

7. LAMPIRAN

7.1 Test Normalitas Karakteristik Kimia Es Krim Beras Merah

Tests of Normality^{b,c,d,e}

perlakuan	Kolmogorov-Smirnov ^f			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
kadar_air	beras merah 0%	,197	6	,200*	,968	6	,880
	whipping cream 100%						
	beras merah 25%	,190	6	,200*	,905	6	,403
	whipping cream 75%						
	beras merah 50%	,279	6	,160	,837	6	,124
	whipping cream 50%						
	beras merah 75%	,279	6	,157	,825	6	,098
kadar_protein	beras merah 0%	,234	6	,200*	,910	6	,435
	whipping cream 100%						
	beras merah 25%	,290	6	,125	,860	6	,188
	whipping cream 75%						
	beras merah 50%	,298	6	,103	,890	6	,316
	whipping cream 50%						
	beras merah 75%	,262	6	,200*	,897	6	,357
kadar_lemak	beras merah 0%	,239	6	,200*	,938	6	,647
	whipping cream 100%						
	beras merah 25%	,264	6	,200*	,859	6	,185
	whipping cream 75%						
	beras merah 50%	,174	6	,200*	,962	6	,833
	whipping cream 50%						
	beras merah 75%	,314	6	,066	,824	6	,096
kadar_pati	beras merah 0%	,326	6	,059	,838	6	,125
	whipping cream 100%						
	beras merah 25%	,199	6	,200*	,969	6	,886
	whipping cream 75%						
	beras merah 50%	,211	6	,200*	,931	6	,584
	whipping cream 50%						
	beras merah 75%	,228	6	,200*	,874	6	,244
Total_padatan	whipping cream 0%	,365	3	.	,798	3	,110
	tepung beras merah saja						
	beras merah 0%	,197	6	,200*	,968	6	,880
	whipping cream 100%						
	beras merah 25%	,190	6	,200*	,905	6	,403
	whipping cream 75%						
	beras merah 50%	,279	6	,160	,837	6	,124
	whipping cream 50%						
	beras merah 75%	,279	6	,157	,825	6	,098
	whipping cream 0%						

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

a. Lilliefors Significance Correction

b. kadar_air is constant when perlakuan = tepung beras merah saja. It has been omitted.

c. kadar_protein is constant when perlakuan = tepung beras merah saja. It has been omitted.

d. kadar_lemak is constant when perlakuan = tepung beras merah saja. It has been omitted.

e. Total_padatan is constant when perlakuan = tepung beras merah saja. It has been omitted.

7.2 Test Homogenitas Semua Varians Karakteristik Kimia Es Krim

Test of Homogeneity of Variances

	Levene Statistic	df 1	df 2	Sig.
kadar_air	8,639	4	22	,000
kadar_protein	5,757	4	22	,003
kadar_lemak	11,813	4	22	,000
kadar_pati	21,239	4	22	,000
Total_padatan	8,639	4	22	,000

7.3 Post Hoc Test

7.3.1 Kadar Air

		kadar_air	
		Duncan ^{a,b}	
perlakuan	N	Subset for alpha = .05	
		1	2
tepung beras merah saja	3	,0000	
beras merah 0%	6		73,2396
whipping cream 100%			
beras merah 25%	6		75,0693
whipping cream 75%			
beras merah 75%	6		76,6969
whipping cream 0%			
beras merah 50%	6		78,3105
whipping cream 50%			
Sig.		1,000	,075

Means for groups in homogeneous subsets are displayed.

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

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

7.3.2 Kadar Protein

		kadar_protein				
		Duncan ^{a,b}				
perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
tepung beras merah saja	3	,0000				
beras merah 0%	6		2,4324			
whipping cream 100%						
beras merah 25%	6			4,2955		
whipping cream 75%						
beras merah 50%	6				6,3762	
whipping cream 50%						
beras merah 75%	6	1,000	1,000	1,000	1,000	1,000
whipping cream 0%						
Sig.						8,7031

Means for groups in homogeneous subsets are displayed.

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

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

7.3.3 Kadar Lemak

kadar_lemak

Duncan^{a,b}

perlakuan	N	Subset for alpha = .05			
		1	2	3	4
tepung beras merah saja	3	,0000			
beras merah 75%	6	,9589			
whipping cream 0%					
beras merah 50%	6		5,3080		
whipping cream 50%					
beras merah 25%	6			12,2362	
whipping cream 75%					
beras merah 0%	6				17,4989
whipping cream 100%					
Sig.		,408	1,000	1,000	1,000

Means for groups in homogeneous subsets are displayed.

