ANEXO

TABLAS

Tabla 1: Tabla normalidad de datos.

	Test utilizado	Valor p	Interpretación
Alimento1-131	Anderson-Darling	<0.001	No paramétrico
Nutriente 1-19	Anderson-Darling	<0.001	No paramétrico

Tabla 1: Cálculo de normalidad para las variables alimento1-131 usando la prueba de Anderson-Darling para todas ellas (n = 1000). El p-valor se representa al lado de cada variable. Se consideró estadísticamente significativo un resultado de p-valor <0.005 (datos no paramétricos).

Tabla 2: Tabla PCA componentes y R2.

	Eigenvalue	Variance.percent	Cumulative.Variance.Percent (R^2)
Dim.1	16.823.939	11.215.959	1.121.596
Dim.2	5.301.192	3.534.128	1.475.009
Dim.3	3.473.709	2.315.806	1.706.589
Dim.4	3.099.932	2.066.621	1.913.251
Dim.5	2.814.445	1.876.297	2.100.881
Dim.6	2.553.558	1.702.372	2.271.118

Tabla 2: Representación de las 6 primeras dimensiones con eigenvlaues, el porcentaje de varianza individual y de varianza acumulada (R^2).

Tabla 3: Tabla PCA cargas.

	PC1	PC2
alimento1	0.0184870834	-0.1172222924
alimento2	0.0275027629	-0.0305078217
alimento3	0.0384938585	0.0687482172
alimento4	0.0006331246	-0.0106364234
alimento5	0.0119973716	-0.0430730825
alimento6	0.0173323526	-0.0279672979
alimento7	0.0293553108	-0.0735655814
alimento8	0.0528358169	0.1039156779
alimento9	0.0073802444	-0.0450413720
alimento10	0.0311835843	-0.0303878944
alimento11	0.0393289835	-0.0219907834
alimento12	0.0620784766	-0.0780505738
alimento13	0.0693149522	0.0123644176
alimento14	0.0332120942	-0.1255930786
alimento15	0.0166923612	-0.0495335846
alimento16	0.0400911077	-0.1189521407
alimento17	0.0222298369	-0.0744092228
alimento18	0.0639842817	0.0177694704
alimento19	0.0455448895	-0.1102895038
alimento20	0.0369645093	-0.1490467247
alimento21	0.0364612695	-0.0624773582
alimento22	0.0371646863	-0.0261800586

alimento23	0.0496577027	-0.0934145840
alimento24	0.0159673271	-0.0405099729
alimento25	0.0771345895	-0.0913829616
alimento26	0.0618037945	-0.0448893767
alimento27	0.0285621127	-0.1644228483
alimento28	0.0192941398	-0.1442468277
alimento29	0.0317581365	-0.1376789971
alimento30	0.0236961629	-0.1221134060
alimento31	0.0147130411	-0.1096039672
alimento32	0.0249476158	-0.1140430747
alimento33	0.0187256628	-0.1370258868
alimento34	0.0857318832	-0.0024271450
alimento35	0.1007874156	-0.0418676703
alimento36	0.0732852710	-0.0252183472
alimento37	0.0635405411	-0.0882178283
alimento38	0.0678106955	-0.0925208086
alimento39	0.0652599684	-0.0987613702
alimento40	0.0816439801	-0.0924587119
alimento41	0.1172441643	0.1127138951
alimento42	0.1075288742	0.0970327590
alimento43	0.1072001194	0.1210478516
alimento44	0.1120858012	0.1330182016
alimento45	0.1142470305	0.1550437504
alimento46	0.1204580858	0.1185237596
alimento47	0.1097299822	0.1440884356
alimento48	0.1040938724	0.0976742868
alimento49	0.0871738094	0.0733080022
alimento50	0.0419511958	0.0615174676
alimento51	0.0716552317	0.0488850474
alimento52	0.0395850166	-0.1665032012
alimento53	0.0756991855	-0.0416854081
alimento54	0.0732018142	0.0756880788
alimento55	0.0427401517	-0.0040304007
alimento56	0.0777342834	0.1049138116
alimento57	0.0789570921	0.1011623457
alimento58	0.0816262757	0.1084802953
alimento59	0.0857872136	0.0904152525
alimento60	0.0485227009	0.0419819251
alimento61	0.0658488003	0.1030265123
alimento62	0.0754748453	0.0971272149
alimento63	0.0757142490	0.0640828621
alimento64	0.0317115939	-0.0667849248
alimento65	0.0324462100	0.0119720364
alimento66	0.0509801508	0.0243253042
alimento67	0.0662156405	-0.0129189326
alimento68	0.0578146203	-0.0436900969
alimento69	0.0576931222	0.0021861544

