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ATTACHMENTS

Appendix 1: Results of ANOVA of Nutritional Value

1.1. moisture

Duncan^{a,b}

formulation	N	Subset	
		1	2
cm4	2	4.8350	
cm3	2	4.9000	
cm2	2	5.1800	
cm1	2		6.1400
Sig.		.068	1.000

Between-Subjects Factors

formulation	Value	Label	N
	1.00	cm1	2
	2.00	cm2	2
	3.00	cm3	2
	4.00	cm4	2

Tests of Between-Subjects Effects

Dependent Variable: moisture

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.182 ^a	3	.727	39.182	.002
Intercept	221.657	1	221.657	11941.092	.000
Formulation	2.182	3	.727	39.182	.002
Error	.074	4	.019		
Total	223.913	8			
Corrected Total	2.256	7			

a. R Squared = .967 (Adjusted R Squared = .942)

1.2. Protein

Duncan^{a,b}

Formulation	N	Subset		
		1	2	3
cm1	2	11.6900		
cm2	2		12.5500	
cm3	2			13.6850
cm4	2			13.7100
Sig.		1.000	1.000	.829

Between-Subjects Factors

	Value	Label	N
formulation	1.00	cm1	2
	2.00	cm2	2
	3.00	cm3	2
	4.00	cm4	2

Tests of Between-Subjects Effects

Dependent Variable: protein

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5.717 ^a	3	1.906	161.333	.000
Intercept	1333.087	1	1333.087	112853.893	.000
Formulation	5.717	3	1.906	161.333	.000
Error	.047	4	.012		
Total	1338.851	8			
Corrected Total	5.764	7			

a. R Squared = .992 (Adjusted R Squared = .986)

1.3. Fat

Duncan^{a,b}

formulation	N	Subset			
		1	2	3	4
cm4	2	15.8400			
cm3	2		16.5150		
cm2	2			17.5300	
cm1	2				18.6700
Sig.		1.000	1.000	1.000	1.000

Between-Subjects Factors

formulation	Value	Label	N
1.00	cm1	2	
2.00	cm2	2	
3.00	cm3	2	
4.00	cm4	2	

Tests of Between-Subjects Effects

Dependent Variable: fat

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9.147 ^a	3	3.049	138.516	.000
Intercept	2349.894	1	2349.894	106752.709	.000
Formulation	9.147	3	3.049	138.516	.000
Error	.088	4	.022		
Total	2359.129	8			
Corrected Total	9.235	7			

a. R Squared = .990 (Adjusted R Squared = .983)

1.4. Ash

Duncan^{a,b}

formulation	N	Subset		
		1	2	3
cm3	2	2.2700		
cm2	2	2.4900	2.4900	
cm1	2		2.6600	2.6600
cm4	2			2.8200
Sig.		.076	.140	.159

Tests of Between-Subjects Effects

Dependent Variable: ash

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.333 ^a	3	.111	12.990	.016
Intercept	52.429	1	52.429	6132.023	.000
formulation	.333	3	.111	12.990	.016
Error	.034	4	.009		
Total	52.796	8			
Corrected Total	.367	7			

a. R Squared = .907 (Adjusted R Squared = .837)

Between-Subjects Factors

formulation	Value Label	N
1.00	cm1	2
2.00	cm2	2
3.00	cm3	2
4.00	cm4	2

1.5. Carbohydrate

Duncan^{a,b}

formulation	N	Subset		
		1	2	3
cm4	2	37.2050		
cm3	2	37.3750		
cm2	2		37.7500	
cm1	2			39.1600
Sig.		.086	1.000	1.000

Between-Subjects Factors

formulation	Value	Label	N
1.00	cm1	2	
2.00	cm2	2	
3.00	cm3	2	
4.00	cm4	2	

Tests of Between-Subjects Effects

Dependent Variable: carbohydrate

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4.731 ^a	3	1.577	280.382	.000
Intercept	11474.610	1	11474.610	2039930.676	.000
formulation	4.731	3	1.577	280.382	.000
Error	.022	4	.006		
Total	11479.364	8			
Corrected Total	4.754	7			

a. R Squared = .995 (Adjusted R Squared = .992)

Appendix 2: Results of ANOVA of Mineral Trace Elements Value

2.1. Fe

Duncan^{a,b}

formulation	N	Subset	
		1	2
cm3	2	.2286	
cm4	2	.2420	
cm2	2	.2500	.2500
cm1	2		.2761
Sig.		.115	.067

Between-Subjects Factors

formulation	Value	Label	N
1.00	cm1	2	
2.00	cm2	2	
3.00	cm3	2	
4.00	cm4	2	

Tests of Between-Subjects Effects

Dependent Variable: Fe

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.002 ^a	3	.001	7.305	.042
Intercept	.497	1	.497	4525.603	.000
formulation	.002	3	.001	7.305	.042
Error	.000	4	.000		
Total	.499	8			
Corrected Total	.003	7			

a. R Squared = .846 (Adjusted R Squared = .730)

