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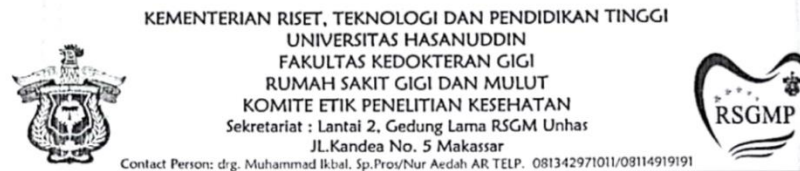62. Kresnoadi U, Raharjo T, Rostiny R. Effects of mangosteen peel extract

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LAMPIRAN

LAMPIRAN

1. 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.Pros/Nur Aedah AR TELP. 081342971011/08114919191

REKOMENDASI PERSETUJUAN ETIK
Nomor: 0060/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 17120462	No Protokol Sponsor	
Peneliti Utama	Drg. Nir Etriyani	Sponsor	Pribadi
Judul Peneliti	Efektivitas Gel Virgin Coconut Oil (Vco) terhadap Kepadatan Kolagen 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 FMIPA 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	☐ Exempted ☒ Expedited ☐ 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.Pros	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*)
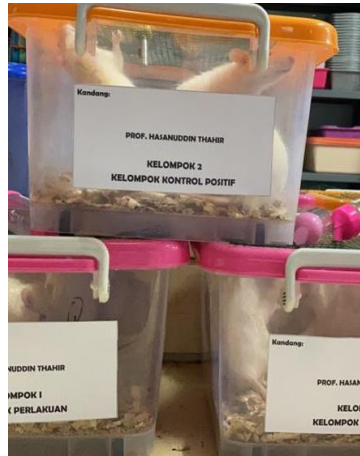- Mematuhi semua aturan yang berlaku.

2. **Foto Penelitian**

Pembuatan Virgin Coconut Oil (*VCO*) 25 Maret 2021
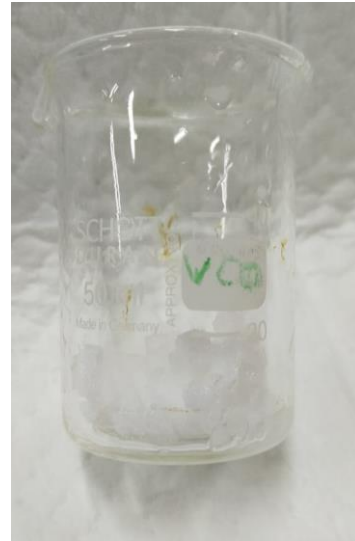
Pembuatan Gel Virgin Coconut Oil (*VCO*) 29 April 2021

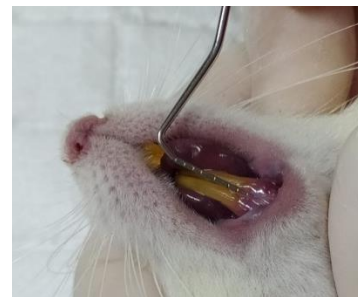**Adaptasi Hewan Coba 17 Mei 2021**

Pembuatan koloni bakteri P.G 21 Mei 2021

Induksi Periodontitis pada hewan coba 25 Mei 2021

Anastesi umum pada hewan coba

Hewan Coba yang mengalami periodontitis 30 Mei 2021
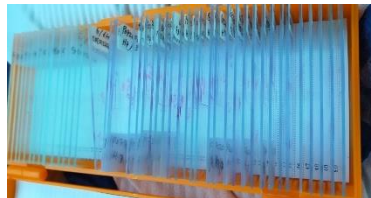

Skeling root planing, Aplikasi gel *VCO* dan aplikasi gel *Metronidazole 25%*

30 Mei 2021

Pengambilan Sampel H3 dan H7 2 Juni 2021 dan 9 Juni 2021

Pembuatan Preparat 24 Juni 2021

3. **Hasil Uji Kandungan Gel *Virgin Coconut Oil (VCO)***

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:\GCMSsolution\Data\Project1\VCO 3i.QGD