alimento70	0.0432666225	0.0761816916
alimento71	0.0611182634	0.1088964154
alimento72	0.0883938333	-0.0087091678
alimento73	0.0833011323	-0.0125830062
alimento74	0.0750252109	-0.0366073153
alimento75	0.0576482472	-0.0112973474
alimento76	0.0340123544	-0.1204904446
alimento77	0.0474044426	0.0759073482
alimento78	0.0477874314	0.0114540505
alimento79	0.0715048838	-0.0366045011
alimento80	0.0606743302	-0.0809230070
alimento81	0.0219965821	-0.0687928087
alimento82	0.0081001298	-0.0640830770
alimento83	0.0093697170	-0.0444016627
alimento84	0.0535605617	0.0052435389
alimento85	0.0265893065	-0.0604270665
alimento86	0.0105187570	0.0006259551
alimento87	0.0081721603	-0.0511261406
alimento88	0.0091271293	0.0109000369
alimento89	0.0232513297	-0.1205922074
alimento90	0.0131023334	-0.0883244917
alimento91	0.0087134738	0.0211559537
alimento92	0.0044943217	-0.0563972202
alimento93	0.0032873154	0.0027927518
alimento94	0.0077459157	-0.0122268655
alimento95	-0.0014188899	-0.0157909149
alimento96	-0.0025535039	0.0098915644
alimento97	0.0243880526	-0.0576645192
alimento98	0.0116395048	-0.0596210973
alimento99	0.0126492836	-0.0874976820
alimento100	0.0078180221	-0.0526135952
alimento101	0.0135437606	-0.0831947751
alimento102	0.0284080949	-0.0551148046
alimento103	0.0243637098	-0.0866538846
alimento104	0.0113391978	-0.0576007173
alimento105	0.0230565423	-0.0597181261
alimento106	0.0260312407	-0.0557617440
alimento107	0.0290936728	-0.0696414252
alimento108	0.0072183756	-0.0593331559
alimento109	0.0118934272	-0.0512669823
alimento110	0.0054713010	-0.0637526518
alimento111	0.0029954115	-0.0718483270
alimento112	-0.0044885164	-0.0610614539
alimento113	0.0014760124	-0.0936284466
alimento114	0.0168824184	-0.0251831613
alimento115	0.0562046691	0.0266331865
alimento116	0.0382191992	0.0279918191

alimento117	0.0117367033	-0.0270640036
alimento118	0.0271421644	0.0134919883
alimento119	0.0204848869	-0.0660973855
alimento120	0.0198116969	-0.0235670143
alimento121	0.0283882234	0.0541388372
alimento122	0.0258915965	-0.1369249858
alimento123	0.0188493642	-0.1080858782
alimento124	0.0265220661	-0.1130606811
alimento125	0.0172116428	-0.1041922620
alimento126	0.0157946559	-0.0341618546
alimento127	0.0209680579	-0.0514475466
alimento128	0.0044772628	-0.1220226163
alimento129	0.0216010331	0.0500443767
alimento130	0.0147611122	-0.0373445476
alimento131	0.0251049494	-0.0057893041
nutriente1	0.1813783966	-0.0449486365
nutriente2	0.2307052177	-0.0092626888
nutriente3	0.1095878802	-0.0361712786
nutriente4	0.2333298328	-0.0018446838
nutriente5	0.1288466831	0.0399908635
nutriente6	0.0832934918	-0.1789089879
nutriente7	0.2329428624	0.0643088782
nutriente8	0.2144276156	-0.0988144247
nutriente9	0.1521432794	-0.0869651510
nutriente10	0.2256184764	-0.0323868749
nutriente11	0.2170448820	-0.0558002619
nutriente12	0.2147787154	-0.1176987022
nutriente13	0.2293163706	0.0300966416
nutriente14	0.2132101039	0.1318797410
nutriente15	0.1385895964	-0.1437783342
nutriente16	0.1650886057	0.1725837962
nutriente17	0.1161798877	-0.0690459903
nutriente18	0.1346992918	-0.1013478666
nutriente19	0.1876281455	0.1753646244

Tabla 3: Las cargas de cada variable de alimento y nutriente para los componentes elegidos para el estudio, PC1 y PC2.

Tabla 4: Tabla descriptiva.

