

LAMPIRAN

Lampiran 1. Formulir *Informed Consent* dan Uji Mutu Hedonik

FORMULIR PERNYATAAN KETERSEDIAAN SEBAGAI PANELIS (*INFORMED CONSENT*)

Saya yang bertanda tangan di bawah ini menyatakan bahwa:

1. Saya menyetujui partisipasi saya dalam penelitian yang dilakukan oleh:
Nama : Venus Camelia Aisyah
Judul : Karakteristik Kimia, Fisik, dan Mutu Hedonik
Sosis Ayam dengan Penambahan Tepung Ampas Tahu
2. Saya tidak memiliki alergi pada bahan makanan yang diujikan yaitu kedelai, gandum, dan produk turunannya, serta bersedia menjadi panelis dalam pengujian mutu hedonik pada produk Sosis Tepung Ampas Tahu.

Peneliti

Calon Panelis

Venus Camelia Aisyah

(.....)

FORMULIR UJI HEDONIK SOSIS AYAM DENGAN PENAMBAHAN TEPUNG AMPAS TAHU

Nama : Tanggal Uji :
NIM : Usia :

➤ Instruksi

1. Cicipilah setiap sampel dan cermati setiap parameter yang tercantum pada tabel.
2. Berilah angka penilaian pada setiap sampel dari 1 sampai 4 sesuai dengan keterangan yang sudah tersedia.
3. Netralkan indera perasa dengan air mineral yang tidak berasa, berwarna, maupun berbau.
4. Berikan komentar singkat pada setiap sampel tentang alasan kesukaan/ketidaksukaan.

Kode	Parameter				
	Warna	Aroma	Rasa	Tekstur	Overall
157					
283					
410					
625					
549					

Keterangan:

1. Sangat tidak suka
2. Tidak suka
3. Suka
4. Sangat suka

Urutan sampel dari yang paling disukai hingga paling tidak disukai:

.....>.....>.....>.....>.....

Komentar:

157 :
.....
283 :
.....
410 :
.....
625 :
.....
549 :
.....

Lampiran 2. Data Uji Kadar Air

Ulangan	Perlakuan				
	P ₀	P ₁	P ₂	P ₃	P ₄
U ₁	57,46%	56,25%	55,82%	54,11%	53,48%
U ₂	58,36%	56,14%	55,87%	54,28%	51,54%
U ₃	58,76%	58,17%	56,30%	54,99%	54,77%
U ₄	58,82%	56,51%	56,65%	54,60%	54,35%

Keterangan:

P₀ = Penambahan Tepung Ampas Tahu 0%

P₁ = Penambahan Tepung Ampas Tahu 2,5%

P₂ = Penambahan Tepung Ampas Tahu 5%

P₃ = Penambahan Tepung Ampas Tahu 7,5%

P₄ = Penambahan Tepung Ampas Tahu 10%

Lampiran 3. Data Uji Kadar Serat Kasar

Ulangan	Perlakuan				
	P ₀	P ₁	P ₂	P ₃	P ₄
U ₁	1,80%	3,69%	3,50%	4,40%	4,10%
U ₂	2,70%	3,70%	4,59%	3,20%	3,19%
U ₃	4,70%	2,79%	3,09%	2,39%	2,29%
U ₄	3,29%	2,20%	2,70%	4,89%	1,89%

Keterangan:

P₀ = Penambahan Tepung Ampas Tahu 0%

P₁ = Penambahan Tepung Ampas Tahu 2,5%

P₂ = Penambahan Tepung Ampas Tahu 5%

P₃ = Penambahan Tepung Ampas Tahu 7,5%

P₄ = Penambahan Tepung Ampas Tahu 10%

Lampiran 4. Data Uji Tekstur (*Hardness*)

A. Data Mentah

Ulangan	Perlakuan (gf)				
	P ₀	P ₁	P ₂	P ₃	P ₄
U ₁	372,40	470,20	511,00	635,40	795,40
U ₂	345,00	494,40	360,00	371,60	514,20
U ₃	421,60	400,80	445,20	681,80	725,80
U ₄	399,80	494,20	387,00	593,00	520,60

Keterangan:

P₀ = Penambahan Tepung Ampas Tahu 0%

P₁ = Penambahan Tepung Ampas Tahu 2,5%

P₂ = Penambahan Tepung Ampas Tahu 5%

P₃ = Penambahan Tepung Ampas Tahu 7,5%

P₄ = Penambahan Tepung Ampas Tahu 10%

B. Data setelah Transformasi Logaritma Natural (Ln)

Ulangan	Perlakuan (gf)				
	P ₀	P ₁	P ₂	P ₃	P ₄
U ₁	5,92	6,15	6,24	6,45	6,68
U ₂	5,84	6,20	5,89	5,92	6,24
U ₃	6,04	5,99	6,10	6,52	6,59
U ₄	5,99	6,20	5,96	6,39	6,25

Keterangan:

P₀ = Penambahan Tepung Ampas Tahu 0%

P₁ = Penambahan Tepung Ampas Tahu 2,5%

P₂ = Penambahan Tepung Ampas Tahu 5%

P₃ = Penambahan Tepung Ampas Tahu 7,5%

P₄ = Penambahan Tepung Ampas Tahu 10%

Lampiran 5. Data Uji Mutu Hedonik

Panelis	Kode Sampel	Warna	Aroma	Rasa	Tekstur	<i>Overall</i>
AP	410 = P ₀	4	4	4	4	4
JS	410 = P ₀	3	4	3	4	4
HA	410 = P ₀	4	3	4	4	4
NS	410 = P ₀	4	4	3	3	3
DS	410 = P ₀	3	4	3	3	4
FD	410 = P ₀	4	4	3	4	3
JK	410 = P ₀	4	4	3	4	4
LK	410 = P ₀	4	3	4	4	4
SM	410 = P ₀	4	3	4	4	4
KK	410 = P ₀	3	4	4	4	4
KR	410 = P ₀	3	3	4	4	4
JZ	410 = P ₀	3	3	4	3	3
SH	410 = P ₀	3	3	3	3	3
NS	410 = P ₀	2	3	3	4	4
ND	410 = P ₀	3	4	4	3	4
GN	410 = P ₀	3	3	4	3	3
RL	410 = P ₀	3	2	3	4	3
RZ	410 = P ₀	3	2	3	2	3
LN	410 = P ₀	3	3	4	4	4
NS	410 = P ₀	3	3	3	3	3
HM	410 = P ₀	3	4	4	4	4
NR	410 = P ₀	4	4	4	4	4
IP	410 = P ₀	3	4	4	4	4
NA	410 = P ₀	4	4	4	4	4
GN	410 = P ₀	3	3	3	3	3
JH	410 = P ₀	4	3	4	4	4
ZA	410 = P ₀	4	3	3	3	4
KN	410 = P ₀	3	3	4	4	4
SK	410 = P ₀	3	3	4	4	4
DF	410 = P ₀	2	4	4	4	4

Panelis	Kode Sampel	Warna	Aroma	Rasa	Tekstur	Overall
AP	157 = P ₁	4	4	4	4	4
JS	157 = P ₁	4	3	3	4	4
HA	157 = P ₁	4	3	4	4	3
NS	157 = P ₁	4	4	4	3	4
DS	157 = P ₁	4	4	3	2	4
FD	157 = P ₁	4	4	4	4	4
JK	157 = P ₁	4	3	4	4	4
LK	157 = P ₁	3	3	3	3	3
SM	157 = P ₁	3	2	3	3	3
KK	157 = P ₁	3	4	4	4	4
KR	157 = P ₁	3	3	3	4	3
JZ	157 = P ₁	3	4	3	2	2
SH	157 = P ₁	4	4	4	4	4
NS	157 = P ₁	4	4	3	3	4
ND	157 = P ₁	3	4	3	3	3
GN	157 = P ₁	3	3	3	4	4
RL	157 = P ₁	2	1	2	4	3
RZ	157 = P ₁	3	3	3	2	2
LN	157 = P ₁	3	4	3	2	2
NS	157 = P ₁	3	4	4	4	4
HM	157 = P ₁	3	3	3	2	3
NR	157 = P ₁	3	4	3	3	3
IP	157 = P ₁	2	3	3	1	2
NA	157 = P ₁	4	3	3	4	3
GN	157 = P ₁	3	2	1	1	2
JH	157 = P ₁	1	3	2	3	3
ZA	157 = P ₁	4	4	4	3	4
KN	157 = P ₁	3	3	4	3	4
SK	157 = P ₁	3	3	4	4	4
DF	157 = P ₁	3	4	4	3	3