TIC
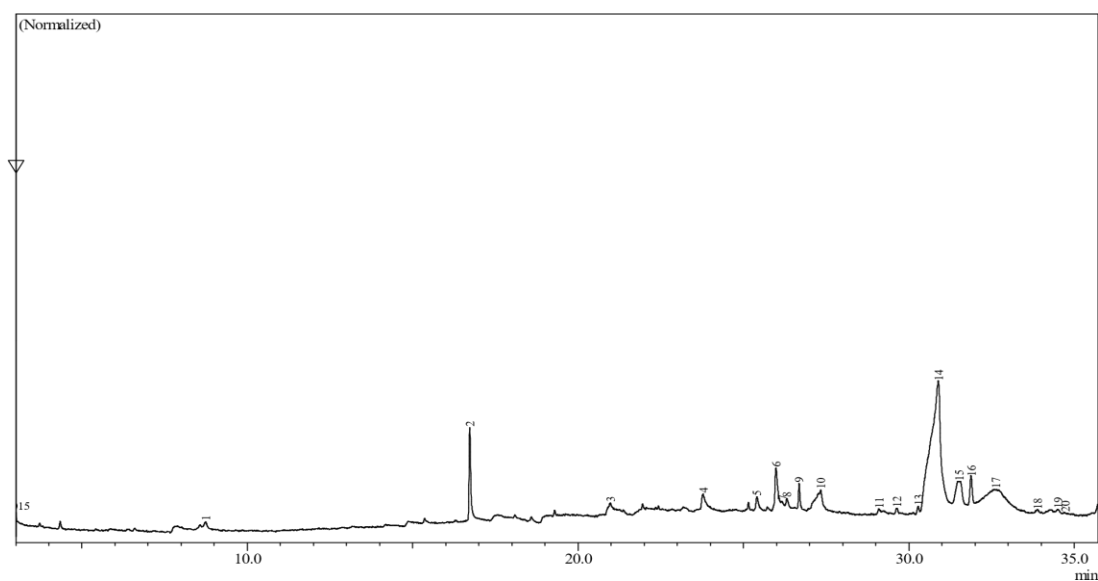
Peak Report TIC

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	Glycidol 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		
20	34.723	123133	0.42	10.56	Piperidine, 1-acetyl-	29016986	100.00

4/05/2021

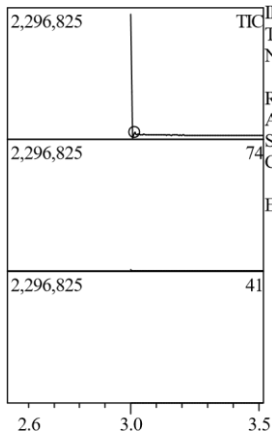# Quantitative Analysis Report

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
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\Octanoic 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 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

4/05/2021 Quantitative Analysis Report

Quantitation   Calibration

69

ID#:1 Mass:TIC
Name:Octanoic
Acid
f(x)=0.000000*x+
0.000000
rr1=0.000000
rr2=0.000000
MeanRF:0.00
RFSD:-- RFRSD:-
CurveType:Least
Square Method

ZeroThrough:Through

WeightedRegression:None External Standard

m/z	Intensity	Ratio
74.00	119	0.23
41.00	2912	5.49

cannot draw

Quantitative Analysis Report

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

| Quantitation				Calibration			
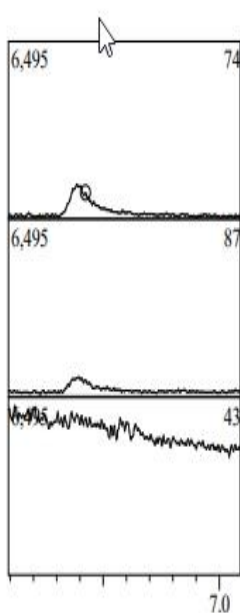
Quantitation

ID#:1   Mass:74.00
Type:Target
Name:DODECANOIC ACID, METHYL ESTER

R.T:6.423
Area:811
SI:33
Conc:0.03765ppm

Event:1:Scan

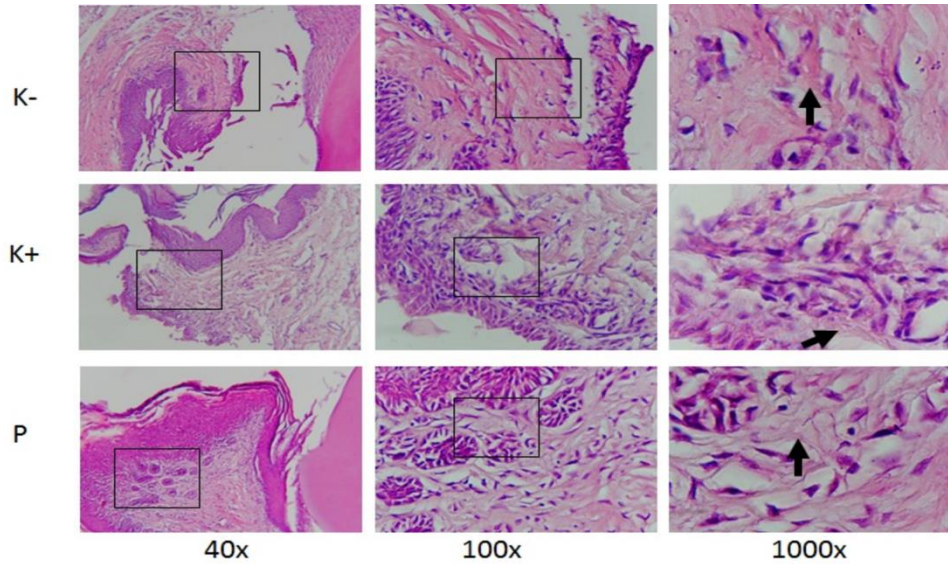| #	m/z	Intensity	Ratio
1	87.00	60	63.16
2	43.00	101	106.32