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

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

7.3.4 Kadar Pati

kadar_pati

Duncan^{a,b}

perlakuan	N	Subset for alpha = .05				
		1	2	3	4	5
beras merah 0%	6	,0597				
whipping cream 100%						
beras merah 25%	6		1,7192			
whipping cream 75%						
beras merah 50%	6			3,4846		
whipping cream 50%						
beras merah 75%	6				6,8373	
whipping cream 0%						
tepung beras merah saja	3	1,000	1,000	1,000	1,000	36,4987
Sig.						1,000

Means for groups in homogeneous subsets are displayed.

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

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

7.3.5 Total Padatan

Total_padatan

perlakuan	N	Subset for alpha = .05	
		1	2
tepung beras merah saja	3	,0000	
beras merah 50%	6		21,6895
whipping cream 50%			
beras merah 75%	6		23,3031
whipping cream 0%			
beras merah 25%	6		24,9307
whipping cream 75%			
beras merah 0%	6		26,7604
whipping cream 100%			
Sig.		1,000	,075

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5,000.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



7.4 Test Normalitas Karakteristik Fisik Es Krim Beras Merah

Tests of Normality^{b,c,d,e,f}

perlakuan	Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Hardness	beras merah 0%	,213	6	,200*	,940	6	,656
	whipping cream 100%						
	beras merah 25%	,279	6	,159	,849	6	,155
	whipping cream 75%						
	beras merah 50%	,218	6	,200*	,933	6	,606
	whipping cream 50%						
Viskositas_I	beras merah 75%	,165	6	,200*	,915	6	,473
	whipping cream 0%						
	beras merah 0%	,202	6	,200*	,853	6	,167
	whipping cream 100%						
	beras merah 25%	,186	6	,200*	,886	6	,300
	whipping cream 75%						
viskositas_II	beras merah 50%	,313	6	,067	,785	6	,043
	whipping cream 50%						
	beras merah 75%	,245	6	,200*	,902	6	,389
	whipping cream 0%						
	beras merah 0%	,183	6	,200*	,960	6	,820
	whipping cream 100%						
OVERRUN	beras merah 25%	,244	6	,200*	,872	6	,235
	whipping cream 75%						
	beras merah 50%	,272	6	,189	,822	6	,092
	whipping cream 50%						
	beras merah 75%	,229	6	,200*	,858	6	,181
	whipping cream 0%						
Time_to_melt	beras merah 0%	,319	6	,056	,683	6	,004
	whipping cream 100%						
	beras merah 25%	,310	6	,074	,805	6	,065
	whipping cream 75%						
	beras merah 50%	,319	6	,056	,683	6	,004
	whipping cream 50%						
	beras merah 75%	,319	6	,056	,683	6	,004
	whipping cream 0%						

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

a. Lilliefors Significance Correction

b. There are no valid cases for Hardness when perlakuan = 5,000. Statistics cannot be computed for this level.

c. There are no valid cases for Viskositas_I when perlakuan = 5,000. Statistics cannot be computed for this level.

d. There are no valid cases for viskositas_II when perlakuan = 5,000. Statistics cannot be computed for this level.

e. There are no valid cases for OVERRUN when perlakuan = 5,000. Statistics cannot be computed for this level.

f. There are no valid cases for Time_to_melt when perlakuan = 5,000. Statistics cannot be computed for this level.

7.5 Test Homogenitas Semua Varians Pada Karakteristik Fisik Es Krim

Test of Homogeneity of Variances

	Levene Statistic	df 1	df 2	Sig.
Hardness	1,655	4	22	,196
Viskositas_I	11,249	4	22	,000
viskositas_II	4,023	4	22	,013
OVERRUN	87,694	4	22	,000
Time_to_melt	2,435	3	20	,095

7.6 Post Hoc Test

7.6.1 Hardness

		Hardness		
		Duncan ^{a,b}		
perlakuan	N	Subset f or alpha = .05		
		1	2	3
tepung beras merah saja	3	,0000		
beras merah 25%	6		8,3821	
whipping cream 75%	6			9,5987
beras merah 0%	6			
whipping cream 100%	6			
beras merah 50%	6			14,9081
whipping cream 50%	6			
beras merah 75%	6			17,0022
whipping cream 0%	6			
Sig.		1,000	,505	,255