2.2. Mn

Duncan^{a,b}

formulation	N	Subset			
		1	2	3	4
cm1	2	.1304			
cm4	2		.2175		
cm3	2			.2804	
cm2	2				.3412
Sig.		1.000	1.000	1.000	1.000

Between-Subjects Factors

formulation	Value	Label	N
			1.00
2.00	cm2	2	
3.00	cm3	2	
4.00	cm4	2	

Tests of Between-Subjects Effects

Dependent Variable: Mn

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.049 ^a	3	.016	102.753	.000
Intercept	.470	1	.470	2971.779	.000
formulation	.049	3	.016	102.753	.000
Error	.001	4	.000		
Total	.519	8			
Corrected Total	.049	7			

a. R Squared = .987 (Adjusted R Squared = .978)

2.3. Z

Duncan^{a,b}

formulation	N	Subset	
		1	2
cm3	2	.4319	
cm4	2	.4453	.4453
cm1	2		.4568
cm2	2		.4607
Sig.		.197	.154

Between-Subjects Factors

formulation	Value	Label	N
			1.00
2.00	cm2	2	
3.00	cm3	2	
4.00	cm4	2	

Tests of Between-Subjects Effects

Dependent Variable: Z

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.001 ^a	3	.000	4.493	.090
Intercept	1.610	1	1.610	21579.210	.000
formulation	.001	3	.000	4.493	.090
Error	.000	4	7.462E-5		
Total	1.612	8			
Corrected Total	.001	7			

a. R Squared = .771 (Adjusted R Squared = .600)

2.4. K

Duncan^{a,b}

formulation	N	Subset 1
cm1	2	.4335
cm4	2	.4347
cm3	2	.4401
cm2	2	.4501
Sig.		.226

Between-Subjects Factors

formulation	Value	Label
1.00	cm1	
2.00	cm2	
3.00	cm3	
4.00	cm4	

Tests of Between-Subjects Effects

Dependent Variable: K

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.000 ^a	3	.000	.874	.525
Intercept	1.546	1	1.546	11732.343	.000
formulation	.000	3	.000	.874	.525
Error	.001	4	.000		
Total	1.547	8			
Corrected Total	.001	7			

a. R Squared = .396 (Adjusted R Squared = -.057)

2.5. Na

Duncan^{a,b}

formulation	N	Subset		
		1	2	3
cm1	2	.7697		
cm2	2		.8749	
cm3	2		.9104	.9104
cm4	2			.9429
Sig.		1.000	.075	.094

Between-Subjects Factors

formulation	Value	Label	N
formulation	1.00	cm1	2
	2.00	cm2	2
	3.00	cm3	2
	4.00	cm4	2

Tests of Between-Subjects Effects

Dependent Variable: Na

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.034 ^a	3	.011	51.076	.001
Intercept	6.118	1	6.118	27651.030	.000
formulation	.034	3	.011	51.076	.001
Error	.001	4	.000		
Total	6.152	8			
Corrected Total	.035	7			

a. R Squared = .975 (Adjusted R Squared = .955)

2.6. Mg

Duncan^{a,b}

formulation	N	Subset 1
cm3	2	.5314
cm2	2	.5456
cm4	2	.5464
cm1	2	.5619
Sig.		.129

Between-Subjects Factors

formulation	Value	Label
1.00	cm1	
2.00	cm2	
3.00	cm3	
4.00	cm4	

Tests of Between-Subjects Effects

Dependent Variable: Mg

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.001 ^a	3	.000	1.266	.398
Intercept	2.388	1	2.388	9733.479	.000
formulation	.001	3	.000	1.266	.398
Error	.001	4	.000		
Total	2.389	8			
Corrected Total	.002	7			

a. R Squared = .487 (Adjusted R Squared = .102)

Appendix 3: Results of ANOVA test of Sensory Evaluation

Color				Aroma			
CM1	CM2	CM3	CM4	CM1	CM2	CM3	CM4
3	3	3	2	3	3	3	3
2	2	3	2	1	1	1	2
2	2	2	2	2	2	2	2
2	2	2	2	3	2	3	3
2	3	3	2	2	2	2	2
3	3	3	2	3	2	3	3
2	2	2	2	2	2	2	2
3	3	3	3	2	3	2	3
2	2	2	3	3	3	1	2
3	3	3	3	3	3	3	3
3	3	2	2	2	3	3	3
2	2	2	3	1	3	3	2
3	3	3	3	2	2	2	2
2	2	2	2	3	1	2	2
2	3	3	3	3	3	3	3
3	3	3	3	2	2	2	2
3	3	2	2	1	2	1	1
3	2	2	2	3	2	3	1
1	2	2	2	3	3	2	2
2	3	3	2	3	2	3	2
2,4	2,55	2,5	2,35	2,35	2,3	2,3	2,25