Calibration

ID#:1   Mass:74.00   Name:DODECANOIC ACID, METHYL ESTER
f(x)=21538.112641*x+0.000000
rr1=1.000000   rr2=1.000000
MeanRF:21538.11   RFSD:--   RFRSD:--
CurveType:Least Square Method
ZeroThrough:Through
WeightedRegression:None
External Standard

#	Conc. (ppm)	Mean Area
1	399.500	8604476.00
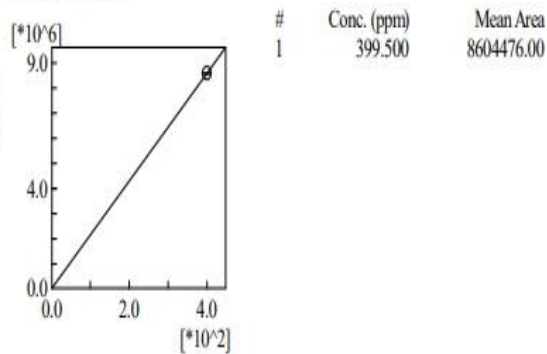
4. Hasil Pemeriksaan Histologi

Pemeriksaan histologis Kolagen hari ke-3
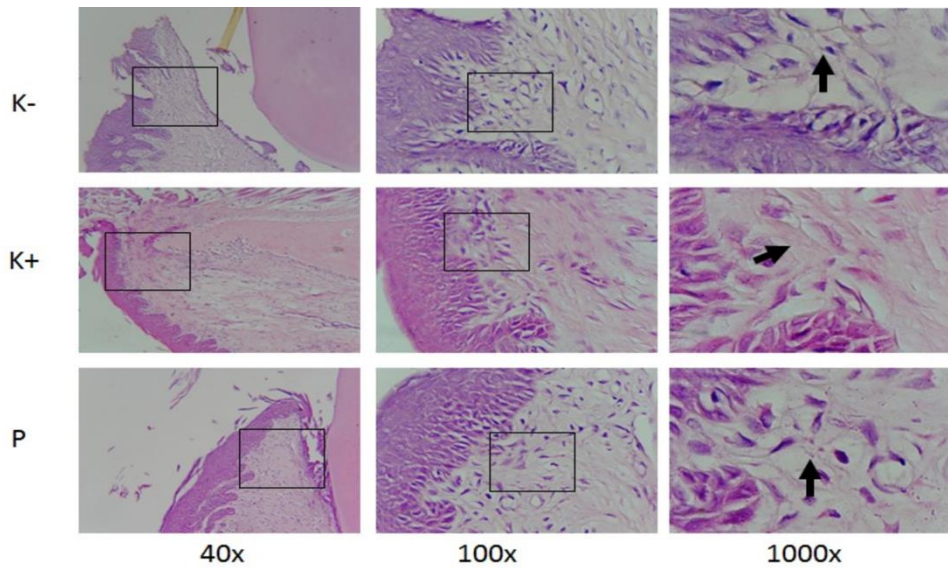
Pemeriksaan histologis Kolagen hari ke-7
2 Agustus 2021

5. Hasil Analisa Data Penelitian

Oneway

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Col	K - (3)	5	203,0750	8,98146	4,01663	191,9230	214,2270	194,67	218,03
	K + (3)	5	233,2150	32,02150	14,32045	193,4551	272,9749	197,98	276,90
	P (3)	5	246,6075	26,22355	11,72753	214,0467	279,1683	218,66	285,94
	K - (7)	5	209,2650	21,45766	9,59616	182,6218	235,9082	186,98	243,98
	K + (7)	5	267,5725	39,08893	17,48110	219,0372	316,1078	207,88	307,56
	P (7)	5	332,5475	20,49860	9,16725	307,0951	357,9999	298,96	354,56
	Total	30	248,7138	50,22248	9,16933	229,9604	267,4671	186,98	354,56

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Col	Between Groups	56337,485	5	11267,497	16,088	,000
	Within Groups	16809,143	24	700,381		
	Total	73146,628	29			