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5,000.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

7.6.2 Viskositas I

Viskositas_I

Duncan^{a,b}

perlakuan	N	Subset f or alpha = .05		
		1	2	3
tepung beras merah saja	3	,0000		
beras merah 0%	6	,6000		
whipping cream 100%				
beras merah 25%	6	1,1333		
whipping cream 75%				
beras merah 50%	6		2,7083	
whipping cream 50%				
beras merah 75%	6			7,0000
whipping cream 0%				
Sig.		,108	1,000	1,000

Means for groups in homogeneous subsets are displayed.

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

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

7.6.3 Viskositas II

viskositas_II

Duncan^{a,b}

perlakuan	N	Subset f or alpha = .05		
		1	2	3
tepung beras merah saja	3	,0000		
beras merah 25%	6		3,8300	
whipping cream 75%				
beras merah 50%	6		4,7917	
whipping cream 50%				
beras merah 0%	6			8,5000
whipping cream 100%				
beras merah 75%	6	1,000	,237	8,5000
whipping cream 0%				
Sig.				1,000

Means for groups in homogeneous subsets are displayed.

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

b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.

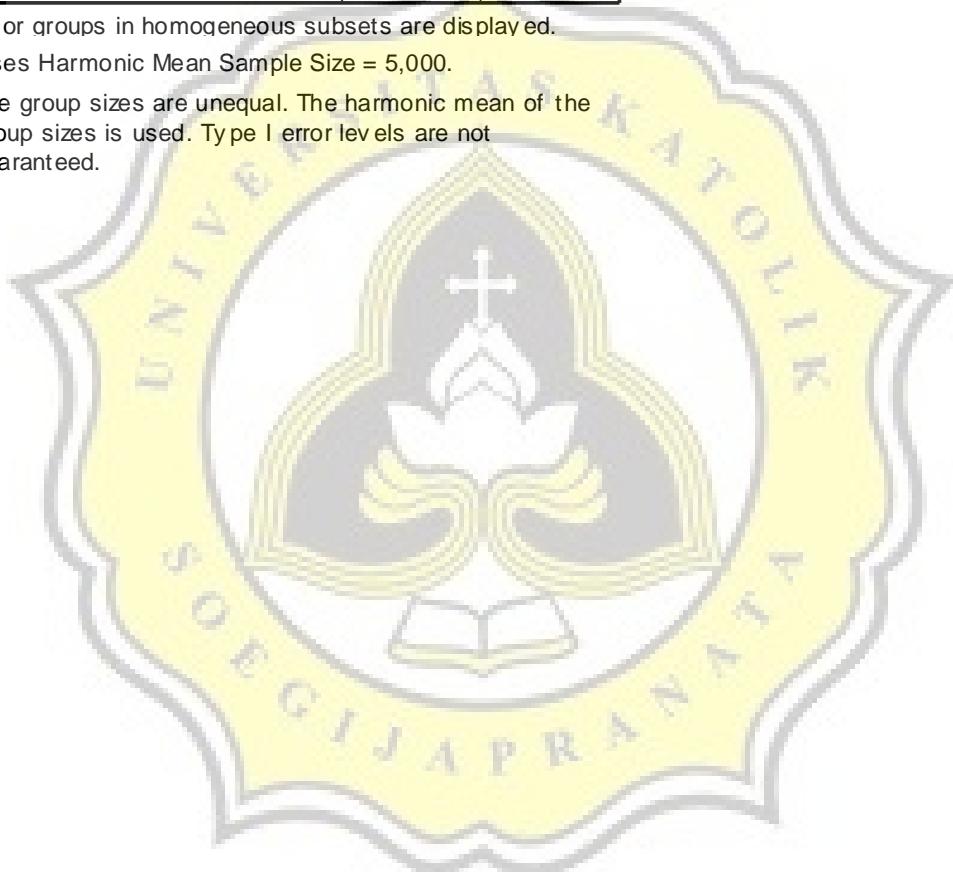
7.6.4 Overrun

Overrun

perlakuan	N	Subset f or alpha = .05	
		1	2
tepung beras merah saja	3	,0000	
beras merah 75%	6		78,1250
whipping cream 0%			
beras merah 50%	6		81,2500
whipping cream 50%			
beras merah 25%	6		82,2917
whipping cream 75%			
beras merah 0%	6		87,5000
whipping cream 100%			
Sig.		1,000	,122

Means f or groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 5,000.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.