Panelis	Kode Sampel	Warna	Aroma	Rasa	Tekstur	Overall
AP	625 = P ₂	3	4	3	3	3
JS	625 = P ₂	3	3	3	3	3
HA	625 = P ₂	3	3	3	2	2
NS	625 = P ₂	3	4	3	2	2
DS	625 = P ₂	3	4	2	3	3
FD	625 = P ₂	2	3	3	2	3
JK	625 = P ₂	3	3	2	3	3
LK	625 = P ₂	2	3	3	2	2
SM	625 = P ₂	4	3	3	3	3
KK	625 = P ₂	3	3	4	3	3
KR	625 = P ₂	4	3	3	3	3
JZ	625 = P ₂	3	3	2	1	2
SH	625 = P ₂	4	3	2	2	3
NS	625 = P ₂	3	3	4	3	3
ND	625 = P ₂	3	3	3	2	3
GN	625 = P ₂	2	3	4	2	3
RL	625 = P ₂	3	3	3	2	2
RZ	625 = P ₂	3	2	2	2	2
LN	625 = P ₂	4	3	2	3	3
NS	625 = P ₂	3	3	3	3	3
HM	625 = P ₂	3	2	3	3	3
NR	625 = P ₂	3	3	2	3	3
IP	625 = P ₂	4	4	2	3	3
NA	625 = P ₂	4	4	2	3	3
GN	625 = P ₂	3	3	2	2	3
JH	625 = P ₂	3	3	3	3	3
ZA	625 = P ₂	3	3	4	3	2
KN	625 = P ₂	3	3	3	2	3
SK	625 = P ₂	3	3	3	3	3
DF	625 = P ₂	4	4	3	2	3

Panelis	Kode Sampel	Warna	Aroma	Rasa	Tekstur	<i>Overall</i>
AP	283 = P ₃	4	3	3	2	3
JS	283 = P ₃	3	3	2	2	2
HA	283 = P ₃	2	3	3	3	3
NS	283 = P ₃	3	4	2	1	2
DS	283 = P ₃	4	3	2	2	3
FD	283 = P ₃	2	3	2	3	2
JK	283 = P ₃	3	3	3	3	3
LK	283 = P ₃	2	3	2	1	2
SM	283 = P ₃	4	3	3	2	3
KK	283 = P ₃	3	3	3	2	3
KR	283 = P ₃	2	3	2	2	2
JZ	283 = P ₃	3	3	2	1	2
SH	283 = P ₃	2	2	2	2	2
NS	283 = P ₃	3	3	2	2	3
ND	283 = P ₃	4	3	2	3	3
GN	283 = P ₃	4	3	2	1	2
RL	283 = P ₃	3	2	2	1	2
RZ	283 = P ₃	3	3	2	2	2
LN	283 = P ₃	3	2	1	3	2
NS	283 = P ₃	2	3	2	2	2
HM	283 = P ₃	4	2	2	1	2
NR	283 = P ₃	2	3	3	2	2
IP	283 = P ₃	2	3	3	2	3
NA	283 = P ₃	4	3	2	2	2
GN	283 = P ₃	3	2	1	1	2
JH	283 = P ₃	3	2	2	1	1
ZA	283 = P ₃	3	3	3	3	3
KN	283 = P ₃	3	3	3	2	3
SK	283 = P ₃	3	3	3	2	3
DF	283 = P ₃	4	2	1	2	1

