

APPENDIX A: STATISTICAL ANALYSES

TABLE A1 Chi-Squared Analyses for Natural Health Product Recommendations

Product	Breast Cancer <i>n</i> (%)	Colorectal Cancer <i>n</i> (%)	Ovarian Cancer <i>n</i> (%)	Pancreatic Cancer <i>n</i> (%)	Chi-squared statistic	P value	Cramer's V
Vitamin D	121 (78)	83 (74)	55 (77)	30 (63)	4.47	0.21	0.11
Curcumin	104 (67)	73 (65)	51 (71)	32 (68)	0.88	0.83	0.05
Melatonin	118 (76)	71 (63)	51 (71)	20 (42)	20.71	< 0.001	0.23
<i>Trametes versicolor</i>	97 (62)	55 (49)	36 (50)	14 (29)	17.13	0.001	0.21
Omega 3 fatty acids	71 (46)	55 (49)	41 (57)	25 (53)	2.87	0.41	0.09
Probiotics	54 (35)	52 (46)	28 (39)	19 (40)	3.50	0.32	0.10
Magnesium	73 (47)	32 (28)	35 (49)	8 (17)	21.78	< 0.001	0.24
B vitamins	59 (38)	33 (29)	34 (47)	15 (31)	6.88	0.08	0.13
L-glutamine	39 (25)	46 (41)	26 (36)	14 (29)	8.06	0.04	0.14
Vitamin C	59 (38)	27 (24)	17 (24)	10 (21)	11.46	0.009	0.17
<i>Linum usitatissimum</i>	62 (40)	12 (10)	21 (29)	9 (19)	30.46	< 0.001	0.28
Multivitamin	45 (29)	26 (23)	18 (25)	10 (21)	2.16	0.54	0.07
Protein powder	26 (16)	28 (25)	16 (22)	13 (27)	3.84	0.28	0.10
Alpha-lipoic acid	26 (16)	16 (14)	20 (28)	18 (38)	15.38	0.002	0.20
Enzymes	29 (18)	24 (21)	10 (14)	17 (36)	9.06	0.03	0.15
Fermented wheat germ extract	18 (11)	29 (25)	21 (29)	6 (12)	14.97	0.002	0.20
Coenzyme Q10	44 (28)	9 (8)	15 (21)	1 (2)	27.72	< 0.001	0.27
Green tea extract	26 (16)	16 (14)	22 (30)	4 (8)	12.29	0.006	0.18
Homeopathic remedies	38 (24)	13 (11)	10 (14)	5 (10)	10.41	0.02	0.16
Zinc	23 (14)	21 (18)	12 (16)	8 (17)	0.69	0.88	0.04
Modified citrus pectin	24 (15)	13 (11)	12 (16)	6 (12)	1.35	0.71	0.06
Calcium	33 (21)	9 (8)	11 (15)	2 (4)	13.91	0.003	0.19
<i>Zingiber officinalis</i>	9 (5)	21 (18)	11 (15)	8 (17)	11.47	0.009	0.17
Berberine	24 (15)	8 (7)	14 (19)	3 (6)	9.08	0.03	0.15
<i>Ganoderma lucidum</i>	22 (14)	11 (9)	12 (16)	3 (6)	4.05	0.26	0.10
<i>Silybum marianum</i>	13 (8)	24 (21)	6 (8)	4 (8)	12.43	0.006	0.18
Vitamin K	33 (21)	7 (6)	3 (4)	2 (4)	23.66	< 0.001	0.25
<i>Astragalus Spp</i>	17 (11)	8 (7)	13 (18)	6 (12)	5.45	0.14	0.12
Quercetin	19 (12)	10 (8)	8 (11)	3 (6)	1.75	0.63	0.07
Immune combination products ¹	21 (13)	10 (8)	1 (1)	3 (6)	11.62	0.009	0.17
<i>Glycyrrhiza glabra</i>	15 (9)	7 (6)	8 (11)	1 (2)	4.29	0.23	0.11
<i>Boswellia serrata</i>	20 (12)	5 (4)	4 (5)	2 (4)	8.47	0.04	0.15
<i>Withania somnifera</i>	21 (13)	4 (3)	5 (7)	1 (2)	11.82	0.008	0.18
Sesame oil	8 (5)	2 (1)	6 (8)	7 (14)	11.49	0.009	0.17
Sulforaphane glucosinolate	16 (10)	0	5 (7)	0	N/A	N/A	N/A
Activated charcoal	0	9 (8)	0	5 (10)	N/A	N/A	N/A
Psyllium	5 (3)	2 (1)	2 (2)	5 (10)	7.85	0.05	0.14

