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# LAMPIRAN

## Lampiran

### I. Foto Kegiatan Penelitian

#### a. Pembuatan Gel VCO



Gambar 1. Hasil parutan 10 buah kelapa segar yang telah diperas, tampak 2 lapisan yaitu santan dan air (23 Maret 2021)



Gambar 2. Santan yang telah diperas dimixer untuk membuat gelembung udara, sebagai fermentasi



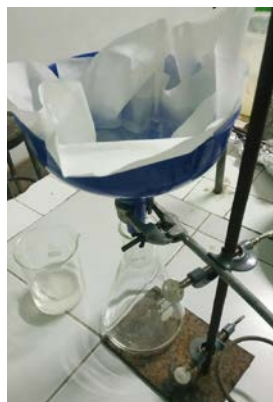
Gambar 3. Setelah 24 jam didiamkan, akan terbentuk 3 lapisan



Gambar 4. Ampas santan dipisahkan dengan minyak kelapa murni (VCO)



Gambar 5. Dilakukan penyaringan pada VCO



Gambar 6. Proses penyaringan VCO menggunakan kertas saring



Gambar 7. Hasil akhir penyaringan VCO

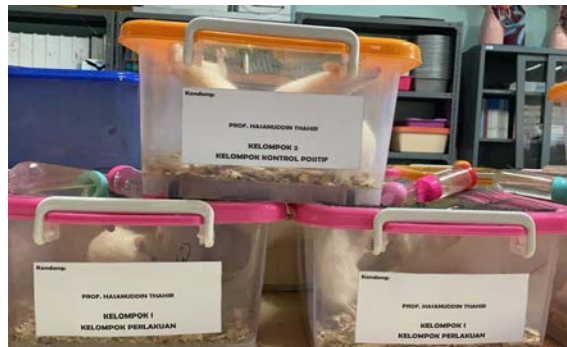


Gambar 8. 10 buah kelapa menghasilkan 500 ml VCO (24 Maret 2021)



- Gambar 9a. NaCMC ditimbang menggunakan neraca analitik, sebagai bahan campuran membuat gel VCO
- 9b. Karbopol + NaCMC dimasukkan ke dalam gelas beaker sesuai takaran yang telah diukur
- 9c. Campuran karbopol + NaCMC dicampur dengan VCO dan diaduk hingga konsentrasi mengental
- 9d. Hasil akhir VCO yang telah menjadi gel

## 2. Pemeliharaan, Perlakuan, dan Sacrificed Hewan Coba



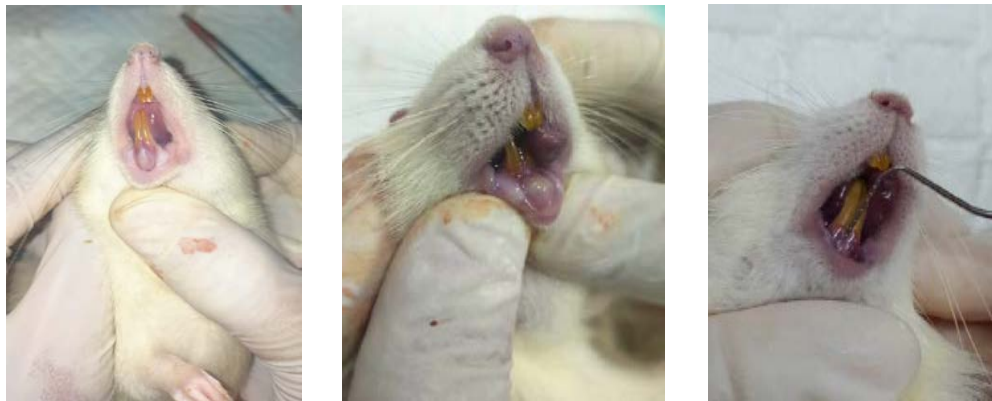
Tikus wistar jantan diadaptasi 7 hari dan di bagi ke kandang menjadi 3 kelompok: kelompok perlakuan, kelompok kontrol positif, dan kelompok kontrol negatif



Penyuntikan ketamin sebagai bahan sedasi sebelum induksi bakteri *P.Gingivalis* pada sulkus gingiva tikus wistar (24 mei 2021)



(a). Induksi bakteri *P.Gingivalis* ATCC 33277 pada sulkus gingiva anterior tikus wistar (b). Pengikatan benang silk pada daerah servikal gigi anterior tikus wistar. (c). Setelah dilakukan induksi bakteri + pengikatan silk