Panelis	Kode Sampel	Warna	Aroma	Rasa	Tekstur	Overall
AP	549 = P ₄	3	3	3	2	3
JS	549 = P ₄	4	3	2	2	2
HA	549 = P ₄	3	3	3	2	2
NS	549 = P ₄	3	2	2	2	2
DS	549 = P ₄	4	3	2	2	2
FD	549 = P ₄	2	3	2	2	2
JK	549 = P ₄	3	3	2	2	3
LK	549 = P ₄	1	2	1	1	1
SM	549 = P ₄	3	3	2	2	2
KK	549 = P ₄	3	2	2	2	2
KR	549 = P ₄	3	2	2	2	2
JZ	549 = P ₄	2	3	1	1	1
SH	549 = P ₄	2	3	2	2	2
NS	549 = P ₄	4	2	2	3	3
ND	549 = P ₄	3	3	3	2	3
GN	549 = P ₄	3	3	2	1	1
RL	549 = P ₄	4	2	1	1	2
RZ	549 = P ₄	3	2	2	1	1
LN	549 = P ₄	2	1	1	3	1
NS	549 = P ₄	2	3	3	2	2
HM	549 = P ₄	2	2	2	2	2
NR	549 = P ₄	2	3	2	2	2
IP	549 = P ₄	2	3	2	2	1
NA	549 = P ₄	4	4	3	2	2
GN	549 = P ₄	3	2	2	2	2
JH	549 = P ₄	2	2	1	2	2
ZA	549 = P ₄	3	3	3	3	2
KN	549 = P ₄	3	3	3	2	2
SK	549 = P ₄	3	3	3	2	3
DF	549 = P ₄	2	2	1	1	1

Lampiran 6. *Output* SPSS Uji Normalitas Kadar Air

Tests of Normality							
	Perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Kadar Air (%)	P0	.256	4	.	.849	4	.222
	P1	.357	4	.	.768	4	.056
	P2	.271	4	.	.897	4	.417
	P3	.210	4	.	.961	4	.786
	P4	.235	4	.	.906	4	.461

a. Lilliefors Significance Correction

Lampiran 7. *Output* SPSS Uji Homogenitas Kadar Air

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Kadar Air (%)	Based on Mean	1.745	4	15	.193
	Based on Median	1.001	4	15	.437
	Based on Median and with adjusted df	1.001	4	7.821	.461
	Based on trimmed mean	1.645	4	15	.215

Lampiran 8. *Output* SPSS Uji Normalitas Kadar Serat Kasar

Tests of Normality							
	Perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Serat	P0	.195	4	.	.984	4	.925
	P1	.291	4	.	.864	4	.273
	P2	.235	4	.	.938	4	.642
	P3	.225	4	.	.950	4	.717
	P4	.221	4	.	.956	4	.754

a. Lilliefors Significance Correction

Lampiran 9. *Output* SPSS Uji Homogenitas Kadar Serat Kasar

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Serat	Based on Mean	.469	4	15	.758
	Based on Median	.421	4	15	.791
	Based on Median and with adjusted df	.421	4	11.186	.791
	Based on trimmed mean	.468	4	15	.758

Lampiran 10. *Output* SPSS Uji Normalitas Tekstur (*Hardness*)

Tests of Normality							
	Perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
ln_hardness	P0	.182	4	.	.984	4	.922
	P1	.310	4	.	.786	4	.079
	P2	.211	4	.	.965	4	.811
	P3	.343	4	.	.813	4	.128
	P4	.296	4	.	.830	4	.167

a. Lilliefors Significance Correction

Lampiran 11. *Output* SPSS Uji Homogenitas Tekstur (*Hardness*)

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
ln_hardness	Based on Mean	2.605	4	15	.078
	Based on Median	1.031	4	15	.424
	Based on Median and with adjusted df	1.031	4	4.805	.476
	Based on trimmed mean	2.268	4	15	.110

Lampiran 12. *Output* SPSS Uji ANOVA Kadar Air

Descriptives

Kadar Air (%)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	4	58.3500	.62748	.31374	57.3515	59.3485	57.46	58.82
P1	4	56.7675	.94778	.47389	55.2594	58.2756	56.14	58.17
P2	4	56.1600	.39132	.19566	55.5373	56.7827	55.82	56.65
P3	4	54.4950	.38751	.19376	53.8784	55.1116	54.11	54.99
P4	4	53.5350	1.43440	.71720	51.2526	55.8174	51.54	54.77
Total	20	55.8615	1.89859	.42454	54.9729	56.7501	51.54	58.82

ANOVA

Kadar Air (%)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	57.530	4	14.382	19.687	.000
Within Groups	10.958	15	.731		
Total	68.488	19			

Kadar Air (%)