7.7 Hasil Analisa Fisik Berat Lelehan Es Krim berdasarkan Waktu dan Suhu terhadap Es Krim Beras Merah

Analisa Fisik	Waktu (menit)	Suhu (°C)	Berat Lelehan (g)
Kontrol	5	-13,37 ± 0,83	5,09 ± 3,14
	10	-11,03 ± 0,83	4,91 ± 2,69
	15	-8,58 ± 0,61	4,49 ± 2,13
	20	-7,17 ± 0,89	7,44 ± 4,97
	25	-5,57 ± 1,16	7,69 ± 2,58
	30	-3,83 ± 2,16	5,31 ± 3,28
	35	-2,88 ± 2,38	4,74 ± 4,14
	40	-1,28 ± 2,04	1,79 ± 4,40
25% tepung beras merah : 75% whipped cream	5	-13,97 ± 0,23	3,46 ± 1,74
	10	-11,43 ± 1,22	2,59 ± 1,17
	15	-9,15 ± 1,01	5,49 ± 1,77
	20	-7,98 ± 0,66	8,59 ± 2,98
	25	-6,68 ± 0,74	8,01 ± 2,67
	30	-5,05 ± 0,85	9,06 ± 5,97
	35	-3,22 ± 1,74	4,32 ± 3,19
	40	-0,88 ± 1,38	2,05 ± 3,73
50% tepung beras merah : 50% whipped cream	5	-12,27 ± 0,61	2,28 ± 0,93
	10	-10,37 ± 1,02	2,41 ± 0,75
	15	-8,77 ± 1,41	5,13 ± 4,56
	20	-7,63 ± 1,39	7,82 ± 5,14
	25	-6,42 ± 1,52	6,41 ± 1,16
	30	-5,25 ± 1,25	5,90 ± 1,59
	35	-4,00 ± 1,21	5,47 ± 1,24
	40	-2,72 ± 1,95	4,49 ± 2,35
75% tepung beras merah : 25% whipped cream	45	-0,97 ± 1,68	1,67 ± 2,59
	50	-0,53 ± 1,31	0,51 ± 1,26
	55	-0,32 ± 0,78	0,55 ± 1,35
	5	-7,35 ± 1,01	1,53 ± 1,38
	10	-5,83 ± 0,53	2,82 ± 1,77
	15	-4,95 ± 0,71	4,83 ± 4,61
	20	-4,35 ± 0,86	5,45 ± 3,86
	25	-3,58 ± 1,09	5,31 ± 4,54
	30	-1,63 ± 2,90	4,13 ± 1,63
	35	-0,77 ± 2,76	2,95 ± 2,55
	40	0,00 ± 1,84	2,69 ± 3,40
	45	0,45 ± 2,11	3,33 ± 4,42
	50	0,48 ± 2,19	2,56 ± 4,09
	55	0,97 ± 3,16	2,05 ± 3,21
	60	0,62 ± 1,51	1,03 ± 2,51
	65	0,98 ± 2,41	1,03 ± 2,51
	70	1,70 ± 4,16	0,64 ± 1,57

7.8 Korelasi Karakteristik Fisik – Kimia Es Krim Beras Merah Konsentrasi 0 – 75% Tepung Beras Merah : 100 -25 % whipped cream