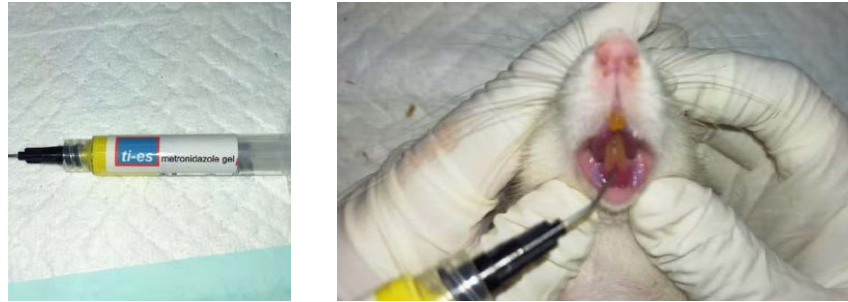


Setelah 5 hari, silk ligature dilepas, dan nampak terjadi periodontitis pada tikus wistar, yg ditandai dengan perubahan warna dan pembengkakan pada gingiva, serta bertambahnya kedalaman poket, (30 Mei 2021)



Gambar (a). Gel VCO dalam gelas sediaan  
 (b). Gel VCO dimasukkan ke dalam spoit untuk memudahkan perlakuan ke hewan coba kelompok 1  
 (c). Pemberian gel VCO ke dalam sulkus gingiva tikus wistar yg mengalami periodontitis (30 Mei 2021)





Gambar (a).Gel metronidazole sebagai bahan kontrol positif pada kelompok 2.  
 Gambar (b) Pemberian gel metronidazole ke dalam sulkus gingiva tikus wistar yang mengalami periodontitis (30 Mei 2021)



Kelompok kontrol (-) dilakukan skeling root planing tanpa pemberian bahan apapun



Mula – mula hewan coba dimasukkan ke dalam toples yang telah diberi kapas + eter, hingga tikus wistar mengalami syncope. Proses euthanasia hewan coba dilakukan dgn penekanan pada bagian posterior dasar tulang tengkorak dan sumsum tulang belakang



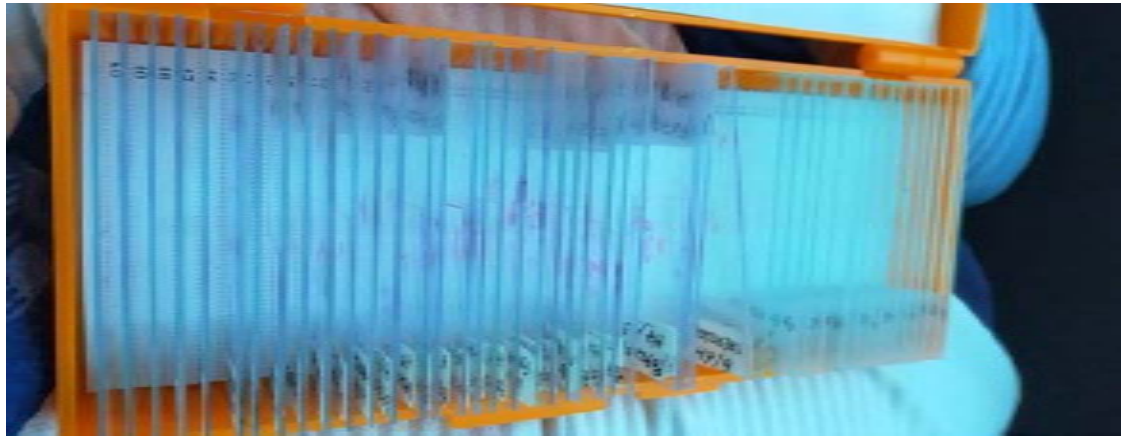
Proses pemotongan specimen tulang rahang bawah anterior tikus wistar jantan. Setelah dipotong, sampel kemudian dicuci dengan aguades, kemudian disimpan dalam tabung sediaan yang berisi formalin buffer 10% dan diberi label pada setiap tabung sediaan (7 Juni 2021)



Proses pengambilan jaringan sampel rahang bawah hewan coba menggunakan gunting dan pinset.



Sampel diletakkan ke dalam tabung sediaan yang berisis formalin 10% yang kemudian akan dibawa ke Balai Veteriner Maros untuk dibuat ke dalam bentuk slide. (14 Juni 2021)



Slide penelitian telah jadi dan selanjutnya diberikan ke laboratorium Biokimia-Biomolekuler Fakultas kedokteran Universitas Brawijaya untuk dilakukan pewarnaan HE dan penghitungan jumlah makrofag