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
P4	4	53.5350		
P3	4	54.4950		
P2	4		56.1600	
P1	4		56.7675	
P0	4			58.3500
Sig.		.133	.331	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

Lampiran 13. *Output* SPSS Uji ANOVA Kadar Serat Kasar

Descriptives

Serat								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	4	3.1225	1.21711	.60856	1.1858	5.0592	1.80	4.70
P1	4	3.0950	.73351	.36675	1.9278	4.2622	2.20	3.70
P2	4	3.4700	.81498	.40749	2.1732	4.7668	2.70	4.59
P3	4	3.7200	1.13587	.56793	1.9126	5.5274	2.39	4.89
P4	4	2.8675	.98524	.49262	1.2998	4.4352	1.89	4.10
Total	20	3.2550	.93630	.20936	2.8168	3.6932	1.80	4.89

ANOVA

Serat					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.823	4	.456	.461	.763
Within Groups	14.833	15	.989		
Total	16.656	19			

Lampiran 14. *Output* SPSS Uji ANOVA Tekstur (*Hardness*)

Descriptives

In_hardness								
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
P0	4	5.9496	.08710	.04355	5.8110	6.0882	5.84	6.04
P1	4	6.1382	.09934	.04967	5.9801	6.2963	5.99	6.20
P2	4	6.0449	.15517	.07758	5.7980	6.2918	5.89	6.24
P3	4	6.3205	.27443	.13722	5.8838	6.7572	5.92	6.52
P4	4	6.4409	.22504	.11252	6.0828	6.7990	6.24	6.68
Total	20	6.1788	.24560	.05492	6.0639	6.2938	5.84	6.68

ANOVA

In_hardness					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.644	4	.161	4.803	.011
Within Groups	.502	15	.033		
Total	1.146	19			

In_hardness

Duncan^a

Perlakuan	N	Subset for alpha = 0.05		
		1	2	3
P0	4	5.9496		
P2	4	6.0449	6.0449	
P1	4	6.1382	6.1382	
P3	4		6.3205	6.3205
P4	4			6.4409
Sig.		.187	.060	.367

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

Lampiran 15. *Output* SPSS Uji *Kruskal Wallis* Mutu Hedonik

Test Statistics^{a,b}

	Warna	Aroma	Rasa	Tekstur	Overall
Kruskal-Wallis H	10.566	32.681	70.622	76.830	82.221
df	4	4	4	4	4
Asymp. Sig.	.032	.000	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Sosis

Lampiran 16. Output SPSS Uji Mann Whitney Hedonik Warna

Ranks				
	Sosis	N	Mean Rank	Sum of Ranks
Warna	410_P0	30	30.85	925.50
	157_P1	30	30.15	904.50
	Total	60		

Test Statistics^a

Warna	
Mann-Whitney U	439.500
Wilcoxon W	904.500
Z	-.175
Asymp. Sig. (2-tailed)	.861

a. Grouping Variable: Sosis

Ranks				
	Sosis	N	Mean Rank	Sum of Ranks
Warna	410_P0	30	32.68	980.50
	625_P2	30	28.32	849.50
	Total	60		

Test Statistics^a

Warna	
Mann-Whitney U	384.500
Wilcoxon W	849.500
Z	-1.127
Asymp. Sig. (2-tailed)	.260

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	410_P0	30	33.80	1014.00
	283_P3	30	27.20	816.00
	Total	60		

Test Statistics^a

Warna

Mann-Whitney U	351.000
Wilcoxon W	816.000
Z	-1.611
Asymp. Sig. (2-tailed)	.107

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	410_P0	30	36.18	1085.50
	549_P4	30	24.82	744.50
	Total	60		

Test Statistics^a

Warna

Mann-Whitney U	279.500
Wilcoxon W	744.500
Z	-2.758
Asymp. Sig. (2-tailed)	.006

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	157_P1	30	32.25	967.50
	625_P2	30	28.75	862.50
	Total	60		

Test Statistics^a

Warna	
Mann-Whitney U	397.500
Wilcoxon W	862.500
Z	-.892
Asymp. Sig. (2-tailed)	.372

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	157_P1	30	33.30	999.00
	283_P3	30	27.70	831.00
	Total	60		

