

Title	Understanding consumer liking of beef using hierarchical cluster analysis and external preference mapping
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Publication date	2019-09-12
Original Citation	Chong, F. S., O'Sullivan, M. G., Kerry, J. P., Moloney, A. P., Methven, L., Gordon, A. W., Hagan, T. D. J. and Farmer, L. J. (2019) 'Understanding consumer liking of beef using hierarchical cluster analysis and external preference mapping', Journal of the Science of Food and Agriculture, 100(1), pp.245-257. https://doi.org/10.1002/jsfa.10032
Type of publication	Article (peer-reviewed)
Link to publisher's version	https://onlinelibrary.wiley.com/doi/abs/10.1002/jsfa.10032 - 10.1002/jsfa.10032
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Download date	2026-10-30 21:38:18
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Coláiste na hOllscoile Corcaigh

Understanding consumer liking of beef using hierarchical cluster analysis and external preference mapping

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Appendix 1

Chi-square analysis on socio-demographic and consumers' habit.

		Cluster Group (CG)			
		CG1 n= 121	CG2 n= 85	CG3 n= 96	CG3 n= 58
Age Group	18- 24	25	16	16	6
	25- 34	13	24	15	11
	35- 44	16	13	14	7
	45- 54	21	10	19	12
	55- 64	27	15	21	10
	65+	19	7	11	12
	χ^2	19.68			
Gender	P	0.184			
	Female	62	38	59	24
	Male	59	47	37	34
	χ^2	7.7			
Income	P	0.053			
	Below £25000	27	23	24	16
	£25000-£50000	59	35	42	24
	£50000-£75000	23	18	17	13
	Above £75000	12	9	13	5
	χ^2	3.04			
Doneness	P	0.963			
	Blue/Rare	7	7	10	9
	Medium rare	25	19	27	16
	Medium	35	28	19	15
	Medium well	30	18	22	10
	Well Done	23	13	17	8
	χ^2	10.97			
Number of children	P	0.532			
	Yes	37	24	26	17
	No	84	60	69	41
	χ^2	0.28			
Number of adult	P	0.964			
	Less than 2	79	64	60	37
	More than 2	42	21	33	21
	χ^2	3.34			

Important attributes	P	0.342			
	Tenderness	48	34	37	27
	Juiciness	7	7	3	4
	Flavour	66	43	56	27
	χ^2	3.9			
Frequency of consumption	P	0.691			
	I enjoy red meat, it's an important part of my diet.	50	31	39	29
	I like red meat well enough, it's a regular part of my diet.	54	40	41	21
	I do eat some red meat although truthfully it wouldn't worry me if I didn't or I rarely/ never eat red meat	17	14	16	8
	χ^2	2.96			
Purchase habit	P	0.814			
	Supermarket	75	55	62	34
	Other	46	29	34	24
	χ^2	0.85			
	P	0.836			
Importance level on motivation of beef choice					
It is good value.	Not/ Little important	8	5	8	4
	Moderately important	56	41	42	33
	Very Important	56	39	45	20
	χ^2	3.38			
	P	0.759			
It has a good flavour.	Not/ Little important	3	0	3	0
	Moderately important	21	17	20	9
	Very Important	96	67	72	49
	χ^2	5.24			
	P	0.513			
It has good tenderness.	Not/ Little important	5	2	5	0
	Moderately important	25	25	26	11
	Very Important	89	57	64	46
	χ^2	7.11			
	P	0.311			
It looks good.	Not/ Little important	12	9	10	5
	Moderately important	43	31	29	26
	Very Important	63	45	56	26
	χ^2	3.56			
	P	0.735			
I know how to cook it.	Not/ Little important	23	21	12	12
	Moderately important	47	37	39	23
	Very Important	49	26	44	22
	χ^2	6.73			
	P	0.374			
It is easy to prepare.	Not/ Little important	26	22	24	17
	Moderately important	59	43	43	26
	Very Important	34	19	28	14
	χ^2	2.55			
	P	0.863			
I enjoy cooking it.	Not/ Little important	20	25	25	12

	Moderately important	65	34	41	23
	Very Important	34	26	29	21
	χ^2	8.06			
	P	0.243			
It is a healthy choice.	Not/ Little important	18	23	20	17
	Moderately important	55	40	44	20
	Very Important	46	21	29	20
	χ^2	9.72			
	P	0.137			
I enjoyed it last time.	Not/ Little important	11	9	11	7
	Moderately important	48	33	30	27
	Very Important	60	41	53	23
	χ^2	4.58			
	P	0.599			
Animal well cared for.	Not/ Little important	19	20	25	12
	Moderately important	47	32	36	29
	Very Important	53	32	33	16
	χ^2	7.85			
	P	0.249			
Environmentally friendly.	Not/ Little important	25	25	31	17
	Moderately important	54	36	39	22
	Very Important	40	22	24	17
	χ^2	5.01			
	P	0.542			
I know where it comes from.	Not/ Little important	15	13	17	9
	Moderately important	53	41	38	23
	Very Important	51	31	40	25
	χ^2	2.52			
	P	0.867			
Consumption frequency for different muscles					
Brisket	Never	75	43	68	34
	<2/ month	42	35	23	21
	$\geq$ 2/ month	3	5	3	0
	χ^2	11.48			
	P	0.075			
Casserole steak	Never	30	26	23	23
	<2/ month	60	41	49	22
	$\geq$ 2/ month	28	16	23	12
	χ^2	6.09			
	P	0.413			
Fillet	Never	21	9	15	12
	<2/ month	80	55	58	33
	$\geq$ 2/ month	19	19	23	13
	χ^2	5.33			
	P	0.503			
Frying steak	Never	31	14	26	19
	<2/ month	58	47	44	26
	$\geq$ 2/ month	30	22	24	12
	χ^2	5.6			
	P	0.469			
Mince	Never	9	7	15	15
	<2/ month	28	16	24	8

	$\geq 2/$ month	82	60	57	34
	χ^2	16.45			
	P	0.012			
Lean mince	Never	12	10	14	7
	$< 2/$ month	27	22	25	17
	$\geq 2/$ month	80	51	57	33
	χ^2	2.5			
	P	0.869			
Rib eye	Never	44	21	40	20
	$< 2/$ month	63	52	40	31
	$\geq 2/$ month	10	10	16	6
	χ^2	10.49			
	P	0.106			
Rump	Never	39	26	38	29
	$< 2/$ month	67	50	47	22
	$\geq 2/$ month	12	8	10	5
	χ^2	8.13			
	P	0.229			
Silverside	Never	53	27	53	27
	$< 2/$ month	51	45	36	20
	$\geq 2/$ month	14	11	7	10
	χ^2	12.45			
	P	0.053			
Sirloin	Never	13	7	10	3
	$< 2/$ month	81	59	51	38
	$\geq 2/$ month	25	18	29	16
	χ^2	6.46			
	P	0.374			
Topside	Never	50	34	48	26
	$< 2/$ month	59	43	41	27
	$\geq 2/$ month	9	6	6	4
	χ^2	2.08			
	P	0.913			

P: Probability