

Supplemental material for

“Assessing Italians’ Preferences for Mountain Beef Production by Using a Best–Worst Scaling Approach”, by Mikael Oliveira Linder, Katia Laura Sidali, Christian Fischer, Matthias Gauly, and Gesa Busch, published in *Mountain Research and Development* 42(3), 2022. (See <https://bioone.org/toc/mred/42/3>)

TABLE S1 Characterization of segments based on segmentation variables (probability scale: 0–100 rescaled importance score)

Segmentation variables	Mountain supporter <i>n</i> = 202 (21%)	Local free-grazing animals <i>n</i> = 221 (23%)	Natural living <i>n</i> = 183 (19%)	Medicine sensitive <i>n</i> = 364 (37%)	Total <i>n</i> = 970
Animals free-range raised	12.42	26.28	26.67	20.80	22.18
Less-medicines	14.48	3.86	26.38	32.36	21.55
Animals grass/hay fed only	9.70	23.67	18.74	20.27	21.41
Local/Autochthonous breed only	10.27	11.95	3.42	6.56	8.26
Production supports the local economy	15.95	7.70	4.05	6.29	7.75
Production contributes to preserve the mountain environment	14.50	8.24	4.33	6.24	7.49
Animals born and raised in mountain areas	8.64	10.11	3.82	4.13	6.07
Animals raised in small farms	8.54	6.20	2.21	2.45	4.33
Animals that live longer	5.44	1.94	10.33	0.85	3.24

Fit criteria of the 4-class solution: Log-likelihood = -21989.96; Percent Certainty = 21.74; AIC = 44049.93; BIC = 44321.80; Chi-Square= 12221.63

Source: authors’ calculations from survey data.

TABLE S2 Profile of respondents, by segment and total, based on their answers on food consumption behavior and mountain- and label-related questions

Variables	Mountain supporter <i>n</i> = 202 (21%)	Local free-grazing animals <i>n</i> = 221 (23%)	Natural living <i>n</i> = 183 (19%)	Medicine sensitive <i>n</i> = 364 (37%)	Total <i>n</i> = 970
Food consumption behavior					
<i>It's important to me that the food I eat on a normal weekday...¹ (segment means)</i>					
Is Cheap** ³	3.29 ^d	3.10	3.20	3.01 ^a	3.13
Takes very little time to prepare** ³	3.69 ^d	3.52	3.54	3.46 ^a	3.54
Contains no artificial ingredients*** ⁴	4.12 ^{c d}	4.29	4.35 ^a	4.40 ^a	4.31
keeps me healthy ** ⁴	4.27	4.39	4.35	4.44	4.38
Tastes well*** ³	4.37 ^{b d}	4.51 ^a	4.49	4.58 ^a	4.50
Is what I usually eat*** ⁴	3.71	3.69	3.60	3.44	3.58
<i>Consumption Frequency* (Times ate beef in the previous week)</i>					
Four or more times % (s.r.)	3.5 (0.5)	3.2 (0.2)	4.4 (1.2)	1.7 (-1.4)	2.9
Three times % (s.r.)	15.9 (-0.7)	17. (-0.2)	13.0 (-1.5)	21.7 (1.7)	17.8
Two times % (s.r.)	45.0 (2.6)	33.5 (-0.2)	31.2 (-0.7)	30.5 (-1.2)	34.3
One time % (s.r.)	29.2 (-1.8)	39.8 (0.7)	41.0 (0.9)	37.9 (0.3)	37.1
Didn't eat beef % (s.r.)	6.4 (-0.7)	6.3 (-0.8)	10.4 (1.23)	8.2 (0.3)	7.9
$\chi^2 = 25.745$. $p < 0.05$					
General attitude towards labels and mountain food					
<i>Read Labels **⁴ (When shopping food products in general, are food labels of importance to you?)</i>	3.86 ^c	3.85 ^c	3.57 ^{a b d}	3.80 ^c	3.78
<i>Mountain food consumption^{2 k 3} (Considering a scale from 1 (not at all) to 5 (very much), to what extent do you consider yourself a consumer of mountain food products?) (p<0.10)</i>	3.33	3.35	3.15	3.23	3.26
¹ = 5-point Likert-type scale from (5) strongly agree to (1) strongly disagree.					
² = 5-point Likert-type scale from (5) very much to (1) not at all.					
³ = Tukey post-hoc test was used because of no differences in variances in segments.					
⁴ = Tamhane post-hoc test was used because of differences in variances in segments.					
^{a, b, c, d} = Letters indicate significant differences ($p < 0.05$) between segments according to post-hoc tests. For instance, ^a indicates that this segment differs from segment 1 ("young sustainable mountain enthusiasts") in this variable with $p < 0.05$.					
***= $p < 0.001$. **= $p < 0.01$. *= $p < 0.05$ ^k = $p < 0.1$.					
s.r.= standardized residual. χ^2 = chi-square					
F = "is good value for money" =3.95. F = "is cheap" =4.16. F = "is not expensive" = 3.48. F = "takes very little time to prepare" =3.09. F = "contain natural ingredients" =5.09. F = "contain no additives" =4.16. F = "contain no artificial ingredients" =45.40 F = "keep me healthy" =2.96. F = "tastes well" =5.53. F = "is what I usually eat" =5.91. F = "is familiar" =2.55. F = "read labels" = 4.73. F = "Mountain food consumption" = 2.50.					