Test Statistics^a

Warna	
Mann-Whitney U	366.000
Wilcoxon W	831.000
Z	-1.356
Asymp. Sig. (2-tailed)	.175

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	157_P1	30	35.60	1068.00
	549_P4	30	25.40	762.00
	Total	60		

Test Statistics^a

Warna	
Mann-Whitney U	297.000
Wilcoxon W	762.000
Z	-2.456
Asymp. Sig. (2-tailed)	.014

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	625_P2	30	31.97	959.00
	283_P3	30	29.03	871.00
	Total	60		

Test Statistics^a

Warna	
Mann-Whitney U	406.000
Wilcoxon W	871.000
Z	-.729
Asymp. Sig. (2-tailed)	.466

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	625_P2	30	34.52	1035.50
	549_P4	30	26.48	794.50
	Total	60		

Test Statistics^a

Warna

Mann-Whitney U	329.500
Wilcoxon W	794.500
Z	-1.992
Asymp. Sig. (2-tailed)	.046

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Warna	283_P3	30	32.83	985.00
	549_P4	30	28.17	845.00
	Total	60		

Test Statistics^a

Warna

Mann-Whitney U	380.000
Wilcoxon W	845.000
Z	-1.115
Asymp. Sig. (2-tailed)	.265

a. Grouping Variable: Sosis

Lampiran 17. Output SPSS Uji Mann Whitney Hedonik Aroma

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	410_P0	30	30.35	910.50
	157_P1	30	30.65	919.50
	Total	60		

Test Statistics^a

Aroma	
Mann-Whitney U	445.500
Wilcoxon W	910.500
Z	-.074
Asymp. Sig. (2-tailed)	.941

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	410_P0	30	33.77	1013.00
	625_P2	30	27.23	817.00
	Total	60		

Test Statistics^a

Aroma	
Mann-Whitney U	352.000
Wilcoxon W	817.000
Z	-1.692
Asymp. Sig. (2-tailed)	.091

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	410_P0	30	37.52	1125.50
	283_P3	30	23.48	704.50
	Total	60		

Test Statistics^a

Aroma

Mann-Whitney U	239.500
Wilcoxon W	704.500
Z	-3.594
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	410_P0	30	38.97	1169.00
	549_P4	30	22.03	661.00
	Total	60		

Test Statistics^a

Aroma

Mann-Whitney U	196.000
Wilcoxon W	661.000
Z	-4.133
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	157_P1	30	33.80	1014.00
	625_P2	30	27.20	816.00
	Total	60		

Test Statistics^a

Aroma

Mann-Whitney U	351.000
Wilcoxon W	816.000
Z	-1.674
Asymp. Sig. (2-tailed)	.094

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	157_P1	30	37.30	1119.00
	283_P3	30	23.70	711.00
	Total	60		

Test Statistics^a

Aroma

Mann-Whitney U	246.000
Wilcoxon W	711.000
Z	-3.409
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	157_P1	30	38.60	1158.00
	549_P4	30	22.40	672.00
	Total	60		

Test Statistics^a

Aroma	
Mann-Whitney U	207.000
Wilcoxon W	672.000
Z	-3.898
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	625_P2	30	34.83	1045.00
	283_P3	30	26.17	785.00
	Total	60		

Test Statistics^a

Aroma	
Mann-Whitney U	320.000
Wilcoxon W	785.000
Z	-2.480
Asymp. Sig. (2-tailed)	.013

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	625_P2	30	36.87	1106.00
	549_P4	30	24.13	724.00
	Total	60		

Test Statistics^a

Aroma

Mann-Whitney U	259.000
Wilcoxon W	724.000
Z	-3.342
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Aroma	283_P3	30	33.03	991.00
	549_P4	30	27.97	839.00
	Total	60		

Test Statistics^a

Aroma

Mann-Whitney U	374.000
Wilcoxon W	839.000
Z	-1.344
Asymp. Sig. (2-tailed)	.179

a. Grouping Variable: Sosis

Lampiran 18. Output SPSS Uji Mann Whitney Hedonik Rasa

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	410_P0	30	34.10	1023.00
	157_P1	30	26.90	807.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	342.000
Wilcoxon W	807.000
Z	-1.803
Asymp. Sig. (2-tailed)	.071