Breast cancer: *n* = 154. Colorectal cancer: *n* = 112. Ovarian cancer: *n* = 71. Pancreatic cancer: *n* = 47.

TABLE A2 Standardized Residuals for Natural Health Product Recommendations

Product	Standardized Residuals			
	Breast Cancer (Recommended, Not Recommended)	Colorectal Cancer (Recommended, Not Recommended)	Ovarian Cancer (Recommended, Not Recommended)	Pancreatic Cancer (Recommended, Not Recommended)
Vitamin D	0.474, -0.826	-0.141, 0.245	0.214, -0.373	-0.903, 1.576
Curcumin	-0.027, 0.038	-0.325, 0.471	0.422, -0.611	0.031, -0.045
Melatonin	1.345, -1.947	-0.555, 0.804	0.422, -0.611	-2.096, 3.035
<i>Trametes versicolor</i>	1.777, -1.872	-0.51, 0.538	-0.221, 0.233	-2.157, 2.272
Omega 3 fatty acids	-0.684, 0.684	-0.134, 0.134	0.923, -0.923	0.309, -0.309
Probiotics	-0.94, 0.765	1.104, -0.898	-0.054, 0.044	0.063, -0.051
Magnesium	1.699, -1.338	-1.661, 1.308	1.5, -1.181	-2.356, 1.855
B vitamins	0.247, -0.187	-1.226, 0.929	1.595, -1.208	-0.516, 0.391
L-glutamine	-1.572, 1.092	1.58, -1.098	0.601, -0.417	-0.332, 0.231
Vitamin C	2.171, -1.384	-0.945, 0.602	-0.998, 0.637	-1.244, 0.793
<i>Linum usitatissimum</i>	3.142, -1.915	-3.329, 2.029	0.404, -0.246	-1.045, 0.637
Multivitamin	0.909, -0.532	-0.67, 0.392	-0.028, 0.016	-0.576, 0.337
Protein powder	-1.263, 0.663	0.771, -0.405	0.167, -0.088	0.891, -0.468
Alpha-lipoic acid	-1.074, 0.551	-1.518, 0.779	1.354, -0.695	2.623, -1.346
Enzymes	-0.544, 0.279	0.138, -0.071	-1.246, 0.639	2.304, -1.182
Fermented wheat germ extract	-2.144, 1.047	1.596, -0.78	1.978, -0.967	-1.016, 0.496
Coenzyme Q10	3.104, -1.453	-2.48, 1.161	0.628, -0.294	-2.562, 1.199
Green tea extract	-0.243, 0.113	-0.861, 0.399	2.659, -1.233	-1.498, 0.695
Homeopathic remedies	2.241, -1.021	-1.425, 0.649	-0.631, 0.287	-1.083, 0.493
Zinc	-0.526, 0.235	0.54, -0.242	0.048, -0.022	0.06, -0.027
Modified citrus pectin	0.414, -0.169	-0.759, 0.311	0.574, -0.235	-0.282, 0.115
Calcium	2.33, -0.953	-1.758, 0.719	0.261, -0.107	-1.824, 0.746
<i>Zingiber officinalis</i>	-2.403, 0.919	1.774, -0.679	0.645, -0.247	0.818, -0.313
Berberine	0.981, -0.375	-1.664, 0.637	1.641, -0.628	-1.224, 0.468
<i>Ganoderma lucidum</i>	0.627, -0.237	-0.802, 0.303	1.049, -0.396	-1.186, 0.448
<i>Silybum marianum</i>	-1.347, 0.503	2.78, -1.038	-0.913, 0.341	-0.731, 0.273
Vitamin K	3.52, -1.282	-1.691, 0.616	-1.844, 0.672	-1.495, 0.545
<i>Astragalus Spp</i>	-0.154, 0.055	-1.349, 0.485	1.706, -0.614	0.265, -0.095
Quercetin	0.739, -0.252	-0.488, 0.166	0.222, -0.076	-0.857, 0.292
Immune combination products ¹	1.994, -0.622	0.026, -0.008	-2.507, 0.781	-0.569, 0.177
<i>Glycyrrhiza glabra</i>	0.728, -0.216	-0.679, 0.201	0.947, -0.281	-1.435, 0.425
<i>Boswellia serrata</i>	2.146, -0.636	-1.344, 0.398	-0.723, 0.214	-0.921, 0.273
<i>Withania somnifera</i>	2.43, -0.72	-1.677, 0.497	-0.306, 0.091	-1.435, 0.425
Sesame oil	-0.40, 0.10	-1.82, 0.46	0.85, -0.21	2.49, -0.63
Sulforaphane glucosinolate	N/A	N/A	N/A	N/A
Activated charcoal	N/A	N/A	N/A	N/A
Psyllium	-0.26, 0.05	-1.03, 0.20	-0.37, 0.07	2.51, -0.49