Correlations

		kadar air	kadar protein	kadar lemak	kadar pati	Total padatan	Hardness	Viskositas I	viskositas II	OVERRUN	Time to melt
kadar_air	Pearson Correlation	1	,655**	,362	-,950**	,797*	,674**	,397*	,661**	,953**	,497*
	Sig. (2-tailed)		,000	,064	,000	,000	,000	,040	,000	,000	,013
	N	27	27	27	27	27	27	27	27	27	24
kadar_protein	Pearson Correlation	,655**	1	-,431*	-,424*	,390*	,825**	,862**	,461*	,501**	,659**
	Sig. (2-tailed)	,000		,025	,028	,044	,000	,000	,015	,008	,000
	N	27	27	27	27	27	27	27	27	27	24
kadar_lemak	Pearson Correlation	,362	-,431*	1	-,591**	,503**	-,183	-,560**	,232	,516**	-,576**
	Sig. (2-tailed)	,064	,025		,001	,008	,362	,002	,245	,006	,003
	N	27	27	27	27	27	27	27	27	27	24
kadar_pati	Pearson Correlation	-,950**	-,424*	-,591**	1	-,890**	-,543**	-,136	-,609**	-,952**	,599**
	Sig. (2-tailed)	,000	,028	,001		,000	,003	,498	,001	,000	,002
	N	27	27	27	27	27	27	27	27	27	24
Total_padatan	Pearson Correlation	,797**	,390*	,503**	-,890**	1	,588**	,103	,552**	,804**	-,497*
	Sig. (2-tailed)	,000	,044	,008	,000		,001	,610	,003	,000	,013
	N	27	27	27	27	27	27	27	27	27	24
Hardness	Pearson Correlation	,674**	,825**	-,183	-,543**	,588**	1	,667**	,541**	,585**	,315
	Sig. (2-tailed)	,000	,000	,362	,003	,001		,000	,004	,001	,134
	N	27	27	27	27	27	27	27	27	27	24
Viskositas_I	Pearson Correlation	,397*	,862**	-,560**	-,136	,103	,667**	1	,555**	,261	,553**
	Sig. (2-tailed)	,040	,000	,002	,498	,610	,000		,003	,188	,005
	N	27	27	27	27	27	27	27	27	27	24
viskositas_II	Pearson Correlation	,661**	,461*	,232	-,609**	,552**	,541**	,555**	1	,652**	,129
	Sig. (2-tailed)	,000	,015	,245	,001	,003	,004	,003		,000	,549
	N	27	27	27	27	27	27	27	27	27	24
OVERRUN	Pearson Correlation	,953**	,501**	,516**	-,952**	,804**	,585**	,261	,652**	1	-,015
	Sig. (2-tailed)	,000	,008	,006	,000	,000	,001	,188	,000		,943
	N	27	27	27	27	27	27	27	27	27	24
Time_to_melt	Pearson Correlation	,497*	,659**	-,576**	,599**	-,497*	,315	,553**	,129	-,015	1
	Sig. (2-tailed)	,013	,000	,003	,002	,013	,134	,005	,549	,943	
	N	24	24	24	24	24	24	24	24	24	24

**. Correlation is significant at the 0.01 level (2-tailed).

* · Correlation is significant at the 0.05 level (2-tailed).

7.9 Korelasi Karakteristik Fisik – Kimia Es Krim Beras Merah Konsentrasi 0 – 50% Tepung Beras Merah : 100 -50% whipped cream

Correlations

		kadar air	kadar protein	kadar lemak	kadar pati	Total padatan	Hardness	Viskositas I	viskositas II	OVERRUN	Time to melt
kadar_air	Pearson Correlation	1	,538*	-,362	,476*	-1,000**	,092	,823**	-,029	,275	,369
	Sig. (2-tailed)		,021	,140	,046	,000	,716	,000	,908	,269	,132
	N	18	18	18	18	18	18	18	18	18	18
kadar_protein	Pearson Correlation	,538*	1	-,914**	,983**	-,538*	,535*	,746**	-,621**	-,230	,642**
	Sig. (2-tailed)	,021		,000	,000	,021	,022	,000	,006	,358	,004
	N	18	18	18	18	18	18	18	18	18	18
kadar_lemak	Pearson Correlation	-,362	-,914**	1	-,931**	,362	-,528*	-,668**	,518*	,372	-,544*
	Sig. (2-tailed)	,140	,000		,000	,140	,024	,002	,028	,129	,020
	N	18	18	18	18	18	18	18	18	18	18
kadar_pati	Pearson Correlation	,476*	,983**	-,931**	1	-,476*	,541*	,695**	-,650**	-,282	,653**
	Sig. (2-tailed)	,046	,000	,000		,046	,021	,001	,004	,257	,003
	N	18	18	18	18	18	18	18	18	18	18
Total_padatan	Pearson Correlation	-1,000**	-,538*	,362	-,476*	1	-,092	-,823**	,029	-,275	-,369
	Sig. (2-tailed)	,000	,021	,140	,046		,716	,000	,908	,269	,132
	N	18	18	18	18	18	18	18	18	18	18
Hardness	Pearson Correlation	,092	,535*	-,528*	,541*	-,092	1	,497*	-,159	-,110	,181
	Sig. (2-tailed)	,716	,022	,024	,021	,716		,036	,529	,664	,473
	N	18	18	18	18	18	18	18	18	18	18
Viskositas_I	Pearson Correlation	,823**	,746**	-,668**	,695**	-,823**	,497*	1	-,141	,054	,356
	Sig. (2-tailed)	,000	,000	,002	,001	,000	,036		,577	,831	,147
	N	18	18	18	18	18	18	18	18	18	18
viskositas_II	Pearson Correlation	-,029	-,621**	,518*	-,650**	,029	-,159	-,141	1	,286	-,366
	Sig. (2-tailed)	,908	,006	,028	,004	,908	,529	,577		,250	,135
	N	18	18	18	18	18	18	18	18	18	18
OVERRUN	Pearson Correlation	,275	-,230	,372	-,282	-,275	-,110	,054	,286	1	,040
	Sig. (2-tailed)	,269	,358	,129	,257	,269	,664	,831	,250		,873
	N	18	18	18	18	18	18	18	18	18	18
Time_to_melt	Pearson Correlation	,369	,642**	-,544*	,653**	-,369	,181	,356	-,366	,040	1
	Sig. (2-tailed)	,132	,004	,020	,003	,132	,473	,147	,135	,873	
	N	18	18	18	18	18	18	18	18	18	18