Characteristic	PC1				PC2			
	Tercil 1, N = 1,634[1]	**Tercil 2**, N = 1,633[1]	**Tercil 3**, N = 1,633[1]	**p-value**[2]	**Tercil 1**, N = 1,634[1]	**Tercil 2**, N = 1,633[1]	**Tercil 3**, N = 1,633[1]	**p-value**[2]
altura	170 (163, 175)	168 (162, 175)	167 (160, 173)	<0.001	170 (164, 176)	168 (162, 175)	165 (160, 172)	<0.001
peso	72 (60, 81)	70 (60, 80)	68 (59, 78)	<0.001	73 (62, 82)	70 (60, 80)	67 (58, 78)	<0.001
IMC	24.6 (22.3, 26.8)	24.5 (22.2, 26.8)	24.2 (22.1, 26.7)	0.041	24.7 (22.5, 26.9)	24.4 (22.3, 26.7)	24.2 (22.0, 26.7)	0.020
sexo				<0.001				<0.001
1	964/2,487 (39%)	820/2,487 (33%)	703/2,487 (28%)		1,034/2,487 (42%)	849/2,487 (34%)	604/2,487 (24%)	
2	670/2,413 (28%)	813/2,413 (34%)	930/2,413 (39%)		600/2,413 (25%)	784/2,413 (32%)	1,029/2,413 (43%)	
Edad (años)	47.0 (41.0-53.8)	46.8 (41.5-53.3)	48.0 (41.5-54.3)	0.011	45.5 (40.0-51.8)	47.3 (41.5-53.5)	49.3 (43.3-56.0)	<0.001
estado_civil				0.4				<0.001
0	282 (35%)	258 (32%)	269 (33%)		293 (36%)	247 (31%)	269 (33%)	
1	1,196 (33%)	1,235 (34%)	1,210 (33%)		1,216 (33%)	1,256 (34%)	1,169 (32%)	
2	29 (32%)	23 (25%)	39 (43%)		22 (24%)	25 (27%)	44 (48%)	
3	85 (36%)	79 (33%)	72 (31%)		63 (27%)	66 (28%)	107 (45%)	
4	29 (39%)	21 (28%)	25 (33%)		22 (29%)	24 (32%)	29 (39%)	
Unknown	13	17	18		18	15	15	
tabaco				0.003				<0.001
0	554 (31%)	600 (33%)	640 (36%)		602 (34%)	571 (32%)	621 (35%)	
1	351 (36%)	339 (35%)	276 (29%)		374 (39%)	342 (35%)	250 (26%)	
2	721 (34%)	679 (32%)	705 (33%)		648 (31%)	705 (33%)	752 (36%)	
3	8 (23%)	15 (43%)	12 (34%)		10 (29%)	15 (43%)	10 (29%)	
colesterol				<0.001				<0.001
0	183 (44%)	124 (30%)	108 (26%)		182 (44%)	142 (34%)	91 (22%)	
1	133 (38%)	121 (35%)	96 (27%)		138 (39%)	121 (35%)	91 (26%)	
2	271 (28%)	345 (35%)	361 (37%)		299 (31%)	309 (32%)	369 (38%)	
3	469 (31%)	531 (35%)	534 (35%)		476 (31%)	514 (34%)	544 (35%)	
4	379 (35%)	348 (32%)	365 (33%)		373 (34%)	374 (34%)	345 (32%)	
5	109 (36%)	96 (32%)	95 (32%)		88 (29%)	107 (36%)	105 (35%)	
6	4 (21%)	6 (32%)	9 (47%)		3 (16%)	5 (26%)	11 (58%)	
Unknown	86	62	65		75	61	77	
hdl				<0.001				<0.001
0	261 (41%)	205 (32%)	175 (27%)		262 (41%)	218 (34%)	161 (25%)	
1	459 (38%)	411 (34%)	352 (29%)		460 (38%)	415 (34%)	347 (28%)	