## II. Uji Kandungan Gel VCO

### Quantitative Analysis Report

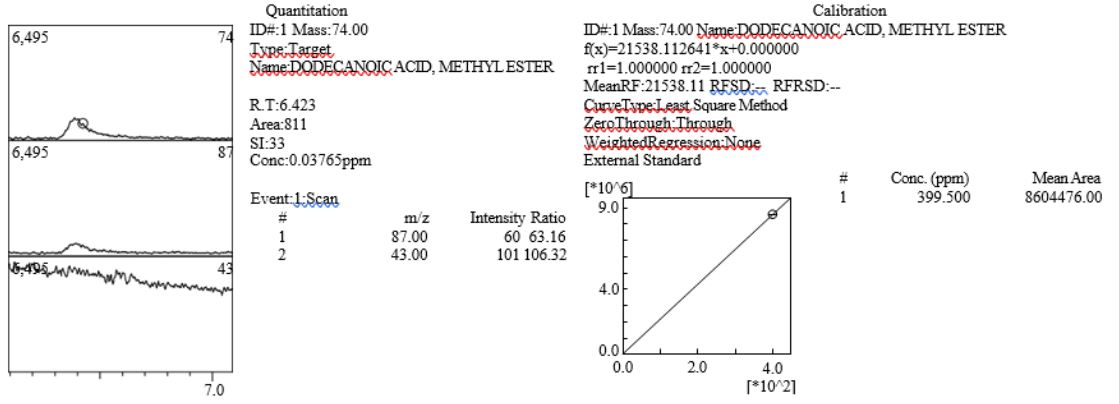
Sample Information

Analyzed by : Admin  
 Analyzed : 4/05/2021 11:15:15 AM  
 Sample Type : VCO (Prof. ~~Hasanuddin Thahir~~)  
 Level # : 1  
 Sample Name : VCO 3  
 Sample ID : VCO 3  
 IS Amount : [1]=1  
 Sample Amount : 1  
 Dilution Factor : 1  
 Vial # : 1  
 Injection Volume : 1.00  
 Data File : C:\GCMSsolution\Data\Project1\VCO 3i.QGD  
 Org Data File : C:\GCMSsolution\Data\Project1\VCO 3i.QGD  
 Method File : C:\GCMSsolution\Data\Project1\LAURIC ACID.qgm  
 Org Method File : C:\GCMSsolution\Data\Project1\asam lemak standar.qgm  
 Report File :  
 Tuning File : C:\GCMSsolution\System\Tune1\TUNING 18 DES.qgt  
 Modified by : Admin  
 Modified : 4/05/2021 11:50:58 AM

Quantitative Result Table

ID#	Name	Conc.	Conc. Unit	R. Time	m/z	Area	Height
1	DODECANOIC ACID, METHYLESTER	0.038	ppm	6.423	74.00	811	656
2	LAURIC ACID	51.7	percent				
3	FLAVONOID ACID	8.74	percent				
4	TOCOPHEROL	0.5	/100gr				

# Quantitative Analysis Report



## Quantitative Analysis Report

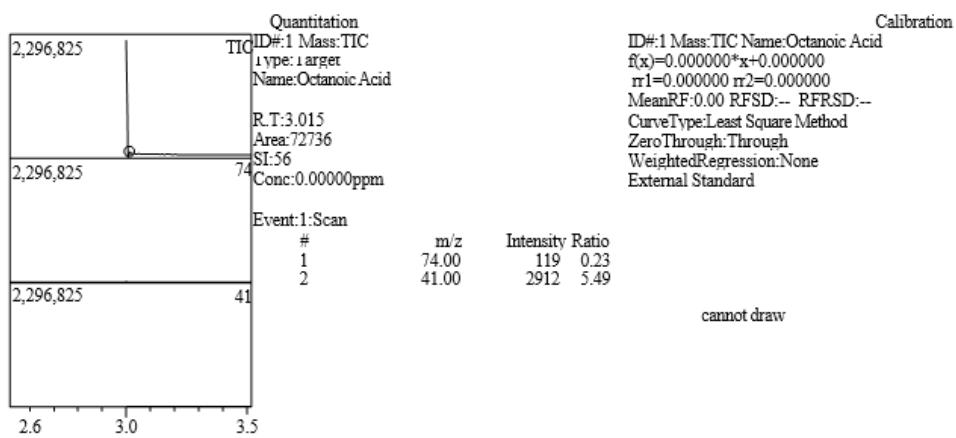
### Sample Information

Analyzed by : Admin  
Analyzed : 4/05/2021 11:15:15 AM  
Sample Type : VCO (Prof. Hasanuddin Thahir)  
Level # : 1  
Sample Name : VCO (Prof. Hasanuddin Thahir)  
Sample ID : VCO 3  
IS Amount : [1]=1  
Sample Amount : 1  
Dilution Factor : 1  
Vial # : 1  
Injection Volume : 1.00  
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Org Data File : C:\GCM\ssolution\Data\Project1\VCO 3i.QGD  
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Org Method File : C:\GCM\ssolution\Data\Project1\asam lemak standar.qgm  
Report File :  
Tuning File : C:\GCM\ssolution\System\Tune1\TUNING 18 DES.qgt  
Modified by : Admin  
Modified : 4/05/2021 12:56:07 PM

