

## LAMPIRAN

### Hasil Kadar MDA

Kode	MDA <i>pre test</i> (nmol/ml)	MDA <i>post test</i> (nmol/ml)
P1.1	0.99	1.08
P1.2	1.14	1.37
P1.3	1.06	1.16
P1.4	1.21	1.24
P1.5	1.03	1.04
P2.1	1.39	8.72
P2.2	1.36	9.26
P2.3	1.21	8.43
P2.4	0.95	9.18
P2.5	1.03	8.93
P3.1	1.39	7.76
P3.2	1.25	7.22
P3.3	1.14	7.06
P3.4	1.21	7.47
P3.5	1.06	7.35
P4.1	1.32	4.52
P4.2	1.10	4.11
P4.3	0.99	3.90
P4.4	1.03	4.36
P4.5	1.36	4.61
P5.1	1.65	2.20
P5.2	1.54	2.53
P5.3	1.39	2.49
P5.4	1.47	2.45
P5.5	1.17	2.36

## Uji Normalitas

### Tests of Normality

	Kolmogorov -Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
MDA (nmol/ml)	,190	25	,020	,873	25	,005

a. Lilliefors Significance Correction

## Descriptive Test

### Descriptives

MDA (nmol/ml)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P1	5	,0920	,08626	,03858	-,0151	,1991	,01	,23
P2	5	7,7151	,42603	,19053	7,1861	8,2440	7,22	8,22
P3	5	6,1645	,20059	,08971	5,9154	6,4135	5,92	6,37
P4	5	3,1422	,17491	,07822	2,9250	3,3593	2,91	3,33
P5	5	,9616	,24659	,11028	,6554	1,2677	,55	1,19
Total	25	3,6151	3,00146	,60029	2,3761	4,8540	,01	8,22

## Kruskal-Wallis Test

### Ranks

	Kelompok	N	Mean Rank
MDA (nmol/ml)	P1	5	3,00
	P2	5	23,00
	P3	5	18,00
	P4	5	13,00
	P5	5	8,00
	Total	25	

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

	MDA (nmol/ml)
Chi-Square	23,077
df	4
Asymp. Sig.	,000

a. Kruskal Wallis Test

b. Grouping Variable: Kelompok

### *Mann-Whitney Test*

#### Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
MDA (nmol/ml)	P1	5	3,00	15,00
	P2	5	8,00	40,00
	Total	10		

#### Test Statistics<sup>b</sup>

	MDA (nmol/ml)
Mann-Whitney U	,000
Wilcoxon W	15,000
Z	-2,611
Asymp. Sig. (2-tailed)	,009
Exact Sig. [2*(1-tailed Sig.)]	,008 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Kelompok

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#### Ranks

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#### Ranks

	Kelompok	N	Mean Rank	Sum of Ranks
MDA (nmol/ml)	P3	5	8,00	40,00
	P4	5	3,00	15,00
	Total	10		

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Mann-Whitney U	,000
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### *Mann-Whitney Test*

#### **Ranks**

	Kelompok	N	Mean Rank	Sum of Ranks
MDA (nmol/ml)	P3	5	8,00	40,00
	P5	5	3,00	15,00
	Total	10		

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Mann-Whitney U	,000
Wilcoxon W	15,000
Z	-2,611
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Exact Sig. [2*(1-tailed Sig.)]	,008 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Kelompok

### *Mann-Whitney Test*

#### **Ranks**

	Kelompok	N	Mean Rank	Sum of Ranks
MDA (nmol/ml)	P4	5	8,00	40,00
	P5	5	3,00	15,00
	Total	10		

#### **Test Statistics<sup>b</sup>**

	MDA (nmol/ml)
Mann-Whitney U	,000
Wilcoxon W	15,000
Z	-2,611
Asy mp. Sig. (2-tailed)	,009
Exact Sig. [2*(1-tailed Sig.)]	,008 <sup>a</sup>

a. Not corrected for ties.

b. Grouping Variable: Kelompok

*Mean std. deviasi semua kelompok*

*Kelompok negative*

**Statistics**

		Pre test	Post test
N	Valid	5	5
	Missing	0	0
Mean		1.0860	1.1780
Std. Deviation		.08849	.13198

*Kelompok positif*

**Statistics**

		Pre test	Post test
N	Valid	5	5
	Missing	0	0
Mean		1.1880	8.9040
Std. Deviation		.19524	.33990