2	69 (24%)	109 (38%)	106 (37%)		85 (30%)	89 (31%)	110 (39%)	
3	599 (30%)	648 (33%)	724 (37%)		600 (30%)	666 (34%)	705 (36%)	
4	111 (26%)	147 (34%)	174 (40%)		113 (26%)	128 (30%)	191 (44%)	
Unknown	135	113	102		114	117	119	
HTA				0.2				<0.001
0	1,370 (33%)	1,388 (34%)	1,360 (33%)		1,434 (35%)	1,368 (33%)	1,316 (32%)	
1	12 (29%)	16 (39%)	13 (32%)		16 (39%)	12 (29%)	13 (32%)	
2	85 (32%)	78 (30%)	100 (38%)		65 (25%)	98 (37%)	100 (38%)	
3	128 (34%)	128 (34%)	124 (33%)		92 (24%)	133 (35%)	155 (41%)	
4	16 (37%)	6 (14%)	21 (49%)		11 (26%)	13 (30%)	19 (44%)	
Unknown	23	17	15		16	9	30	
hipercolesterolemia				0.026				<0.001
0	1,165 (33%)	1,189 (33%)	1,206 (34%)		1,258 (35%)	1,190 (33%)	1,112 (31%)	
1	20 (26%)	28 (36%)	30 (38%)		24 (31%)	26 (33%)	28 (36%)	
2	236 (37%)	206 (32%)	201 (31%)		202 (31%)	216 (34%)	225 (35%)	
3	181 (34%)	189 (36%)	160 (30%)		129 (24%)	181 (34%)	220 (42%)	
4	10 (28%)	6 (17%)	20 (56%)		10 (28%)	8 (22%)	18 (50%)	
Unknown	22	15	16		11	12	30	
hipertrigliceridemia				0.051				0.2
0	1,397 (33%)	1,422 (33%)	1,435 (34%)		1,434 (34%)	1,420 (33%)	1,400 (33%)	
1	13 (37%)	12 (34%)	10 (29%)		13 (37%)	13 (37%)	9 (26%)	
2	107 (35%)	102 (33%)	99 (32%)		111 (36%)	99 (32%)	98 (32%)	
3	88 (39%)	82 (36%)	58 (25%)		55 (24%)	84 (37%)	89 (39%)	
4	5 (31%)	1 (6.3%)	10 (63%)		4 (25%)	5 (31%)	7 (44%)	
Unknown	24	14	21		17	12	30	
METs_h_semana	14 (5, 26)	16 (7, 30)	17 (6, 33)	<0.001	14 (5, 27)	16 (6, 30)	17 (7, 30)	<0.001
cereales	69 (34, 101)	85 (60, 162)	111 (73, 184)	<0.001	107 (69, 182)	79 (56, 158)	77 (43, 122)	<0.001
verdura	321 (214, 436)	502 (380, 645)	754 (561, 1,021)	<0.001	409 (276, 577)	469 (326, 636)	654 (450, 912)	<0.001
fruta	205 (120, 310)	326 (213, 469)	517 (338, 770)	<0.001	253 (153, 409)	299 (194, 454)	458 (276, 718)	<0.001
pescado	66 (43, 101)	100 (67, 135)	139 (92, 171)	<0.001	96 (64, 149)	97 (63, 145)	96 (56, 148)	0.043
legumbre	16 (12, 21)	21 (16, 30)	25 (17, 34)	<0.001	21 (16, 30)	21 (16, 30)	21 (12, 30)	<0.001
lacteos	81 (28, 210)	112 (46, 250)	132 (50, 297)	<0.001	213 (97, 365)	104 (48, 221)	48 (20, 125)	<0.001
carnes	133 (94, 176)	168 (125, 215)	199 (143, 261)	<0.001	210 (163, 263)	158 (120, 203)	125 (82, 171)	<0.001