Post Hoc Tests

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) KELOMPOK	(J) KELOMPOK	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Fibr	K - (3)	K + (3)	-2,750	,951	,076	-5,69	,19
		P (3)	-5,250*	,951	,000	-8,19	-2,31
		K - (7)	-2,000	,951	,319	-4,94	,94
Col	K - (3)	K + (3)	-30,14000	16,73775	,484	-81,8920	21,6120
		P (3)	-43,53250	16,73775	,136	-95,2845	8,2195
		K - (7)	-6,19000	16,73775	,999	-57,9420	45,5620
		K + (7)	-64,49750*	16,73775	,009	-116,2495	-12,7455
		P (7)	-129,47250*	16,73775	,000	-181,2245	-77,7205
	K + (3)	K - (3)	30,14000	16,73775	,484	-21,6120	81,8920
		P (3)	-13,39250	16,73775	,965	-65,1445	38,3595
		K - (7)	23,95000	16,73775	,709	-27,8020	75,7020
		K + (7)	-34,35750	16,73775	,344	-86,1095	17,3945
		P (7)	-99,33250*	16,73775	,000	-151,0845	-47,5805
	P (3)	K - (3)	43,53250	16,73775	,136	-8,2195	95,2845
		K + (3)	13,39250	16,73775	,965	-38,3595	65,1445
		K - (7)	37,34250	16,73775	,261	-14,4095	89,0945
		K + (7)	-20,96500	16,73775	,807	-72,7170	30,7870
		P (7)	-85,94000*	16,73775	,000	-137,6920	-34,1880
	K - (7)	K - (3)	6,19000	16,73775	,999	-45,5620	57,9420
		K + (3)	-23,95000	16,73775	,709	-75,7020	27,8020
		P (3)	-37,34250	16,73775	,261	-89,0945	14,4095
		K + (7)	-58,30750*	16,73775	,021	-110,0595	-6,5555
		P (7)	-123,28250*	16,73775	,000	-175,0345	-71,5305
	K + (7)	K - (3)	64,49750*	16,73775	,009	12,7455	116,2495
		K + (3)	34,35750	16,73775	,344	-17,3945	86,1095
		P (3)	20,96500	16,73775	,807	-30,7870	72,7170
		K - (7)	58,30750*	16,73775	,021	6,5555	110,0595
	P (7)	P (7)	-64,97500*	16,73775	,008	-116,7270	-13,2230

	K - (3)	129,47250*	16,73775	,000	77,7205	181,2245
	K + (3)	99,33250*	16,73775	,000	47,5805	151,0845
	P (3)	85,94000*	16,73775	,000	34,1880	137,6920

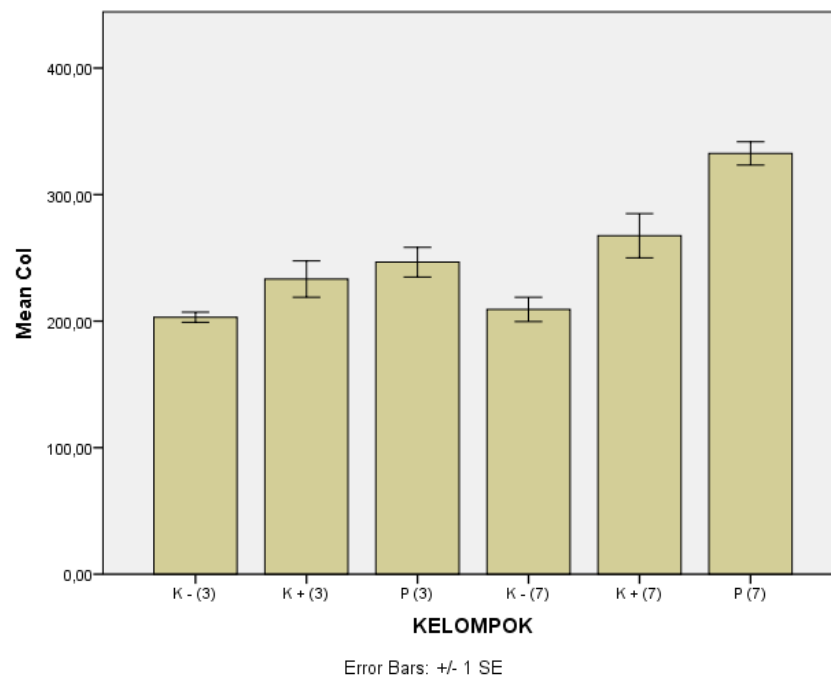*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Col

Tukey HSD[a]

KELOMPOK	N	Subset for alpha = 0.05		
		1	2	3
K - (3)	5	203,0750		
K - (7)	5	209,2650		
K + (3)	5	233,2150	233,2150	
P (3)	5	246,6075	246,6075	
K + (7)	5		267,5725	
P (7)	5			332,5475
Sig.		,136	,344	1,000

Means for groups in homogeneous subsets are displayed.

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

Error Bars: +/- 1 SE

Explore

<div style="text-align: center">**Notes**</div>

Output Created		01-MAR-2022 09:03:34
Comments		
Input	Data	C:\Users\Panasonic\Documents\afdalia.sav
	Active Dataset	DataSet1
	Filter	<none>
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	N of Rows in Working Data File	30
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.