TABLE A3 Chi-Squared Analyses for Nutrition Encouragement Recommendations

Product	Breast Cancer <i>n</i> (%)	Colorectal Cancer <i>n</i> (%)	Ovarian Cancer <i>n</i> (%)	Pancreatic Cancer <i>n</i> (%)	Chi-squared statistic	P value	Cramer's V
Protein foods ¹	77 (50)	56 (50)	37 (52)	27 (57)	0.91	0.82	0.05
Vegetables	82 (53)	51 (45)	37 (52)	20 (42)	2.67	0.46	0.08
Eating behaviours and education	62 (40)	46 (41)	27 (38)	24 (51)	2.23	0.53	0.08
Teas	63 (40)	31 (27)	33 (46)	12 (25)	10.56	0.01	0.17
Fruits	49 (31)	45 (40)	30 (42)	14 (29)	4.01	0.26	0.10
Nuts and seeds	46 (29)	31 (27)	25 (35)	16 (34)	1.46	0.69	0.06
Fats	48 (31)	33 (29)	23 (32)	15 (31)	0.21	0.98	0.02
Fasting	51 (33)	27 (24)	22 (30)	8 (17)	5.95	0.11	0.12
Water	38 (24)	29 (25)	23 (32)	8 (17)	3.62	0.31	0.10
Whole grains	31 (20)	26 (23)	16 (22)	11 (23)	0.47	0.92	0.04
Specific diets	38 (24)	20 (17)	19 (26)	9 (19)	2.85	0.42	0.09
Fermented foods	32 (20)	21 (18)	23 (32)	6 (12)	7.70	0.05	0.14
Whole foods	26 (16)	29 (25)	16 (22)	7 (14)	4.34	0.23	0.11
Herbs/spices	29 (18)	24 (21)	13 (18)	7 (14)	0.97	0.81	0.05
Low glycemic index foods	26 (16)	22 (19)	16 (22)	5 (10)	3.05	0.38	0.09
Dairy	24 (15)	17 (15)	11 (15)	9 (19)	0.44	0.93	0.03
Fibre	19 (12)	18 (16)	12 (16)	7 (14)	1.13	0.77	0.05
Soups and broths	12 (7)	15 (13)	9 (12)	10 (21)	6.66	0.08	0.13
Alliums	11 (7)	15 (13)	8 (11)	5 (10)	2.93	0.40	0.09
Juice	17 (11)	9 (8)	7 (9)	6 (12)	1.04	0.79	0.05
Coffee	9 (5)	9 (8)	4 (5)	8 (17)	6.84	0.08	0.13
Red meat	8 (5)	13 (11)	7 (9)	4 (8)	3.78	0.29	0.10
Sugar substitute	7 (4)	10 (8)	10 (14)	3 (6)	6.49	0.09	0.13
Apple cider vinegar	8 (5)	4 (3)	8 (11)	2 (4)	5.27	0.15	0.12

Breast cancer: *n* = 154. Colorectal cancer: *n* = 112. Ovarian cancer: *n* = 71. Pancreatic cancer: *n* = 47. 1: Red meat included as a separate recommendation.