Taste

CM1	CM2	CM3	CM4
3	3	3	3
2	1	1	2
1	1	2	2
1	1	1	1
2	2	2	2
3	3	3	3
2	2	2	2
3	2	3	1
3	3	3	3
3	3	3	3
3	2	2	2
2	2	3	2
2	2	2	2
2	2	2	2
1	1	1	1
1	2	1	2
1	1	2	3
2	3	3	3
3	3	2	2
1	2	3	3
2,05	2,05	2,2	2,2

Texture

CM1	CM2	CM3	CM4
3	3	3	3
2	3	3	2
3	3	3	3
1	1	1	1
2	2	2	2
3	3	3	3
2	2	2	2
2	3	3	3
3	3	3	2
3	3	3	3
2	3	3	2
3	3	3	3
2	2	2	2
2	2	2	2
2	2	2	2
2	2	2	2
2	2	2	2
3	2	3	3
2	2	3	2
3	2	3	3
2	2	2	2
2	2	2	2
2,35	2,4	2,55	2,35

Appendix 4: Average and Standard Deviations

Nutrient	CM1 (60:40)		AV	SD	CM2 (55:45)		AV	SD	CM3 (45:55)		AV	SD	CM4 (40:60)		AV	SD
	Moisture %	6.03	6.25	6.14	0.15	5.20,	5.16	5.16	2.62	4.98	8.82	4.90	2.71	4.97	4.70	4.835
				5				0				5				0
Fat%	18.8	18.5	18.6	0.21	17.6	17.4	12.5	0.11	16.4	16.5	16.51	0.07	15.7	15.9	15.84	0.15
	2	2	7	2	1	5	5	3	6	7		7	3	5		5
Protein%	11.7	11.6	11.6	0.05	12.4	12.6	12.5	0.18	13.6	13.7	13.68	0.09	13.7	13.6	13.71	0.04
	3	5	9	6	2	8	5	3	2	5		1	4	8		2
Ash%	2.57	2.75	2.66	0.12	2.53	2.45	2.49	0.05	2.20	2.34	2.27	0.09	2.77	2.87	2.82	0.07
				7				6				8				0
Carbohydrate %	39.1	39.1	39.1	0.01	37.7	37.7	37.7	0.01	37.2	37.4	37.37	0.14	37.2	37.2	37.20	0.00
	5	7	6	4	6	4	5	4	7	8		8	1		5	7

Table 4: values of Average and Standard Division of Chemical Analysis of Nutritional Content in the Baby Cookies

Attribute	CM1 (60:40)	CM2 (55:45)	CM3 (45:55)	CM4 (40:60)
Color	2.4	2.55	2.5	2,35
Aroma	2.35	2.3	2.3	2.25
Taste	2.05	2.05	2.2	2.2
Texture	2.35	2.4	2.55	2.35
Total Acceptance	2.2875	2.325	2.3875	2.2875

Table 5: Total score of sensory evaluations

Appendix 5: Sensory Evaluations

Date:

Panelist Name:

Sample Type:

Instructions: In front of you is one sample, which is a cookie made from sweet yellow corn and mung bean flour, with the addition of sugar and butter. Based on this, you are asked to provide an assessment of the attribute of its color, taste, texture, and smell. You can taste the sample more than once, and give answers with the criteria below:

Like- 3

Normal- 2

Dislike- 1

	Appearance	Aroma	Taste	Texture	Aroma
Like					
Normal					
Dislike					

Table 6: Scored hedonic rating scale

Appendix 6: Research Documentations



Figure 5 Sweet Yellow Corn Sample



Mung Bean Sample



Blended Sample Sweet Yellow Corn



Blended Sample of Mung Bean



Spreading blend sample in the oven tray



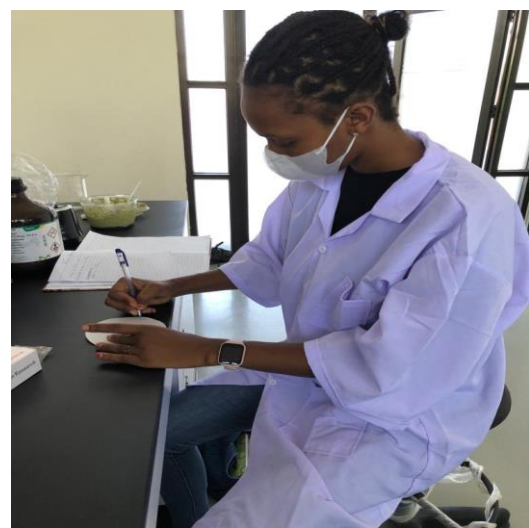
Dried Sweet Yellow Corn Sample from oven



Dried Sweet Corn Flour Sample



Dried Mung Bean Flour Sample



Sorting out flour samples for proximate Analysis



Weighing and measuring ingredient for baby cookies



Making Baby Cookies



Baby Cookies with Different Formulations



Sensory Evaluations with panelist- nursing baby mamas



Chemical Analysis Documentations