Source: authors' calculations from survey data.

TABLE S3 Sociodemographic profile of respondents by segment and total

Socio-demographics					
<i>Variables</i>	Mountain supporter n = 202 (21%)	Local free-grazing animals n = 221 (23%)	Natural living n = 183 (19%)	Medicine sensitive n = 364 (37%)	Total n = 970
<i>Gender**</i>					
Male % (s.r.)	43.6 (-1.3)	47.9 (-0.4)	56.83 (1.3)	51.65 (0.4)	50.01
Female % (s.r.)	56.4 (1.3)	52.1 (0.4)	43.17 (-1.3)	48.35 (-0.4)	49.90
$\chi^2 = 20.896$. $p < 0.05$					
<i>Household size* (mean)</i>	3.04	2.79	2.95	2.79	2.87
<i>Residence Location (n.s.)</i>					
Mountain Area / Non-Mountain Area (%)	12.4 / 87.6	5.9 / 94.1	6.6 / 93.4	8.3 / 91.7	8.4 / 91.6
Urban Area / Rural Area (%)	71.6 / 28.34	74.9 / 25.1	69.4 / 30.6	71.0 / 29.0	71.7 / 28.3
<i>Education**</i>					
Primary School % (s.r.)	0.5 (0.0)	1.8 (2.7)	0.0 (-1.0)	0.00 (-1.4)	0.5
Middle School % (s.r.)	8.4 (-0.8)	9.5 (-0.4)	13.7 (1.4)	10.2 (-0.1)	10.3
High School % (s.r.)	60.9 (0.3)	63.8 (0.9)	60.7 (0-2)	54.9 (-1.1)	59.3
University or higher % (s.r.)	30.2 (0.1)	24.9 (-1.4)	25.7 (-1.0)	34.9 (1.7)	29.9
$\chi^2 = 20.896$. $p < 0.05$					
<i>Age segments***</i>					
18-29 % (s.r.)	16.8 (0.8)	10.4 (-1.6)	22.4 (2.7)	12.1 (-1.3)	14.6
30-44 % (s.r.)	28.2 (1.8)	19.0 (-1.1)	21.9 (-0.1)	21.4 (-0.4)	22.4
45-59 % (s.r.)	26.2 (-0.6)	28.5 (0.0)	31.1 (0.7)	28.6 (0.0)	28.6
60 & over % (s.r.)	28.8 (-1.4)	42.1 (1.9)	24.6 (-2.3)	37.9 (1.1)	34.4
$\chi^2 = 29.809$. $p < 0.001$					
<i>Income (net per year)**</i>					
≤ 24.000€ % (s.r.)	36.6 (0.8)	32.1 (-0.3)	36.6 (0.8)	30.5 (-0.9)	33.3
24.000€ - 60.000€ % (s.r.)	45.6 (-0.5)	43.5 (-1.0)	42.6 (-1.0)	54.6 (1.9)	47.9
≥ 60.000€ % (s.r.)	5.9 (-0.4)	6.3 (-0.2)	7.7 (0.6)	6.6 (0.0)	6.6
Preferred not to answer % (s.r.)	11.9 (-0.1)	18.1 (2.5)	13.1 (0.4)	8.3 (-2.1)	12.2
$\chi^2 = 19.539$. $p < 0.05$					
***= $p < 0.001$. **= $p < 0.01$. *= $p < 0.05$ $\chi^2 = p < 0.1$.					
F = "household size" = 2.78.					
s.r.= standardized residual. χ^2 = chi-square					
n.s. = non-significant					

Source: authors' calculations from survey data.