[1] Median (IQR); n/N (%); Median (25%-75%); n (%)

[2] Kruskal-Wallis rank sum test; Pearson's Chi-squared test

Tabla 4: Tabla descriptiva obtenida mediante la librería de R *gtsummary*. Test estadísticos realizados mediante la prueba de Kruskal-Wallis y Chi-cuadrado de Pearson

Tabla 5: Modelos de Regresión Logística Lineal.

	OR and 95% CI								
	Multivariable model 1			Multivariable model 2			Multivariable model 3		
Variable	OR[1]	95% CI[1]	p-value	OR[1]	95% CI[1]	p-value	OR[1]	95% CI[1]	p-value
Terciles_PC1									
Tercil 1	1.00	—		1.00	—		1.00	—	
Tercil 2	1.19	0.87, 1.63	0.3	1.26	0.92, 1.74	0.2	1.17	0.85, 1.63	0.3
Tercil 3	1.36	1.00, 1.85	0.051	1.43	1.04, 1.97	0.030	1.16	0.80, 1.69	0.4
Terciles_PC2									
Tercil 1	1.00	—		1.00	—		1.00	—	
Tercil 2	1.81	1.30, 2.55	<0.001	1.74	1.23, 2.48	0.002	1.88	1.32, 2.71	<0.001
Tercil 3	2.04	1.47, 2.84	<0.001	2.02	1.44, 2.88	<0.001	2.31	1.57, 3.43	<0.001
hipertrigliceridemia									
0	1.00	—		1.00	—		1.00	—	
1	3.08	1.01, 8.16	0.032	2.89	0.88, 8.24	0.060	2.83	0.86, 8.14	0.067
2	3.49	2.25, 5.35	<0.001	3.30	2.08, 5.20	<0.001	3.29	2.07, 5.20	<0.001
3	5.14	3.30, 8.00	<0.001	3.43	2.20, 5.32	<0.001	3.51	2.25, 5.47	<0.001
4	3.34	0.68, 16.0	0.13	2.67	0.61, 11.5	0.2	2.57	0.59, 11.1	0.2
hipercolesterolemia									
0	1.00	—		1.00	—		1.00	—	
1	2.23	0.95, 4.75	0.049	3.27	1.32, 7.32	0.006	3.29	1.32, 7.36	0.006
2	1.29	0.86, 1.90	0.2	1.25	0.82, 1.87	0.3	1.22	0.80, 1.84	0.3
3	1.67	1.11, 2.48	0.012	1.19	0.79, 1.75	0.4	1.16	0.77, 1.71	0.5
4	5.33	1.61, 14.9	0.003	1.11	0.36, 3.06	0.8	1.16	0.38, 3.18	0.8
tabaco									
0	1.00	—		1.00	—		1.00	—	
1	1.20	0.82, 1.74	0.3	1.17	0.79, 1.72	0.4	1.15	0.78, 1.69	0.5
2	1.61	1.21, 2.15	0.001	1.24	0.92, 1.68	0.2	1.22	0.90, 1.65	0.2
3	1.14	0.17, 4.24	0.9	0.74	0.11, 2.76	0.7	0.74	0.11, 2.75	0.7
edad				1.07	1.06, 1.09	<0.001	1.07	1.06, 1.09	<0.001
sexo				0.56	0.41, 0.76	<0.001	0.55	0.40, 0.75	<0.001
verdura							1.00	1.00, 1.00	0.5
carnes							1.00	1.00, 1.00	0.002

[1] OR = Odds Ratio, CI = Confidence Interval

Tabla 5: Odds Ratio y Confidence Interval por cada variable elegida en cada una de sus categorías.

FIGURAS

Figura 1: Scree plot del porcentaje de varianza explicada por cada componente.

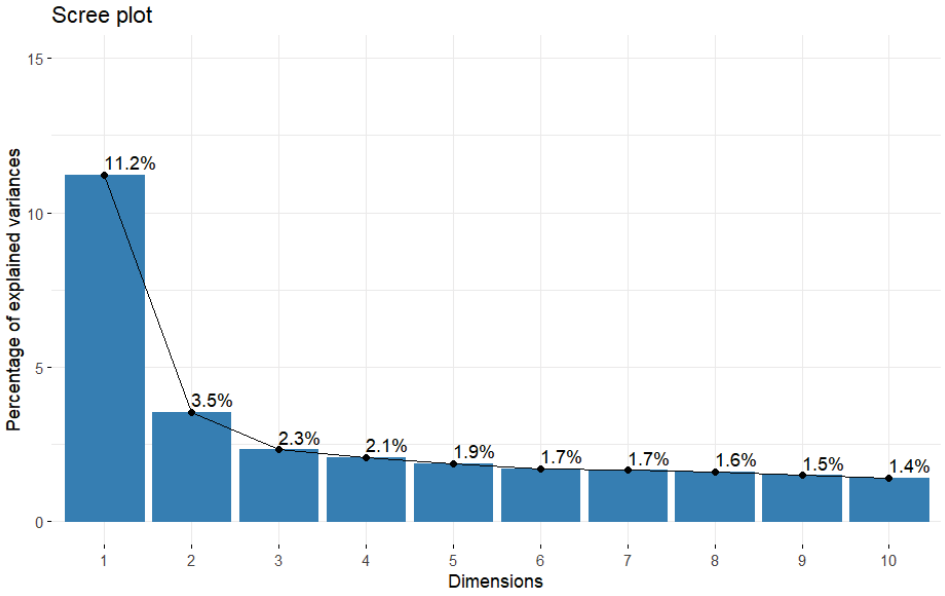

Figura 1: Scree plot del porcentaje de varianza explicada por cada componente. El componente 1 explica la mayor parte de los datos (11.2%) y el componente 2 explica el 3.5% de los datos. A partir del componente 3, la gráfica se aplana y solo explica entre 2% y el 1% de los datos.