*Kelompok dosis 1*

**Statistics**

		Pre test	Post test
N	Valid	5	5
	Missing	0	0
Mean		1.2100	7.3720
Std. Deviation		.12390	.26508



***Kelompok dosis 2***

**Statistics**

		Pre test	Post test
N	Valid	5	5
	Missing	0	0
Mean		1.1600	4.3000
Std. Deviation		.16956	.29334

***Kelompok dosis 3***

**Statistics**

		Pre test	Post test
N	Valid	5	5
	Missing	0	0
Mean		1.4440	2.4060
Std. Deviation		.18050	.13126

***Uji Wilcoxon***

***Kelompok negatif***

**Ranks**

		N	Mean Rank	Sum of Ranks
Post test – pre test	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	5 <sup>b</sup>	3.00	15.00
	Ties	0 <sup>c</sup>		
	Total	5		

a. post test < pre test

b. post test > pre test

c. post test = pre test

**Test Statistics<sup>b</sup>**

	Post test – pre test
Z	-2.023 <sup>a</sup>
Asymp. Sig. (2-tailed)	.043

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

### *Kelompok positif*

**Ranks**

		N	Mean Rank	Sum of Ranks
Post test – pre test	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	5 <sup>b</sup>	3.00	15.00
	Ties	0 <sup>c</sup>		
	Total	5		

a. post test < pre test

b. post test > pre test

c. post test = pre test

**Test Statistics<sup>b</sup>**

	Post test – pre test
Z	-2.032 <sup>a</sup>
Asymp. Sig. (2-tailed)	.042

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

***Kelompok dosis 1***

**Ranks**

		N	Mean Rank	Sum of Ranks
Post test – pre test	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	5 <sup>b</sup>	3.00	15.00
	Ties	0 <sup>c</sup>		
	Total	5		

a. post test < pre test

b. post test > pre test

c. post test = pre test

**Test Statistics<sup>b</sup>**

	Post test – pre test
Z	-2.023 <sup>a</sup>
Asymp. Sig. (2-tailed)	.043

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

***Kelompok dosis 2***

**Ranks**

		N	Mean Rank	Sum of Ranks
Post test – pre test	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	5 <sup>b</sup>	3.00	15.00
	Ties	0 <sup>c</sup>		
	Total	5		

a. post test < pre test

b. post test > pre test

c. post test = pre test

**Test Statistics<sup>b</sup>**

	Post test – pre test
Z	-2.023 <sup>a</sup>
Asymp. Sig. (2-tailed)	.043

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

***Kelompok dosis 3*****Ranks**

		N	Mean Rank	Sum of Ranks
Post test – pre test	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	5 <sup>b</sup>	3.00	15.00
	Ties	0 <sup>c</sup>		
	Total	5		

a. post test < pre test

b. post test > pre test

c. post test = pre test

**Test Statistics<sup>b</sup>**

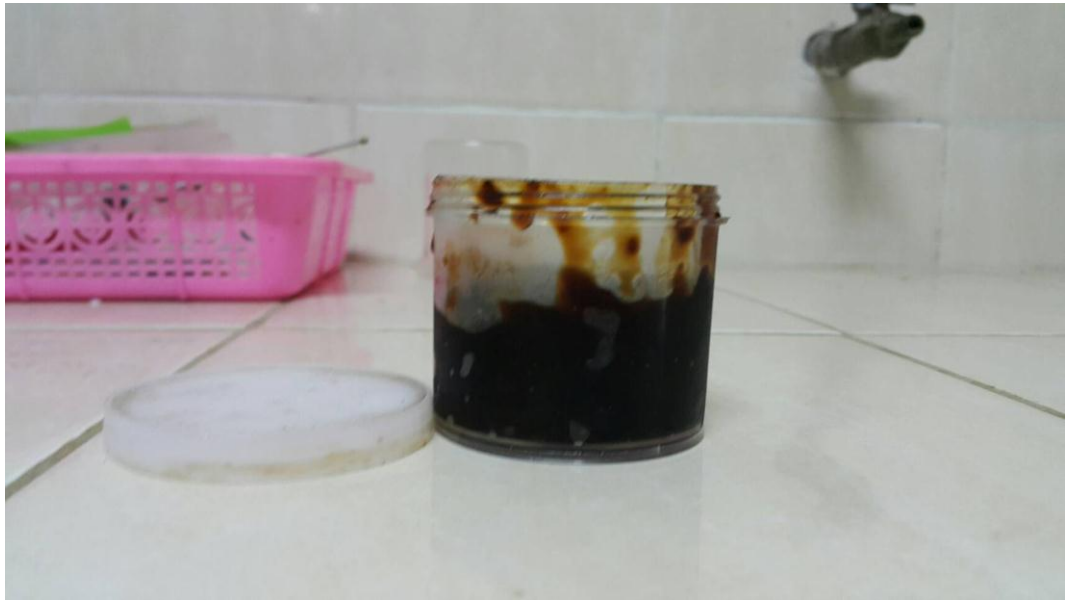
	Post test – pre test
Z	-2.023 <sup>a</sup>
Asymp. Sig. (2-tailed)	.043