*: Correlation is significant at the 0.05 level (2-tailed).

**: Correlation is significant at the 0.01 level (2-tailed).

8.0 Uji Mann – Whitney pada Analisa Sensori

8.0.1 Uji Mann – Whitney pada Konsentrasi 25% tepung beras merah : 75% whipped cream dan 50% tepung beras merah : 50% whipped cream

Ranks

Konsentrasi		N	Mean Rank	Sum of Ranks
tekstur	tepung beras merah 25% whipped cream 75%	30	28,20	846,00
	tepung beras merah 50% whipped cream 50%	30	32,80	984,00
	Total	60		
sandiness	tepung beras merah 25% whipped cream 75%	30	31,78	953,50
	tepung beras merah 50% whipped cream 50%	30	29,22	876,50
	Total	60		
creamness	tepung beras merah 25% whipped cream 75%	30	28,23	847,00
	tepung beras merah 50% whipped cream 50%	30	32,77	983,00
	Total	60		
overall	tepung beras merah 25% whipped cream 75%	30	31,20	936,00
	tepung beras merah 50% whipped cream 50%	30	29,80	894,00
	Total	60		

Test Statistics^a

	tekstur	sandiness	creamness	overall
Mann-Whitney U	381,000	411,500	382,000	429,000
Wilcoxon W	846,000	876,500	847,000	894,000
Z	-1,086	-,614	-1,080	-,334
Asy mp. Sig. (2-tailed)	,278	,539	,280	,739

a. Grouping Variable: Konsentrasi

8.0.2 Uji Mann – Whitney pada Konsentrasi 25% tepung beras merah : 75% whipped cream dan 75% tepung beras merah : 25% whipped cream

Ranks

Konsentrasi		N	Mean Rank	Sum of Ranks
tekstur	tepung beras merah 25% whipped cream 75%	30	35,80	1074,00
	tepung beras merah 75% whipped cream 25%	30	25,20	756,00
	Total	60		
sandiness	tepung beras merah 25% whipped cream 75%	30	41,33	1240,00
	tepung beras merah 75% whipped cream 25%	30	19,67	590,00
	Total	60		
creamness	tepung beras merah 25% whipped cream 75%	30	37,80	1134,00
	tepung beras merah 75% whipped cream 25%	30	23,20	696,00
	Total	60		
overall	tepung beras merah 25% whipped cream 75%	30	39,73	1192,00
	tepung beras merah 75% whipped cream 25%	30	21,27	638,00
	Total	60		

Test Statistics^a

	tekstur	sandiness	creamness	overall
Mann-Whitney U	291,000	125,000	231,000	173,000
Wilcoxon W	756,000	590,000	696,000	638,000
Z	-2,437	-5,012	-3,377	-4,278
Asy mp. Sig. (2-tailed)	,015	,000	,001	,000

a. Grouping Variable: Konsentrasi

8.0.3 Uji Mann – Whitney pada Konsentrasi 25% tepung beras merah : 75% whipped cream dan 100% tepung beras merah : 0% whipped cream