	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.

Syntax		EXAMINE VARIABLES=Col Makr Fibr TGFb1 TNFalpha BY KELOMPOK
		  /PLOT NPPLOT
		  /STATISTICS DESCRIPTIVES
		  /CINTERVAL 95
		  /MISSING LISTWISE
		  /NOTOTAL.

Resources	Processor Time	00:00:27,91
	Elapsed Time	00:00:40,75

[DataSet1] C:\Users\Panasonic\Documents\afdalia.sav

KELOMPOK

Case Processing Summary

	KELOMPOK	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
colagen	K - (3)	5	100,0%	0	0,0%	5	100,0%
	K + (3)	5	100,0%	0	0,0%	5	100,0%
	P (3)	5	100,0%	0	0,0%	5	100,0%
	K - (7)	5	100,0%	0	0,0%	5	100,0%
	K + (7)	5	100,0%	0	0,0%	5	100,0%
	P (7)	5	100,0%	0	0,0%	5	100,0%

Descriptives

	KELOMPOK			Statistic	Std. Error
colagen	K - (3)	Mean		203,0750	4,01663
		95% Confidence Interval for Mean	191,9230		
			214,2270		
		5% Trimmed Mean		202,7111	
		Median		201,6600	
		Variance		80,667	
		Std. Deviation		8,98146	
		Minimum		194,67	

78

	Maximum	218,03	
	Range	23,36	
	Interquartile Range	14,25	
	Skewness	1,503	,913
	Kurtosis	2,702	2,000
	Mean	233,2150	14,32045
	95% Confidence Interval for Mean	193,4551	
		272,9749	
	5% Trimmed Mean	232,7456	
	Median	233,2150	
	Variance	1025,376	
K + (3)	Std. Deviation	32,02150	
	Minimum	197,98	
	Maximum	276,90	
	Range	78,92	
	Interquartile Range	60,86	
	Skewness	,354	,913
	Kurtosis	-1,222	2,000
	Mean	246,6075	11,72753
	95% Confidence Interval for Mean	214,0467	
		279,1683	
	5% Trimmed Mean	245,9750	
	Median	246,6075	
	Variance	687,675	
P (3)	Std. Deviation	26,22355	
	Minimum	218,66	
	Maximum	285,94	
	Range	67,28	
	Interquartile Range	47,02	
	Skewness	,752	,913
	Kurtosis	,297	2,000
	Mean	209,2650	9,59616
	95% Confidence Interval for Mean	182,6218	
		235,9082	
	5% Trimmed Mean	208,5744	
K - (7)	Median	208,6500	
	Variance	460,431	
	Std. Deviation	21,45766	
	Minimum	186,98	
	Maximum	243,98	

	Range	57,00	
	Interquartile Range	34,41	
	Skewness	1,228	,913
	Kurtosis	2,133	2,000
	Mean	267,5725	17,48110
	95% Confidence Interval for Mean	219,0372	
		316,1078	
	5% Trimmed Mean	268,6672	
	Median	267,5725	
	Variance	1527,944	
K + (7)	Std. Deviation	39,08893	
	Minimum	207,88	
	Maximum	307,56	
	Range	99,68	
	Interquartile Range	69,28	
	Skewness	-,869	,913
	Kurtosis	,565	2,000
	Mean	332,5475	9,16725
	95% Confidence Interval for Mean	307,0951	
		357,9999	
	5% Trimmed Mean	333,1906	
	Median	337,5900	
	Variance	420,193	
P (7)	Std. Deviation	20,49860	
	Minimum	298,96	
	Maximum	354,56	
	Range	55,60	
	Interquartile Range	31,07	
	Skewness	-1,297	,913
	Kurtosis	2,690	2,000

Tests of Normality

	KELOMPOK	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
colagen	K - (3)	,300	5	,161	,871	5	,271
	K + (3)	,188	5	,200*	,961	5	,815
	P (3)	,185	5	,200*	,952	5	,752

