Asymp. Sig. (2-tailed)	.150
Exact Sig. [2*(1-tailed Sig.)]	.180 <sup>b</sup>

a. Grouping Variable: Kelompok

b. Not corrected for ties.

### Lampiran 6 : Hasil Analisis Kreatinin Tikus dengan SPSS

#### Descriptive Statistics

	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Kreatinin TPRKRL	6	.550	.161	.711	.39850	.088376	.216477	.047
Kreatinin AD2	6	.438	.135	.573	.38083	.070093	.171692	.029
Valid N (listwise)	6							

#### Tests of Normality

	Kelompok	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Pengukuran Kreatinin TPRKRL	Kreatinin TPRKRL	.203	6	.200 <sup>*</sup>	.928	6	.561
Kreatinin	Kreatinin AD2	.256	6	.200 <sup>*</sup>	.921	6	.515

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

a. Lilliefors Significance Correction

#### Test of Homogeneity of Variances

Hasil Pengukuran Kreatinin

Levene Statistic	df1	df2	Sig.
.773	1	10	.400

#### Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil Pengukuran Kreatinin	Equal variances assumed	.773	.400	.157	10	.879	.017667	.112798	-.233663	.268996
	Equal variances not assumed			.157	9.507	.879	.017667	.112798	-.235441	.270774

## Lampiran 7 : Dokumentasi Penelitian

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Bahan pakan diet TPRKRL

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Pakan diet TPRKRL setelah jadi & proses pemberian pakan

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Proses pengambilan sampel

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**Lampiran 8 : Surat Persetujuan Pembimbing**

**KEMENTERIAN RISET TEKNOLOGI DAN PENDIDIKAN TINGGI**  
**FAKULTAS KEDOKTERAN UNIVERSITAS HASANUDDIN**  
**DEPARTEMEN FISILOGI**  
Kampus Baru Tamalanrea Jl. Perintis Kemerdekaan Km. 11 Tamalanrea Ujungpandang 90245  
Telp. (0411) – 584730 (langsung) – 586010 ext 19 IIP. 081340852778/085238151644  
Email : PhysiologyDepartment@gmail.com

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**LAMPIRAN 3****SURAT PERSETUJUAN PEMBIMBING**

Yang bertanda tangan dibawah ini :

Nama : dr. M. Aryadi Arsyad, MBIomedSc, Ph.D  
NIP : 197608202002121003  
Jabatan : Pembimbing

Dengan ini memberikan persetujuan penelitian kepada :

Nama : Siti Afifah  
NIM : C011171072  
Program : Prodi S1 Pendidikan Dokter Fakultas Kedokteran Universitas Hasanuddin  
Judul : Pengaruh Diet Tinggi Protein, Rendah Karbohidrat, dan Rendah Lemak Terhadap Fungsi Ginjal Pada Tikus *Sprague dawley* Jantan

Makassar, 28 Agustus 2019

dr. M. Aryadi Arsyad, MBIomedSc, Ph.D  
NIP. 197608202002121003

## Lampiran 9 : Surat Permohonan Perizinan Penelitian



**KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KEDOKTERAN  
PROGRAM STUDI SARJANA KEDOKTERAN**

Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245, Telp. (0411) 587436, Fax. (0411) 586297

Nomor : 16427/UN4.6.8/DA.04.09/2019  
Lamp : --  
Hal : Permohonan Izin Penelitian

Makassar, 21 Agustus 2019

Yth. :

1. Laboratorium Biofarmasi
2. Laboratorium Kimia Klinik Fak. Farmasi
3. Laboratorium Kimia Makanan Ternak Fak. Peternakan  
Makassar

Dengan hormat, disampaikan bahwa mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Hasanuddin di bawah ini :

N a m a : Siti Afifah  
N i m : C011171072

bermaksud melakukan penelitian di Laboratorium biofarmasi, laboratorium kimia klinik fakultas farmasi, dan laboratorium kimia makanan ternak fakultas peternakan dengan judul penelitian **“Pengaruh Diet Tinggi Protein, Rendah Karbohidrat dan Rendah Lemak Terhadap Fungsi Ginjal Pada Tikus Sprague Dawley Jantan”**.

Sehubungan hal tersebut kiranya yang bersangkutan dapat diberi izin untuk melakukan Penelitian dalam rangka penyelesaian studinya.

Demikian permohonan kami, atas bantuan dan kerjasamanya disampaikan terima kasih.

Ketua  
Program Studi Sarjana Kedokteran  
Fakultas Kedokteran Unhas



Dr. dr. Sitti Raffah, MSi  
NIP.196805301997032001

Tembusan Yth :  
1. Arsip



## Lampiran 10 : Surat Rekomendasi Persetujuan Etik



**KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
UNIVERSITAS HASANUDDIN  
FAKULTAS KEDOKTERAN  
RSPTN UNIVERSITAS HASANUDDIN  
RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR  
KOMITE ETIK PENELITIAN KESEHATAN**

Sekretariat : Lantai 3 Gedung Laboratorium Terpadu  
JL.PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245.  
Contact Person: dr. Agussalim Bukhari, MMed, PhD, SpGK TELP. 081225704670 e-mail : agussalimbukhari@yahoo.com

### REKOMENDASI PERSETUJUAN ETIK

Nomor : 757/UN4.6.4.5.31/ PP36/ 2019

Tanggal: 2 September 2019

Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH19080645	No Sponsor	
Peneliti Utama	<b>Siti Afifah</b>	Protokol	
Judul Peneliti	Pengaruh Diet Tinggi Protein, Rendah Karbohidrat, dan Rendah Lemak Terhadap Fungsi Ginjal Pada Tikus Sprague Dawley Jantan		
No Versi Protokol	1	Tanggal Versi	30 Agustus 2019
No Versi PSP		Tanggal Versi	
Tempat Penelitian	Laboratorium Fakultas Farmasi dan Laboratorium Fakultas Peternakan Universitas Hasanuddin Makassar		
Jenis Review	<input checked="" type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 2 September 2019 sampai 2 September 2020	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian Kesehatan FKUH	Nama <b>Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)</b>	Tanda tangan	
Sekretaris Komisi Etik Penelitian Kesehatan FKUH	Nama <b>dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)</b>	Tanda tangan	

**Kewajiban Peneliti Utama:**

- Menyerahkan Amendemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Laporan SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