Quantitative Result Table

ID#	Name	Conc.	Conc.Unit	R.Time	m/z	Area	Height
1	Octanoic Acid	0.000	ppm	3.015	TIC	72736	100485

## Quantitative Analysis Report

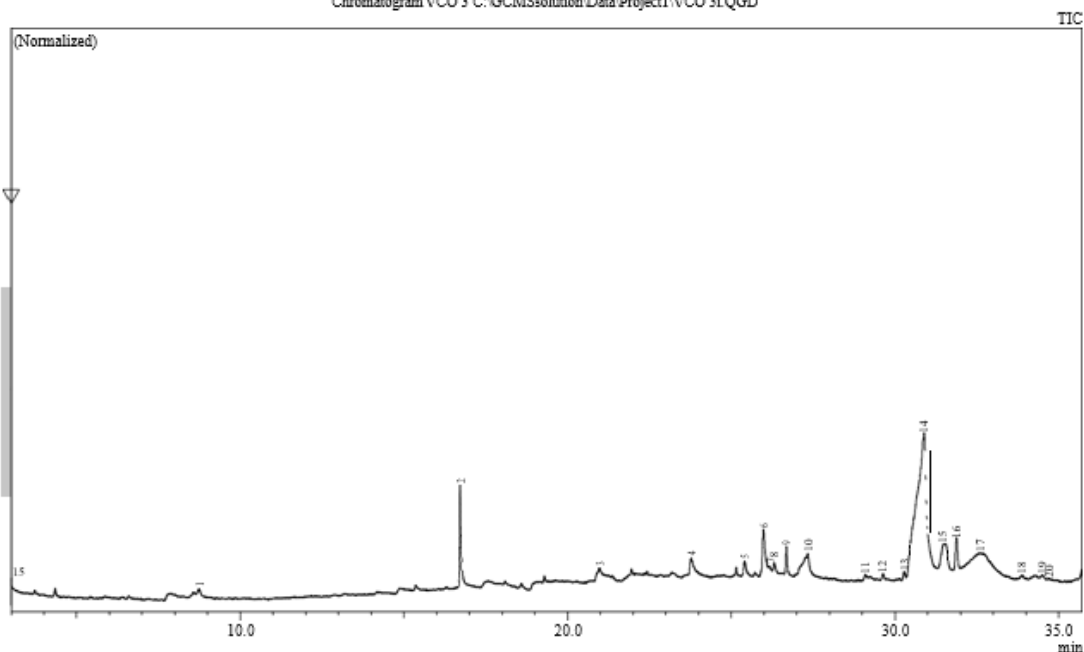


# DATA REPORT GCMS-QP2010 ULTRA SHIMADZU

## Sample Information

Analyzed by : Admin  
 Analyzed : 4/05/2021 11:15:15 AM  
 Sample Type : Unknown  
 Level # : 1  
 Sample Name : VCO 3  
 Sample ID : VCO 3  
 IS Amount : [1]=1  
 Sample Amount : 1