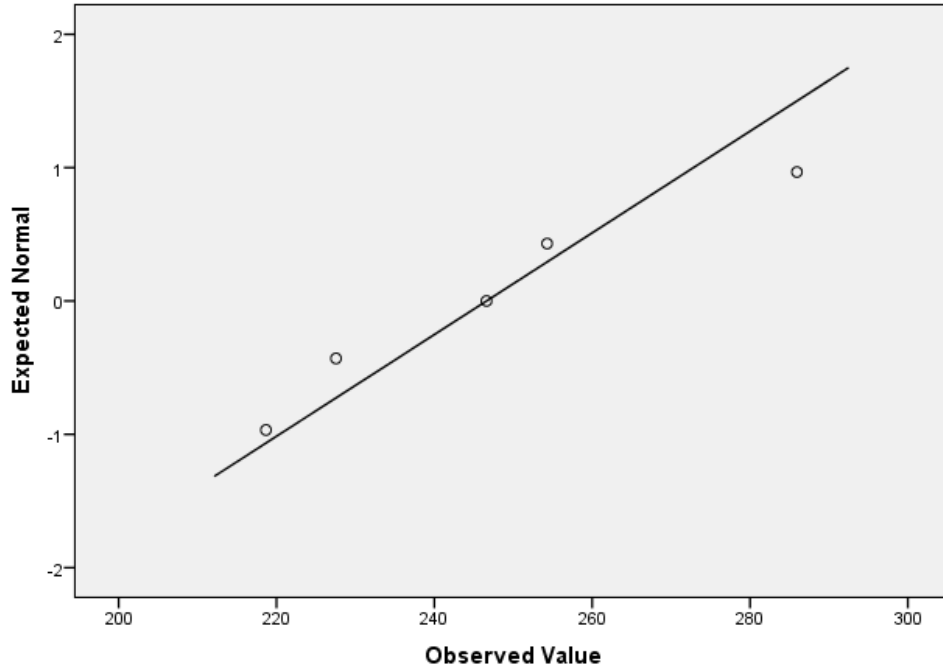|						
K - (7)	,300	5	,161	,901	5	,416
K + (7)	,203	5	,200*	,936	5	,637
P (7)	,300	5	,161	,883	5	,324

*. This is a lower bound of the true significance.
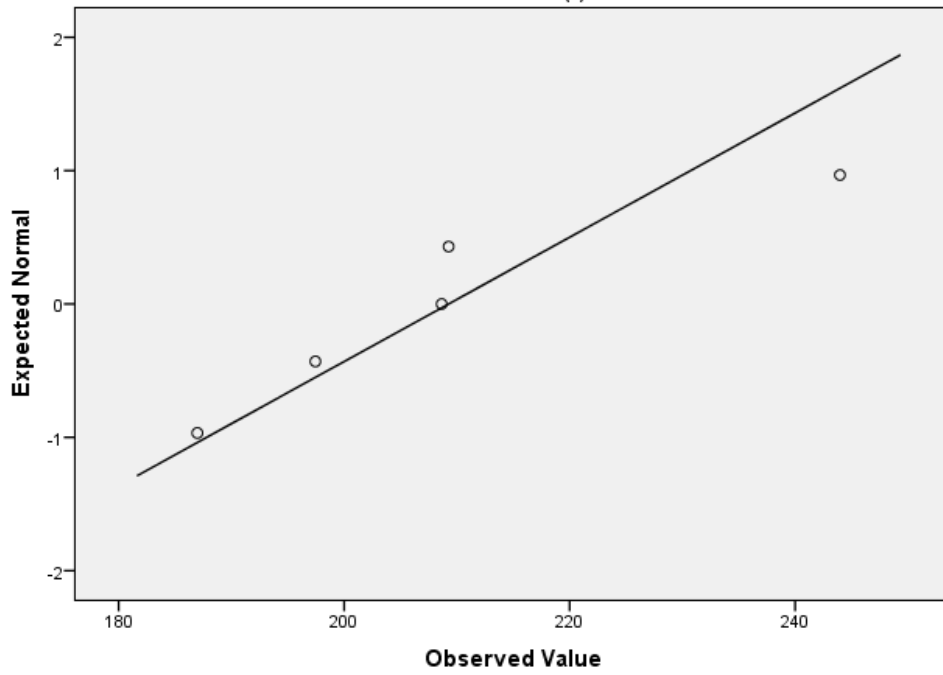
a. Lilliefors Significance Correction

Normal Q-Q Plots

Normal Q-Q Plot of Col
for KELOMPOK= K - (3)