Ranks

Konsentrasi		N	Mean Rank	Sum of Ranks
tekstur	tepung beras merah 25% whipped cream 75%	30	36,87	1106,00
	tepung beras merah 100% whipped cream 0%	30	24,13	724,00
	Total	60		
sandiness	tepung beras merah 25% whipped cream 75%	30	41,52	1245,50
	tepung beras merah 100% whipped cream 0%	30	19,48	584,50
	Total	60		
creamness	tepung beras merah 25% whipped cream 75%	30	37,35	1120,50
	tepung beras merah 100% whipped cream 0%	30	23,65	709,50
	Total	60		
overall	tepung beras merah 25% whipped cream 75%	30	41,80	1254,00
	tepung beras merah 100% whipped cream 0%	30	19,20	576,00
	Total	60		

Test Statistics^a

	tekstur	sandiness	creamness	overall
Mann-Whitney U	259,000	119,500	244,500	111,000
Wilcoxon W	724,000	584,500	709,500	576,000
Z	-2,950	-5,051	-3,158	-5,226
Asy mp. Sig. (2-tailed)	,003	,000	,002	,000

a. Grouping Variable: Konsentrasi

8.0.4 Uji Mann – Whitney pada Konsentrasi 50% tepung beras merah : 50% whipped cream dan 75% tepung beras merah : 25% whipped cream

Ranks

Konsentrasi		N	Mean Rank	Sum of Ranks
tekstur	tepung beras merah 50% whipped cream 50%	30	37,80	1134,00
	tepung beras merah 75% whipped cream 25%	30	23,20	696,00
	Total	60		
sandiness	tepung beras merah 50% whipped cream 50%	30	40,13	1204,00
	tepung beras merah 75% whipped cream 25%	30	20,87	626,00
	Total	60		
creamness	tepung beras merah 50% whipped cream 50%	30	40,63	1219,00
	tepung beras merah 75% whipped cream 25%	30	20,37	611,00
	Total	60		
overall	tepung beras merah 50% whipped cream 50%	30	38,97	1169,00
	tepung beras merah 75% whipped cream 25%	30	22,03	661,00
	Total	60		

Test Statistics^a

	tekstur	sandiness	creamness	overall
Mann-Whitney U	231,000	161,000	146,000	196,000
Wilcoxon W	696,000	626,000	611,000	661,000
Z	-3,363	-4,477	-4,705	-3,904
Asy mp. Sig. (2-tailed)	,001	,000	,000	,000

a. Grouping Variable: Konsentrasi

8.0.5 Uji Mann – Whitney pada Konsentrasi 50% tepung beras merah : 50% whipped cream dan 100% tepung beras merah : 0% whipped cream

Ranks

Konsentrasi		N	Mean Rank	Sum of Ranks
tekstur	tepung beras merah 50%	30	39,10	1173,00
	whipped cream 50%	30	21,90	657,00
	tepung beras merah 100% whipped cream 0%	60		
sandiness	Total	30		
	tepung beras merah 50%	30	40,63	1219,00
	whipped cream 50%	30	20,37	611,00
creamness	tepung beras merah 100% whipped cream 0%	60		
	Total	30		
	tepung beras merah 50%	30	39,93	1198,00
overall	whipped cream 50%	30	21,07	632,00
	tepung beras merah 100% whipped cream 0%	60		
	Total	30		

Test Statistics^a

	tekstur	sandiness	creamness	overall
Mann-Whitney U	192,000	146,000	167,000	138,000
Wilcoxon W	657,000	611,000	632,000	603,000
Z	-3,985	-4,654	-4,374	-4,826
Asy mp. Sig. (2-tailed)	,000	,000	,000	,000

a. Grouping Variable: Konsentrasi

8.0.6 Uji Mann – Whitney pada Konsentrasi 75% tepung beras merah : 25% *whipped cream* dan 100% tepung beras merah : 0% *whipped cream*