Figura 2: Contribución (%) de los alimentos y nutrientes en el componente 1.

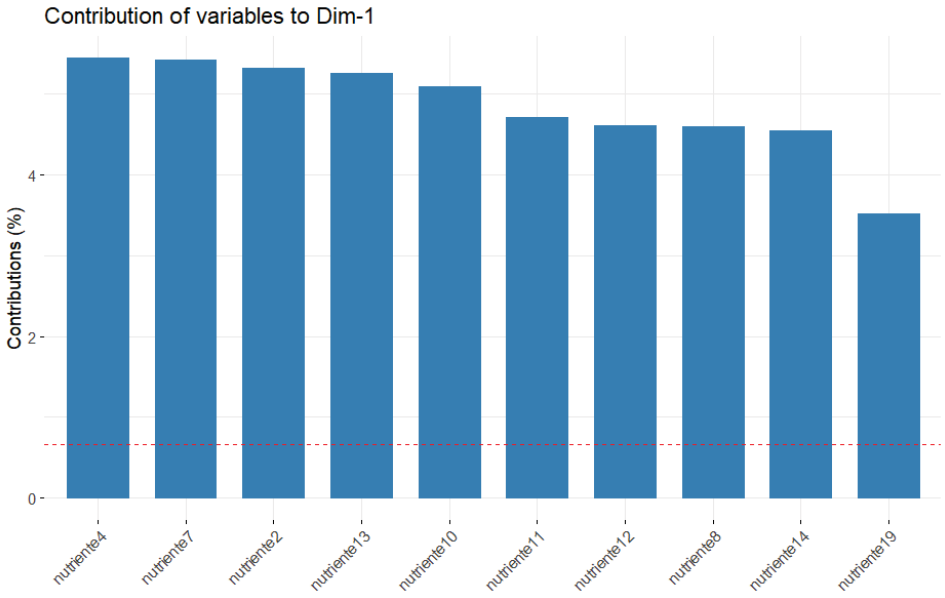

Figura 2: Representación en box plot de los nutrientes que más contribuyen en el componente 1.

Figura 3: Contribución (%) de los alimentos y nutrientes en el componente 2.

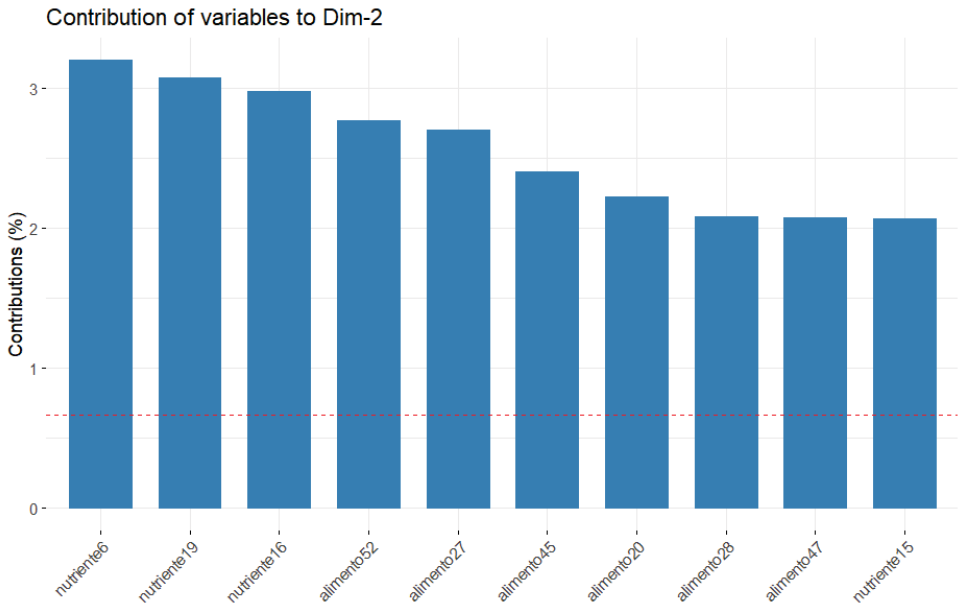

Figura 3: Representación en box plot de los nutrientes y alimentos que más contribuyen en el componente 2.