TABLE A4 Standardized Residuals for Nutrition Encouragement Recommendations

Product	Standardized Residuals			
	Breast Cancer (Recommended, Not Recommended)	Colorectal Cancer (Recommended, Not Recommended)	Ovarian Cancer (Recommended, Not Recommended)	Pancreatic Cancer (Recommended, Not Recommended)
Protein foods ¹	-0.226, 0.232	-0.192, 0.197	0.095, -0.098	0.588, -0.604
Vegetables	0.665, -0.658	-0.593, 0.587	0.315, -0.312	-0.675, 0.668
Eating behaviours and education	-0.221, 0.186	-0.055, 0.046	-0.442, 0.372	1.029, -0.865
Teas	0.972, -0.732	-1.499, 1.129	1.44, -1.085	-1.215, 0.915
Fruits	-0.853, 0.639	0.749, -0.561	0.888, -0.665	-0.703, 0.527
Nuts and seeds	-0.192, 0.128	-0.582, 0.388	0.681, -0.454	0.41, -0.273
Fats	0.04, -0.027	-0.29, 0.194	0.213, -0.142	0.114, -0.076
Fasting	1.168, -0.731	-0.802, 0.502	0.455, -0.284	-1.435, 0.898
Water	-0.208, 0.122	0.078, -0.046	1.146, -0.671	-1.153, 0.675
Whole grains	-0.463, 0.245	0.303, -0.16	0.119, -0.063	0.224, -0.119
Specific diets	0.598, -0.321	-1.015, 0.545	0.777, -0.417	-0.47, 0.253
Fermented foods	-0.154, 0.08	-0.596, 0.311	2.013, -1.049	-1.274, 0.664
Whole foods	-0.944, 0.477	1.31, -0.662	0.416, -0.21	-0.824, 0.416
Herbs/spices	-0.051, 0.025	0.587, -0.284	-0.135, 0.066	-0.647, 0.314
Low glycemic index foods	-0.318, 0.149	0.418, -0.196	0.908, -0.425	-1.186, 0.555
Dairy	-0.094, 0.041	-0.188, 0.082	-0.083, 0.036	0.561, -0.244
Fibre	-0.73, 0.302	0.412, -0.17	0.511, -0.211	0.056, -0.023
Soups and broths	-1.501, 0.554	0.432, -0.159	0.17, -0.063	1.842, -0.679
Alliums	-1.173, 0.395	1.075, -0.361	0.294, -0.099	0.104, -0.035
Juice	0.344, -0.116	-0.704, 0.237	-0.079, 0.026	0.561, -0.189
Coffee	-0.874, 0.254	0.085, -0.025	-0.657, 0.191	2.259, -0.658
Red meat	-1.349, 0.407	1.2, -0.362	0.445, -0.134	0.042, -0.013
Sugar substitute	-1.451, 0.422	0.423, -0.123	1.891, -0.55	-0.351, 0.102
Apple cider vinegar	-0.280, 0.070	-0.950, 0.240	1.950, -0.480	-0.420, 0.100

¹ Red meat included as a separate recommendation.