Chromatogram VCO 3 C:\GCMSolution\Data\Project1\VCO 3\QGD

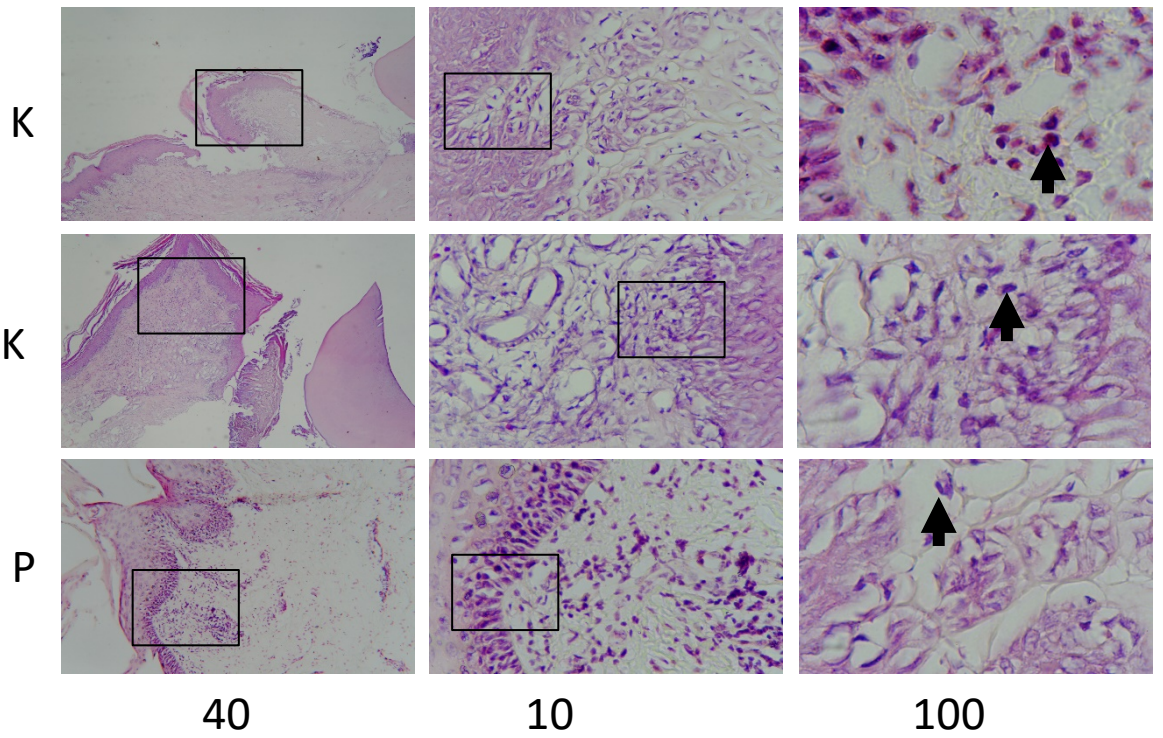


Peak#	R. Time	Area	Area%	A/H Name
1	8.738	115734	0.40	4.90 DODECANOIC ACID, ETHYL ESTER
2	16.721	1330216	4.58	3.50 1,2-Benzenedicarboxylic acid, bis(2-methylpropyl) ester
3	20.970	151372	0.52	4.33 9-Octadecenoic acid (Z)-, methyl ester
4	23.777	396664	1.37	6.77 HEXADECANOIC ACID, 2-HYDROXY-1,3-PROPANEDIYL ESTER
5	25.401	221067	0.76	4.47 Oleoyl chloride
6	25.980	1100783	3.79	6.28 9-Octadecenoic acid, 1,2,3-propanetriyl ester, (E,E,E)-
7	26.149	201274	0.69	6.13 Cyclohexanecarboxylic acid, heptadecyl ester
8	26.307	209648	0.72	5.04 Glycerol stearate
9	26.680	337988	1.16	3.23 1,2-BENZENEDICARBOXYLIC ACID
10	27.334	1259597	4.34	14.79 Dodecanoic acid, 1-(hydroxymethyl)-1,2-ethanediyl ester
11	29.096	118121	0.41	5.36 12-TRICOSANONE
12	29.633	99836	0.34	4.46 Octanoic acid, 4-tridecyl ester
13	30.282	151774	0.52	4.41 1,3-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
14	30.890	12732438	43.88	23.32 GLYCEROL TRICAPRYLATE
15	31.506	2462912	8.49	17.86 Dodecanoic acid, 1,2,3-propanetriyl ester
16	31.887	1194680	4.12	7.73 2,6,10,14,18,22-Tetracosahexaene, 2,6,10,15,19,23-hexamethyl-, (all-E)-
17	32.615	5879263	20.26	55.52 Dodecanoic acid, 1-(hydroxymethyl)-1,2-ethanediyl ester
18	33.886	342906	1.18	15.42 12-TRICOSANONE
19	34.511	587580	2.02	24.01 DODECANOIC ACID, 1,2,3-PROPANETRIYL ESTER