Normal Q-Q Plot of Col
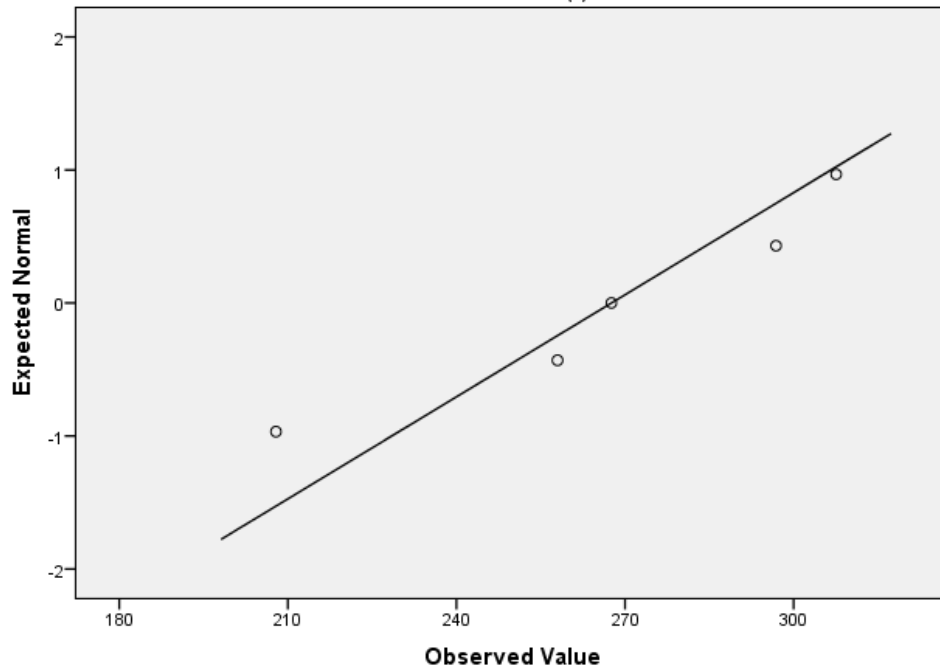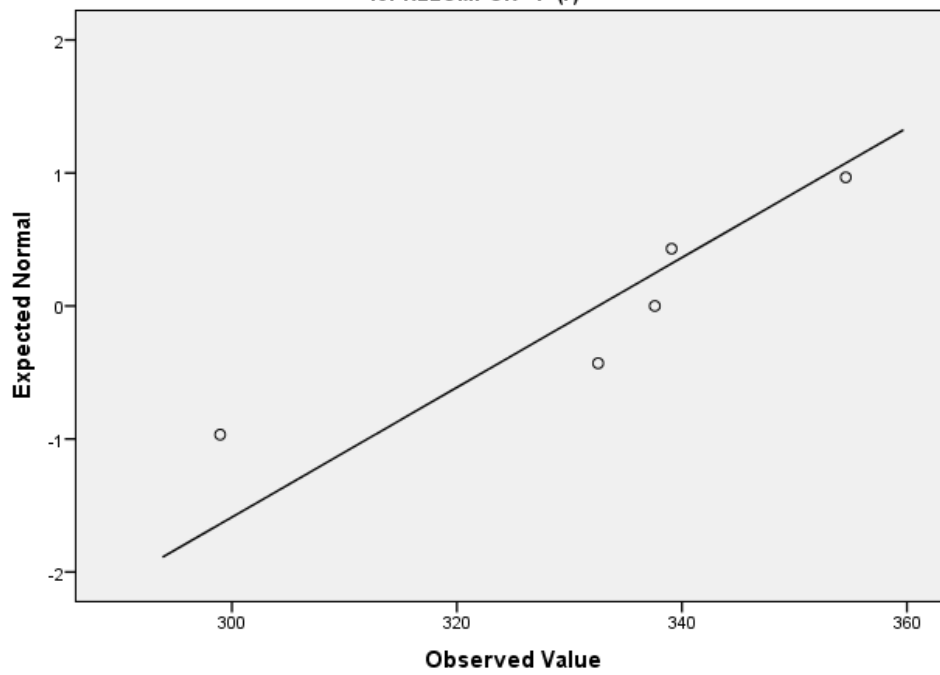for KELOMPOK= K + (3)