Test Statistics^a

	tekstur	sandiness	creamness	overall
Mann-Whitney U	442,000	382,000	450,000	402,000
Wilcoxon W	907,000	847,000	915,000	867,000
Z	-,123	-1,096	,000	-,757
Asy mp. Sig. (2-tailed)	,902	,273	1,000	,449

a. Grouping Variable: Konsentrasi

8

Ranks

	Konsentrasi	N	Mean Rank	Sum of Ranks
tekstur	tepung beras merah 75% whipped cream 25%	30	30,77	923,00
	tepung beras merah 100% whipped cream 0%	30	30,23	907,00
	Total	60		
sandiness	tepung beras merah 75% whipped cream 25%	30	32,77	983,00
	tepung beras merah 100% whipped cream 0%	30	28,23	847,00
	Total	60		
creamness	tepung beras merah 75% whipped cream 25%	30	30,50	915,00
	tepung beras merah 100% whipped cream 0%	30	30,50	915,00
	Total	60		
overall	tepung beras merah 75% whipped cream 25%	30	32,10	963,00
	tepung beras merah 100% whipped cream 0%	30	28,90	867,00
	Total	60		

8.1 Kusioner Uji Sensori untuk Uji Pendahuluan

UJI HEDONIK ES KRIM EKSTRUDAT

BERAS MERAH

Nama :
 Umur :
 Tanggal pengujian :

Instruksi :

Di hadapan Anda telah tersedia 4 sampel es krim. Sebelum Anda mencicipi tiap sampel minumlah air putih terlebih dahulu. Rasakanlah tiap sampel dari kiri ke kanan. Setelah mencicipi tiap sampel, Anda dapat memberikan penilaian atas dasar TEKSTUR es krim dengan menggunakan skala rating (boleh ada yang dobel). Berilah skor dari (1) sampai (4) dimana penilaian berdasarkan TINGKAT KESUKAAN seperti keterangan dibawah.. Terima kasih atas perhatian Anda.

Sampel	Tingkat kesukaan

Keterangan parameter sensoris:

Tingkat kesukaan :

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

Komentar / Saran :

**UJI HEDONIK ES KRIM EKSTRUDAT
BERAS MERAH**

Nama : _____

Umur : _____

Tanggal pengujian : _____

Instruksi : _____

Di hadapan Anda telah tersedia 4 sampel es krim. Sebelum Anda mencicipi tiap sampel minumlah air putih terlebih dahulu. Rasakanlah tiap sampel dari kiri ke kanan. Setelah mencicipi tiap sampel, Anda dapat memberikan penilaian atas dasar *SANDINESS* (rasa berpasir (bertepung) pada es krim) dengan menggunakan skala rating (boleh ada yang dobel). Berilah skor dari (1) sampai (4) dimana penilaian berdasarkan TINGKAT KESUKAAN seperti keterangan dibawah.. Terima kasih atas perhatian Anda.

Sampel	Tingkat kesukaan

Keterangan parameter sensoris:

Tingkat kesukaan :

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

Komentar / Saran :

UJI HEDONIK ES KRIM EKSTRUDAT BERAS MERAH

Nama : _____

Umur : _____

Tanggal pengujian : _____

Instruksi : _____

Di hadapan Anda telah tersedia 4 sampel es krim. Sebelum Anda mencicipi tiap sampel minumlah air putih terlebih dahulu. Rasakanlah tiap sampel dari kiri ke kanan. Setelah mencicipi tiap sampel, Anda dapat memberikan penilaian atas dasar *CREAMINESS* (kuat atau tidaknya rasa es krim berkaitan dengan lemak) dengan menggunakan skala rating (boleh ada yang dobel). Berilah skor dari (1) sampai (4) dimana penilaian berdasarkan TINGKAT KESUKAAN seperti keterangan dibawah.. Terima kasih atas perhatian Anda.

Sampel	Tingkat kesukaan

Keterangan parameter sensoris:

Tingkat kesukaan :

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Sangat tidak suka 2. Tidak suka | <ol style="list-style-type: none"> 3. Suka 4. Sangat suka |
|---|---|

Komentar / Saran :

**UJI HEDONIK ES KRIM EKSTRUDAT
BERAS MERAH**

Nama : _____

Umur : _____

Tanggal pengujian : _____

Instruksi : _____

Di hadapan Anda telah tersedia 4 sampel es krim. Sebelum Anda mencicipi tiap sampel minumlah air putih terlebih dahulu. Rasakanlah tiap sampel dari kiri ke kanan. Setelah mencicipi tiap sampel berilah skor dari (1) sampai (4) dimana penilaian berdasarkan keterangan dibawah. Anda memberikan penilaian terhadap es krim tersebut berdasarkan *Overall* Anda dengan menggunakan skala rating (boleh ada yang dobel). Terima kasih atas perhatian Anda.

Sampel	Overall

Keterangan parameter sensoris:

Overall :

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

Komentar / Saran :