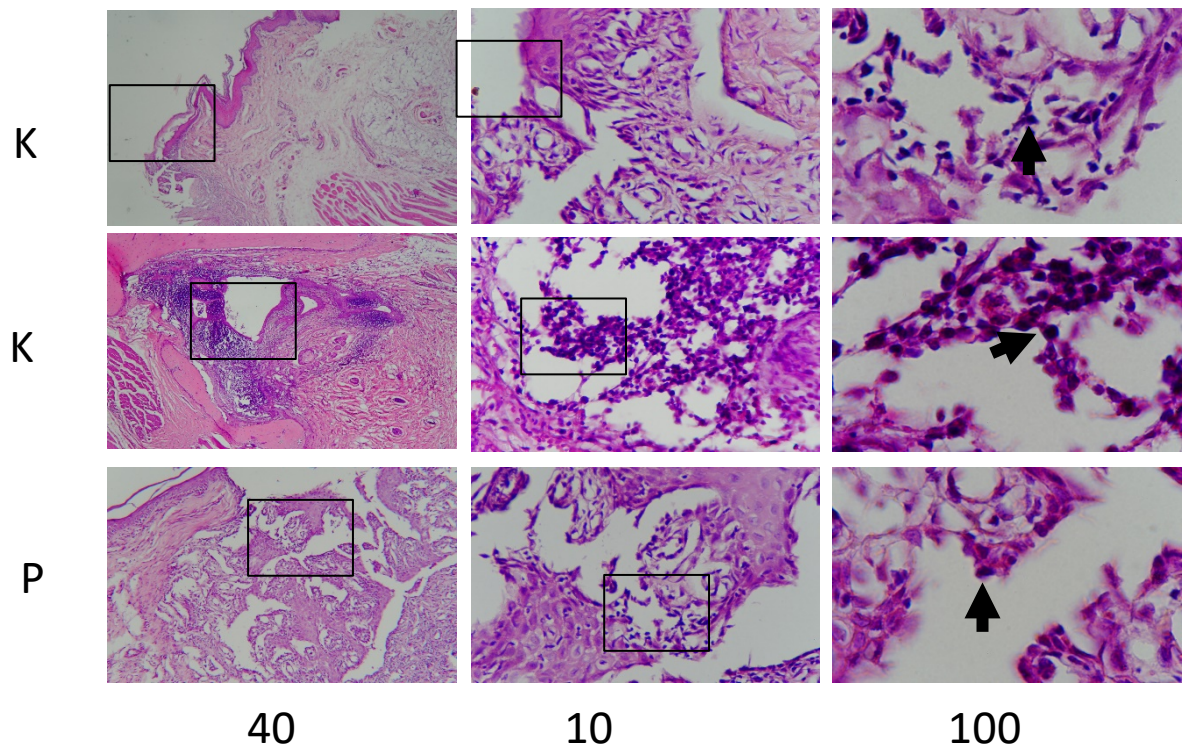


### III. Hasil Pemeriksaan Histologi

#### - Makrofag hari ketiga



#### - Makrofag hari ketujuh



## IV. Hasil Analisa Data Penelitian

### Oneway

#### Notes

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	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.	
Syntax	ONEWAY Col Makr Fibr BY KELOMPOK /STATISTICS DESCRIPTIVES HOMOGENEITY /MISSING ANALYSIS /POSTHOC=TUKEY ALPHA(0.05).		
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#### Descriptives

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					K - (3)	5		
Makr K + (3)	5	7,00	1,414	,632	5,24	8,76	5	9
P (3)	5	8,00	2,236	1,000	5,22	10,78	5	11

K - (7)	5	5,50	1,500	,671	3,64	7,36	4	8
K + (7)	5	8,75	1,479	,661	6,91	10,59	7	11
P (7)	5	12,50	2,062	,922	9,94	15,06	10	15
Total	30	7,50	3,286	,600	6,27	8,73	2	15

#### Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Makr	,702	5	24	,627

#### ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	245,625	5	49,125	17,467	,000
Makr Within Groups	67,500	24	2,813		
Total	313,125	29			

### Post Hoc Tests

#### Multiple Comparisons

##### Tukey HSD

Dependent Variable	(I)	(J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval		
						Lower Bound	Upper Bound	
Makr	K - (3)	K + (3)	-3,750*	1,061	,019	-7,03	-,47	
		P (3)	-4,750*	1,061	,002	-8,03	-1,47	
		K - (7)	-2,250	1,061	,310	-5,53	1,03	
		K + (7)	-5,500*	1,061	,000	-8,78	-2,22	
		P (7)	-9,250*	1,061	,000	-12,53	-5,97	
		K - (3)	3,750*	1,061	,019	,47	7,03	
	K + (3)	P (3)	-1,000	1,061	,931	-4,28	2,28	
		K - (7)	1,500	1,061	,718	-1,78	4,78	
		K + (7)	-1,750	1,061	,576	-5,03	1,53	
		P (7)	-5,500*	1,061	,000	-8,78	-2,22	
		P (3)	K - (3)	4,750*	1,061	,002	1,47	8,03
			K + (3)	1,000	1,061	,931	-2,28	4,28

	K - (7)	2,500	1,061	,211	-,78	5,78
	K + (7)	-,750	1,061	,979	-4,03	2,53
	P (7)	-4,500*	1,061	,003	-7,78	-1,22
	K - (3)	2,250	1,061	,310	-1,03	5,53
	K + (3)	-1,500	1,061	,718	-4,78	1,78
K - (7)	P (3)	-2,500	1,061	,211	-5,78	,78
	K + (7)	-3,250	1,061	,043	-6,53	,03
	P (7)	-7,000*	1,061	,000	-10,28	-3,72
	K - (3)	5,500*	1,061	,000	2,22	8,78
	K + (3)	1,750	1,061	,576	-1,53	5,03
K + (7)	P (3)	,750	1,061	,979	-2,53	4,03
	K - (7)	3,250	1,061	,043	-,03	6,53
	P (7)	-3,750*	1,061	,019	-7,03	-,47
	K - (3)	9,250*	1,061	,000	5,97	12,53
	K + (3)	5,500*	1,061	,000	2,22	8,78
P (7)	P (3)	4,500*	1,061	,003	1,22	7,78
	K - (7)	7,000*	1,061	,000	3,72	10,28
	K + (7)	3,750*	1,061	,019	,47	7,03