TABLE A5 Chi-Squared Analyses for Nutrition Discouragement Recommendations

Product	Breast Cancer <i>n</i> (%)	Colorectal Cancer <i>n</i> (%)	Ovarian Cancer <i>n</i> (%)	Pancreatic Cancer <i>n</i> (%)	Chi-squared statistic	P value	Cramer's V
Sugar	39 (25)	29 (26)	23 (32)	9 (19)	2.69	0.44	0.08
Refined grains	27 (18)	24 (21)	18 (25)	6 (13)	3.55	0.31	0.10
Red meat	21 (14)	19 (17)	16 (23)	3 (6)	6.3	0.10	0.13
Raw foods	10 (6)	19 (17)	7 (10)	12 (26)	14.87	0.002	0.20
Alcohol	9 (6)	9 (8)	9 (13)	2 (4)	4.08	0.25	0.10
Eating behaviours and education	8 (5)	7 (6)	8 (11)	2 (4)	3.48	0.32	0.10

Breast cancer: *n* = 154. Colorectal cancer: *n* = 112. Ovarian cancer: *n* = 71. Pancreatic cancer: *n* = 47.

TABLE A6 Standardized Residuals for Nutrition Discouragement Recommendations

Product	Standardized Residuals			
	Breast Cancer (Recommended, Not Recommended)	Colorectal Cancer (Recommended, Not Recommended)	Ovarian Cancer (Recommended, Not Recommended)	Pancreatic Cancer (Recommended, Not Recommended)
Sugar	-0.174, 0.103	-0.031, 0.018	1.049, -0.622	-0.926, 0.549
Refined grains	-0.561, 0.277	0.454, -0.224	1.11, -0.547	-1.049, 0.517
Red meat	-0.547, 0.233	0.432, -0.184	1.541, -0.657	-1.571, 0.669
Raw foods	-2.108, 0.797	1.336, -0.505	-0.629, 0.238	2.527, -0.955
Alcohol	-0.771, 0.22	0.186, -0.053	1.571, -0.449	-0.822, 0.235
Eating behaviours and education	-0.64, 0.169	-0.108, 0.029	1.571, -0.415	-0.606, 0.16

TABLE A7 Chi-Squared Analyses for Parenteral Recommendations

Product	Breast Cancer <i>n</i> (%)	Colorectal Cancer <i>n</i> (%)	Ovarian Cancer <i>n</i> (%)	Pancreatic Cancer <i>n</i> (%)	Chi-squared statistic	P value	Cramer's V
Vitamin C (intravenous)	96 (62)	76 (68)	51 (72)	34 (72)	2.90	0.41	0.09
Mistletoe (subcutaneous)	62 (40)	60 (54)	29 (41)	25 (53)	6.36	0.10	0.13
Mistletoe (intravenous)	47 (31)	41 (37)	25 (35)	22 (47)	4.36	0.23	0.11
General nutrients (intravenous)	11 (7)	15 (13)	7 (10)	9 (19)	6.31	0.10	0.13
Artesunate (intravenous)	19 (12)	8 (7)	6 (8)	3 (6)	2.81	0.42	0.09
Dichloroacetate (intravenous)	9 (6)	9 (8)	2 (3)	5 (11)	3.45	0.33	0.09

Breast cancer: *n* = 154. Colorectal cancer: *n* = 112. Ovarian cancer: *n* = 71. Pancreatic cancer: *n* = 47.

TABLE A8 Standardized Residuals for Parenteral Recommendations

Product	Standardized Residuals			
	Breast Cancer (Recommended, Not Recommended)	Colorectal Cancer (Recommended, Not Recommended)	Ovarian Cancer (Recommended, Not Recommended)	Pancreatic Cancer (Recommended, Not Recommended)
Vitamin C (intravenous)	-0.696, 0.99	0.12, -0.171	0.505, -0.719	0.454, -0.645
Mistletoe (subcutaneous)	-1.022, 0.94	1.21, -1.113	-0.621, 0.571	0.745, -0.685
Mistletoe (intravenous)	-0.97, 0.715	0.259, -0.191	0.008, -0.006	1.347, -0.992
General nutrients (intravenous)	-1.424, 0.499	0.786, -0.275	-0.275, 0.096	1.702, -0.597
Artesunate (intravenous)	1.201, -0.386	-0.772, 0.248	-0.254, 0.082	-0.67, 0.215
Dichloroacetate (intravenous)	-0.324, 0.086	0.633, -0.167	-1.22, 0.322	1.109, -0.293