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	410_P0	30	39.50	1185.00
	625_P2	30	21.50	645.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	180.000
Wilcoxon W	645.000
Z	-4.343
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	410_P0	30	43.50	1305.00
	283_P3	30	17.50	525.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	60.000
Wilcoxon W	525.000
Z	-6.074
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	410_P0	30	43.90	1317.00
	549_P4	30	17.10	513.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	48.000
Wilcoxon W	513.000
Z	-6.209
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	157_P1	30	36.03	1081.00
	625_P2	30	24.97	749.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	284.000
Wilcoxon W	749.000
Z	-2.685
Asymp. Sig. (2-tailed)	.007

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	157_P1	30	40.82	1224.50
	283_P3	30	20.18	605.50
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	140.500
Wilcoxon W	605.500
Z	-4.856
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	157_P1	30	41.53	1246.00
	549_P4	30	19.47	584.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	119.000
Wilcoxon W	584.000
Z	-5.137
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	625_P2	30	36.67	1100.00
	283_P3	30	24.33	730.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	265.000
Wilcoxon W	730.000
Z	-3.007
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	625_P2	30	38.03	1141.00
	549_P4	30	22.97	689.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	224.000
Wilcoxon W	689.000
Z	-3.617
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Rasa	283_P3	30	32.40	972.00
	549_P4	30	28.60	858.00
	Total	60		

Test Statistics^a

Rasa	
Mann-Whitney U	393.000
Wilcoxon W	858.000
Z	-.940
Asymp. Sig. (2-tailed)	.347

a. Grouping Variable: Sosis

Lampiran 19. Output SPSS Uji Mann Whitney Hedonik Tekstur

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	410_P0	30	34.92	1047.50
	157_P1	30	26.08	782.50
	Total	60		

Test Statistics^a

Tekstur	
Mann-Whitney U	317.500
Wilcoxon W	782.500
Z	-2.189
Asymp. Sig. (2-tailed)	.029

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	410_P0	30	42.18	1265.50
	625_P2	30	18.82	564.50
	Total	60		

Test Statistics^a

Tekstur	
Mann-Whitney U	99.500
Wilcoxon W	564.500
Z	-5.550
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	410_P0	30	44.13	1324.00
	283_P3	30	16.87	506.00
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	41.000
Wilcoxon W	506.000
Z	-6.296
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	410_P0	30	44.60	1338.00
	549_P4	30	16.40	492.00
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	27.000
Wilcoxon W	492.000
Z	-6.574
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	157_P1	30	36.87	1106.00
	625_P2	30	24.13	724.00
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	259.000
Wilcoxon W	724.000
Z	-3.017
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	157_P1	30	40.43	1213.00
	283_P3	30	20.57	617.00
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	152.000
Wilcoxon W	617.000
Z	-4.584
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	157_P1	30	40.95	1228.50
	549_P4	30	20.05	601.50
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	136.500
Wilcoxon W	601.500
Z	-4.896
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	625_P2	30	37.33	1120.00
	283_P3	30	23.67	710.00
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	245.000
Wilcoxon W	710.000
Z	-3.309
Asymp. Sig. (2-tailed)	.001

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	625_P2	30	38.35	1150.50
	549_P4	30	22.65	679.50
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	214.500
Wilcoxon W	679.500
Z	-3.904
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Tekstur	283_P3	30	30.80	924.00
	549_P4	30	30.20	906.00
	Total	60		

Test Statistics^a

	Tekstur
Mann-Whitney U	441.000
Wilcoxon W	906.000
Z	-.154
Asymp. Sig. (2-tailed)	.878

a. Grouping Variable: Sosis

Lampiran 20. Output SPSS Uji Mann Whitney Hedonik Overall

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	410_P0	30	34.75	1042.50
	157_P1	30	26.25	787.50
	Total	60		

Test Statistics^a

Overall	
Mann-Whitney U	322.500
Wilcoxon W	787.500
Z	-2.156
Asymp. Sig. (2-tailed)	.031

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	410_P0	30	42.05	1261.50
	625_P2	30	18.95	568.50
	Total	60		

Test Statistics^a

Overall	
Mann-Whitney U	103.500
Wilcoxon W	568.500
Z	-5.713
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	410_P0	30	43.70	1311.00
	283_P3	30	17.30	519.00
	Total	60		