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

## Homogeneous Subsets

### Makr

Tukey HSD<sup>a</sup>

KELOMPOK	N	Subset for alpha = 0.05		
		1	2	3
K - (3)	5	3,25		
K - (7)	5	5,50	5,50	
K + (3)	5		7,00	
P (3)	5		8,00	
K + (7)	5		8,75	
P (7)	5			12,50
Sig.		,310	,053	1,000

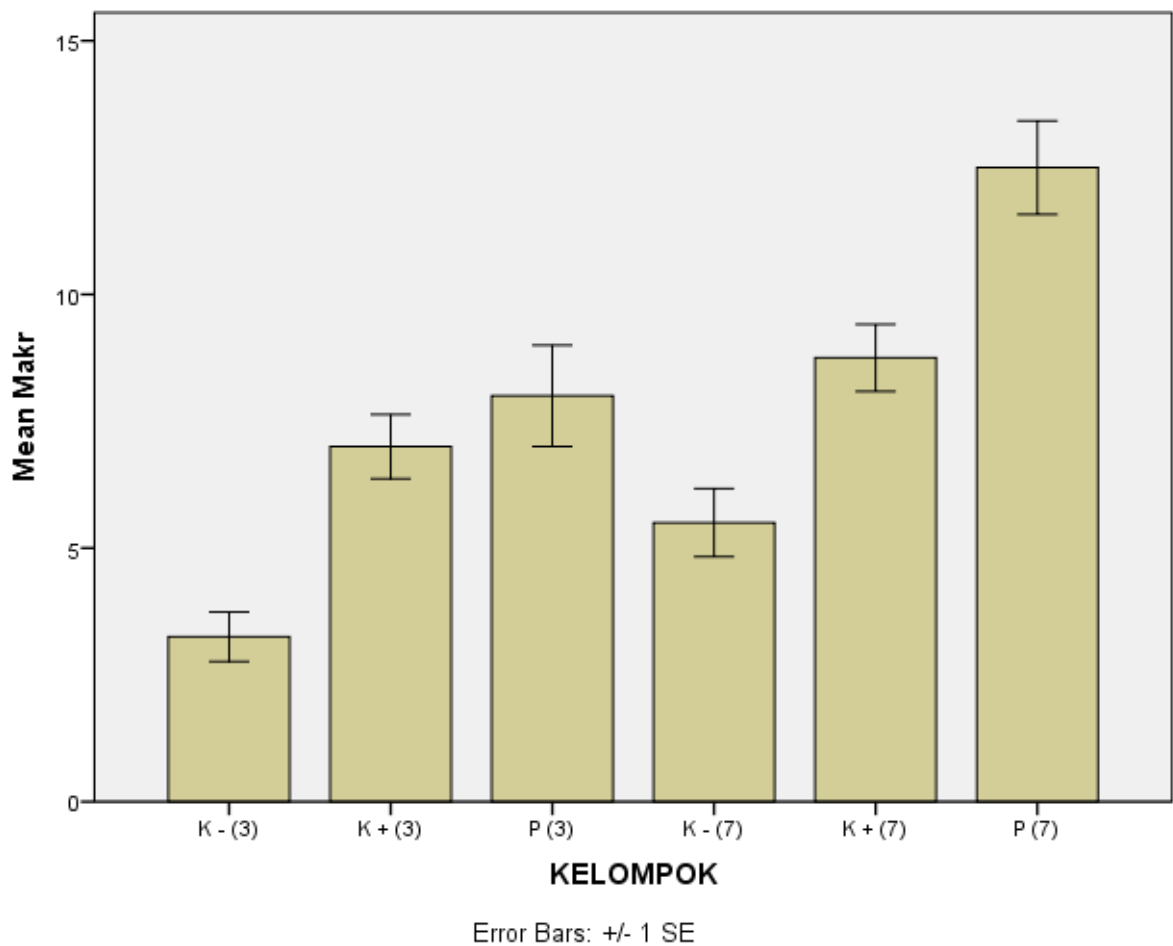
Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5,000.