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test

## DOKUMENTASI PENELITIAN















**UNIVERSITAS GADJAH MADA**  
**PUSAT STUDI PANGAN DAN GIZI**

SURAT KETERANGAN  
No. : PSPG-UGM/25/SKP/II/2017

Yang bertanda tangan di bawah ini, Ketua Laboratorium Gizi Pusat Studi Pangan dan Gizi Universitas Gadjah Mada menerangkan bahwa mahasiswa berikut :

Nama : Nunki Indah Hidayati  
NIK/NIM : 20130310211  
Institusi : Pendidikan Dokter/FKIK/Universitas Muhammadiyah Yogyakarta

Judul : Pengaruh Pemberian Ekstrak Kulit Jeruk Manis (Citrus Sinensis) Terhadap Perubahan Kadar Malondialdehid (MDA) Pada Hewan Uji Yang di Induksi Asap Rokok.

Telah melakukan sebagian penelitian di Laboratorium Gizi (Kandang Hewan Coba) di Pusat Studi Pangan dan Gizi Universitas Gadjah Mada pada 13 September - 13 Oktober 2016.

Demikian Surat Keterangan ini kami buat untuk dapat digunakan sebagaimana perlunya.

Yogyakarta, 13 Februari 2017

Mengetahui,  
Kepala,  
Pusat Studi Pangan dan Gizi - UGM



Prof. Dr. Ir. Umar Santoso, MSc.  
NIP. 195902171985031002

An. Ketua Laboratorium Gizi  
Wakil Kepala Bidang Program/Kegiatan

Dr. Ir. Nurliyani, MS  
NIP. 196008171986032003



Fakultas Kedokteran dan Ilmu Kesehatan  
Universitas Muhammadiyah Yogyakarta

**KETERANGAN LOLOS UJI ETIK**  
**ETHICAL APPROVAL**

Komite Etik Penelitian Fakultas Kedokteran dan Ilmu Kesehatan Universitas Muhammadiyah Yogyakarta dalam upaya melindungi hak asasi dan kesejahteraan responden/subyek penelitian, telah mengkaji dengan teliti protokol berjudul :

*The Ethics Committee of the Faculty of Medicine and Health Sciences, University of Muhammadiyah Yogyakarta, with regards of the protection of human rights and welfare in research, has carefully reviewed the research protocol entitled :*

**“Pengaruh Pemberian Ekstrak Kulit Jeruk Manis (*Citrus sinensis*) Terhadap Perubahan Kadar Malondialdehid (MDA) Pada Hewan Uji yang Diinduksi Asap Rokok”**

Peneliti Utama : Nunki Indah Hidayati  
*Principal Investigator*

Nama Institusi : Program Studi Pendidikan Dokter FKIK UMY  
*Name of the Institution*

Negara : Indonesia  
*Country*

Dan telah menyetujui protokol tersebut diatas.  
*And approved the above-mentioned protocol.*

Yogyakarta, 18 Juli 2017

Sekretaris  
*Secretary*  
  
Dr. dr. Titiek Hidayati, M. Kes

\*Peneliti Berkewajiban :

1. Menjaga kerahasiaan identitas subyek penelitian
2. Memberitahukan status penelitian apabila :
  - a. Setelah masa berlakunya keterangan lolos uji etik, penelitian masih belum selesai, dalam hal ini *ethical clearance* 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 responden/subyek sebelum penelitian lolos uji etik dan *informed consent*

Kampus:

Jl. Lingkar Selatan, Tamantirto, Kasihan, Bantul, Yogyakarta 55183  
Telp. (0274) 387656 ext. 213 , 7491350 Fax. (0274) 387658

*Muda mendunia*