TABLE A9 Chi-Squared Analyses for Other Common Recommendations

Product	Breast Cancer <i>n</i> (%)	Colorectal Cancer <i>n</i> (%)	Ovarian Cancer <i>n</i> (%)	Pancreatic Cancer <i>n</i> (%)	Chi-squared statistic	P value	Cramer's V
Exercise (aerobic)	82 (53)	56 (50)	40 (56)	23 (49)	0.97	0.81	0.05
Acupuncture	46 (30)	26 (23)	19 (27)	12 (26)	1.51	0.68	0.06
Cannabis and cannabinoids	42 (27)	24 (21)	15 (21)	14 (29)	2.33	0.51	0.08
Hydrotherapy	35 (23)	13 (12)	18 (25)	6 (13)	8.49	0.04	0.15
Exercise (resistance)	31 (20)	14 (13)	15 (21)	10 (21)	3.53	0.32	0.1
Metformin	28 (18)	7 (6)	21 (30)	6 (13)	18.43	< 0.001	0.22
Yoga	25 (16)	16 (14)	13 (18)	4 (9)	2.37	0.50	0.08
Meditation and/or mindfulness	19 (12)	20 (18)	11 (15)	2 (4)	5.66	0.13	0.12
Low dose naltrexone	25 (16)	8 (7)	11 (15)	12 (26)	9.88	0.02	0.16
Massage therapy	19 (12)	8 (7)	13 (18)	3 (6)	6.76	0.08	0.13
Acetyl salicylic acid	20 (13)	2 (2)	8 (11)	3 (6)	11.33	0.01	0.17
NSAIDs	11 (7)	14 (12)	3 (4)	4 (9)	4.4	0.22	0.11
Dichloroacetate	4 (3)	12 (11)	3 (4)	4 (9)	8.51	0.04	0.15

Breast cancer: *n* = 154. Colorectal cancer: *n* = 112. Ovarian cancer: *n* = 71. Pancreatic cancer: *n* = 47.

TABLE A10 Standardized Residuals for Other Common Recommendations

Product	Standardized Residuals			
	Breast Cancer (Recommended, Not Recommended)	Colorectal Cancer (Recommended, Not Recommended)	Ovarian Cancer (Recommended, Not Recommended)	Pancreatic Cancer (Recommended, Not Recommended)
Exercise (aerobic)	0.155, -0.162	-0.343, 0.359	0.465, -0.488	-0.323, 0.338
Acupuncture	0.73, -0.442	-0.737, 0.446	-0.01, 0.006	-0.171, 0.103
Cannabis and cannabinoids	0.632, -0.362	-0.704, 0.404	-0.612, 0.351	0.696, -0.399
Hydrotherapy	1.14, -0.548	-1.746, 0.839	1.285, -0.617	-0.947, 0.455
Exercise (resistance)	0.552, -0.261	-1.42, 0.671	0.572, -0.27	0.489, -0.231
Metformin	0.629, -0.276	-2.606, 1.144	2.817, -1.236	-0.577, 0.253
Yoga	0.361, -0.152	-0.223, 0.094	0.695, -0.293	-1.163, 0.491
Meditation and/or mindfulness	-0.406, 0.161	1.241, -0.491	0.447, -0.177	-1.73, 0.685
Low dose naltrexone	0.536, -0.222	-2.062, 0.852	0.201, -0.083	1.966, -0.812
Massage therapy	0.423, -0.15	-1.282, 0.455	1.791, -0.636	-0.986, 0.35
Acetyl salicylic acid	1.86, -0.57	-2.458, 0.754	0.769, -0.236	-0.517, 0.159
NSAIDs	-0.512, 0.154	1.528, -0.461	-1.199, 0.362	0.042, -0.013
Dichloroacetate	-1.72, 0.434	2.043, -0.516	-0.607, 0.153	0.706, -0.178