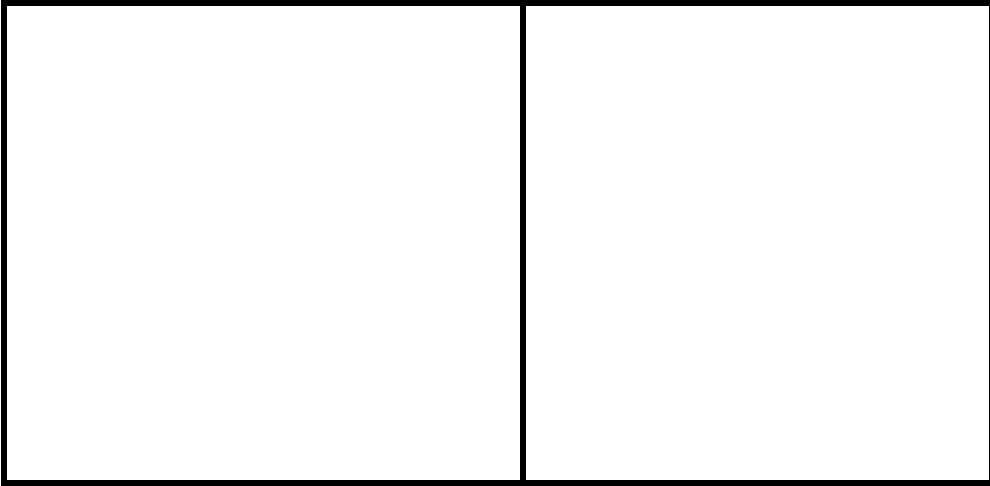
```

* Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=KELOMPOK MEANSE(Col,
1)[name="MEAN_Col" LOW="MEAN_Col_LOW" HIGH="MEAN_Col_HIGH"]
MISSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: KELOMPOK=col(source(s), name("KELOMPOK"), unit.category())
  DATA: MEAN_Col=col(source(s), name("MEAN_Col"))
  DATA: LOW=col(source(s), name("MEAN_Col_LOW"))
  DATA: HIGH=col(source(s), name("MEAN_Col_HIGH"))
  GUIDE: axis(dim(1), label("KELOMPOK"))
  GUIDE: axis(dim(2), label("Mean Col"))
  GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
  SCALE: cat(dim(1), include("1", "2", "3", "4", "5", "6"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: interval(position(KELOMPOK*MEAN_Col),
shape.interior(shape.square))

```



## GGraph



## ETIK PENELITIAN



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI  
 UNIVERSITAS HASANUDDIN  
 FAKULTAS KEDOKTERAN GIGI  
 RUMAH SAKIT GIGI DAN MULUT  
 KOMITE ETIK PENELITIAN KESEHATAN  
 Sekretariat : Lantai 2, Gedung Lama RSGM Unhas  
 JL.Kandea No. 5 Makassar  
 Contact Person: drg. Muhammad Ikbal, Sp.Prost/Nur Aedah AR TELP. 081342971011/08114919191



### REKOMENDASI PERSETUJUAN ETIK Nomor: 0059/PL.09/KEPK FKG-RSGM UNHAS/2021

Tanggal: 27 Mei 2021

Dengan ini menyatakan bahwa protokol dan dokumen yang berhubungan dengan protokol berikut ini telah mendapatkan persetujuan etik:

No. Protokol	UH 17120461		No Protokol Sponsor	
Peneliti Utama	Drg. Ayu Rahayu Feblina		Sponsor	Pribadi
Judul Peneliti	Efektivitas Gel Virgin Coconut Oil (Vco) terhadap Jumlah Sel Makrofag pada Rattus Norvegicus secara In Vivo			
No. Versi Protokol	1	Tanggal Versi	27 Mei 2021	
No. Versi Protokol		Tanggal Versi		
Tempat Penelitian	1.Laboratorium Biologi FMIFA UNM 2.Laboratorium Politeknik Kimia Unhas 3.Laboratorium Biofarmasi Fakultas Farmasi Unhas 4.Laboratorium Biofarmaka Fakultas Farmasi Unhas 5.Laboratorium Patologi Anatomi RSPTN Unhas 6.Laboratorium Biokimia-Biomolekuler FK Universitas Brawijaya			
Dokumen Lain				
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard		Masa Berlaku 27 Mei 2021-27 Mei 2022	Frekuensi Review Lanjutan
Ketua Komisi Etik Penelitian	Nama: Dr. drg. Marhamah, M.Kes	Tanda Tangan	Tanggal	
Sekretaris Komisi Etik Penelitian	Nama: drg. Muhammad Ikbal, Sp.Prost	Tanda Tangan	Tanggal	

#### Kewajiban peneliti utama:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum diimplementasikan
- Menyerahkan laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan lapor 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 protokol yang disetujui (*protocol deviation/violation*)
- Mematuhi semua aturan yang berlaku.