Test Statistics^a

	Overall
Mann-Whitney U	54.000
Wilcoxon W	519.000
Z	-6.187
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	410_P0	30	44.75	1342.50
	549_P4	30	16.25	487.50
	Total	60		

Test Statistics^a

	Overall
Mann-Whitney U	22.500
Wilcoxon W	487.500
Z	-6.603
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	157_P1	30	36.87	1106.00
	625_P2	30	24.13	724.00
	Total	60		

Test Statistics^a

Overall	
Mann-Whitney U	259.000
Wilcoxon W	724.000
Z	-3.162
Asymp. Sig. (2-tailed)	.002

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	157_P1	30	39.97	1199.00
	283_P3	30	21.03	631.00
	Total	60		

Test Statistics^a

Overall	
Mann-Whitney U	166.000
Wilcoxon W	631.000
Z	-4.455
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	157_P1	30	42.25	1267.50
	549_P4	30	18.75	562.50
	Total	60		

Test Statistics^a

	Overall
Mann-Whitney U	97.500
Wilcoxon W	562.500
Z	-5.461
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	625_P2	30	36.23	1087.00
	283_P3	30	24.77	743.00
	Total	60		

Test Statistics^a

	Overall
Mann-Whitney U	278.000
Wilcoxon W	743.000
Z	-2.945
Asymp. Sig. (2-tailed)	.003

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	625_P2	30	40.32	1209.50
	549_P4	30	20.68	620.50
	Total	60		

Test Statistics^a

	Overall
Mann-Whitney U	155.500
Wilcoxon W	620.500
Z	-4.795
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Sosis

Ranks

	Sosis	N	Mean Rank	Sum of Ranks
Overall	283_P3	30	35.27	1058.00
	549_P4	30	25.73	772.00
	Total	60		

Test Statistics^a

	Overall
Mann-Whitney U	307.000
Wilcoxon W	772.000
Z	-2.375
Asymp. Sig. (2-tailed)	.018

a. Grouping Variable: Sosis

Lampiran 21. Dokumentasi Pembuatan Tepung Ampas Tahu

Foto Kegiatan

Pengeringan Ampas Tahu

Penghalusan

Pengayakan

Hasil



Lampiran 22. Dokumentasi Pembuatan Sosis Tepung Ampas Tahu

Foto Kegiatan

Penimbangan



Pencampuran



Pengisian ke Selongsong dan Pengikatan



Pengukusan



Hasil



Lampiran 23. Dokumentasi Produk Sosis Tepung Ampas Tahu

Perlakuan	Foto Produk
P ₀	
P ₁	
P ₂	
P ₃	
P ₄	

Lampiran 24. Dokumentasi Pengujian Laboratorium

Foto Kegiatan

Pengujian Kadar Air



Pengujian Tekstur (*Hardness*)

Lampiran 25. Dokumentasi Pengujian Mutu Hedonik

Foto Kegiatan



RIWAYAT HIDUP



Penulis lahir di Tangerang, Banten pada tanggal 2 November 2004. Penulis merupakan putri kedua dari 2 bersaudara, putri dari Bapak Rusyetiadi dan Ibu Lilis Suryani. Penulis menamatkan pendidikan *Raudhatul Athfal* di RA Baidha'ul Ahkam pada tahun 2011, Sekolah Dasar di SD Negeri Gebang Raya 1 pada tahun 2016, Sekolah Menengah Pertama di SMP Negeri 1 Kota Tangerang pada tahun 2019, dan Madrasah Aliyah di Pondok Pesantren Modern Sahid Bogor pada tahun 2022.

Saat ini penulis merupakan mahasiswa aktif Prodi S-1 Teknologi Pangan di Fakultas Peternakan dan Pertanian Universitas Diponegoro angkatan tahun 2022. Beberapa kegiatan yang diikuti oleh penulis selama aktif perkuliahan adalah organisasi Keluarga Muslim An-Nahl sebagai staf bidang Ekonomi dan Bisnis dan Lembaga Pers Nuansa sebagai bendahara. Penulis juga aktif mengikuti kegiatan kepanitiaan yang diselenggarakan di Universitas Diponegoro.