81
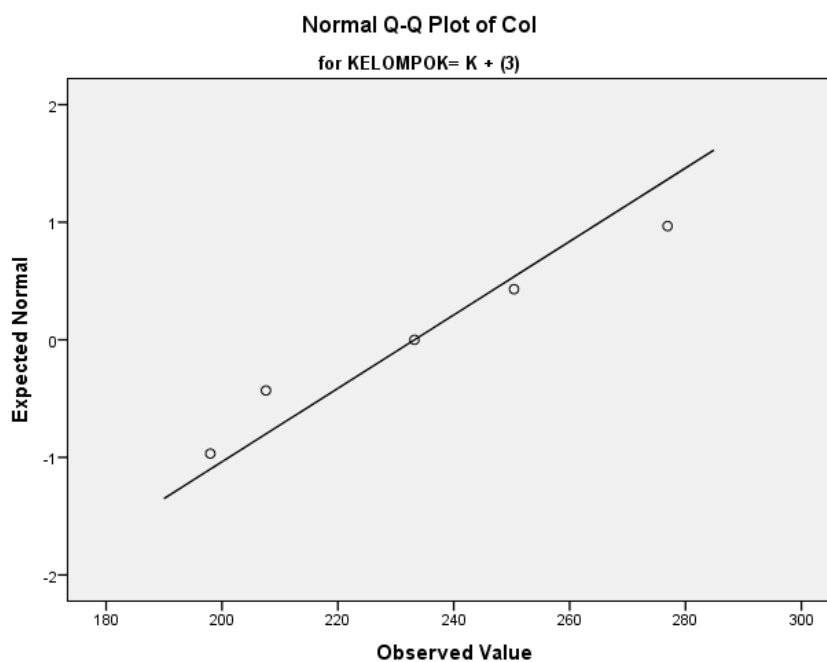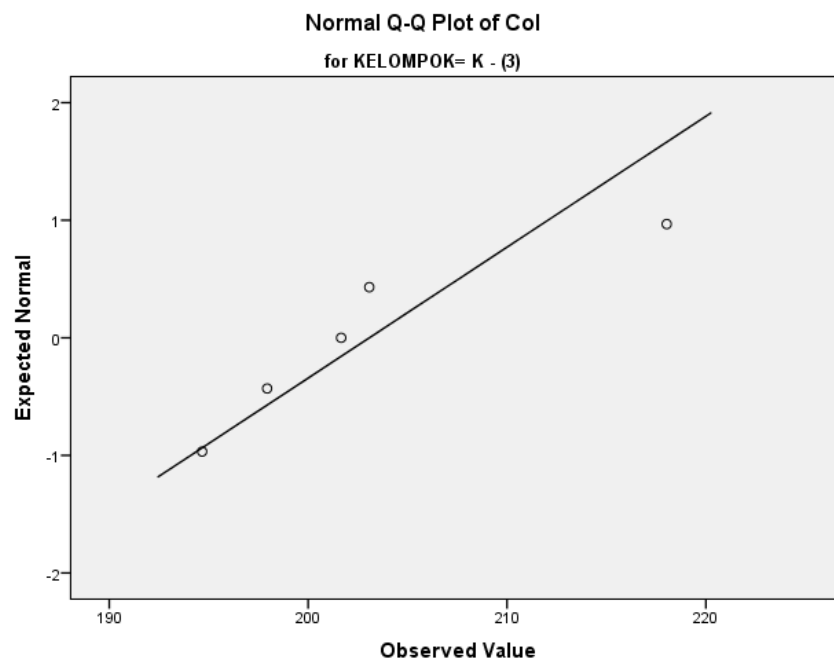
Normal Q-Q Plot of Col

for KELOMPOK= P (3)

Normal Q-Q Plot of Col

for KELOMPOK= K - (7)
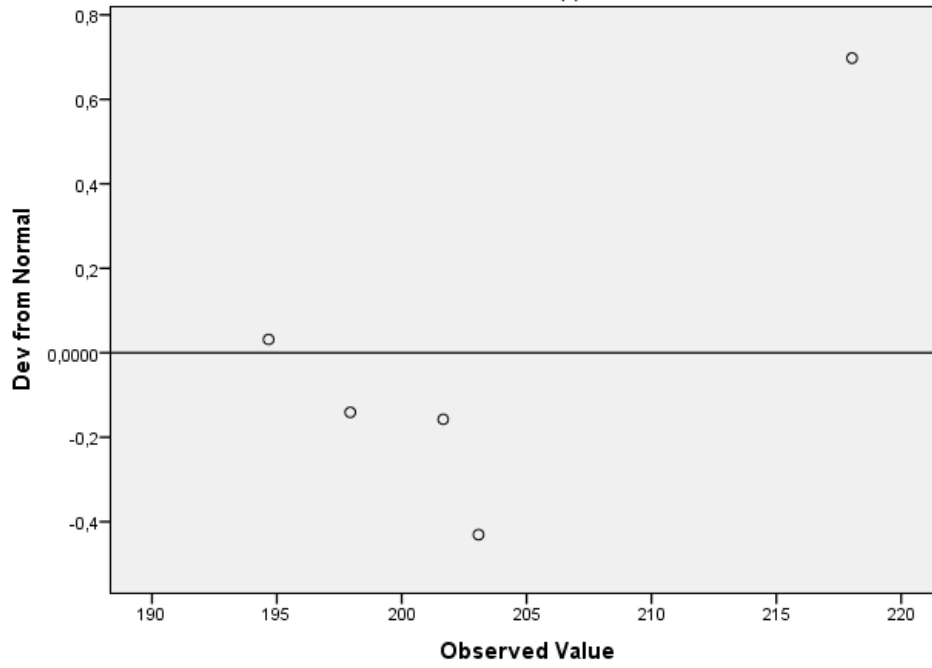
Normal Q-Q Plot of Col

for KELOMPOK= K + (7)

Normal Q-Q Plot of Col

for KELOMPOK= P (7)

Detrended Normal Q-Q Plots

Detrended Normal Q-Q Plot of Col

for KELOMPOK= K - (3)

Detrended Normal Q-Q Plot of Col

for KELOMPOK= K + (3)

Detrended Normal Q-Q Plot of Col

for KELOMPOK= P (3)

Detrended Normal Q-Q Plot of Col

for KELOMPOK= K - (7)

Detrended Normal Q-Q Plot of Col
for KELOMPOK= K + (7)

Detrended Normal Q-Q Plot of Col
for KELOMPOK= P (7)