

## Supplementary tables

Supplementary Table 1. The raw material plants of research related to the phytochemical ingredients and the period of the scientific articles

English or science name (Korean name)	-1990	1991-2000	2001-2010	2011-2019	Total
Acaiberry			2	6	8
Apple		1	3	7	11
Artichoke			4	7	11
Basil			4	10	14
Beans				1	1
Bearberry			4	1	5
Berries			2	8	10
Blackberry			1	11	12
Black currant				7	7
Black raspberry			1		1
Blackberry			1	9	10
Blueberry				23	23
Burdock			2	6	8
Cacao, cocoa			2	10	12
<i>Camellia sinensis</i>	2	12	40	51	105
Carrot			4	4	8
Chamomile			5	19	24
Cherry			1	2	3
Chicory			1	6	7
Chlorella				1	1
Citrus		3	12	31	46
Clove		2	3	3	8
Coconut			3	18	21
Cranberry				2	2
<i>Crataegus pinnatifida</i>			1	7	8
Dandelion		2	5	15	22
Elderberry			2	7	9
Fennel			1	4	5
Flower tea				2	2
Galangal			2	4	6
<i>Gastrodia elata</i>			1		1
Ginger			11	9	20
Goji			1	13	14

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English or science name (Korean name)	-1990	1991-2000	2001-2010	2011-2019	Total
Grape			2	13	15
Honeybush			3	5	8
Hop			3	8	11
Jasmine		1		3	4
Lavender			1	3	4
Lemon (citrus limon)			3	8	11
Lemon balm			6	16	22
Lemon grass			4	8	12
Licorice			7	7	14
Lime				2	2
Lychee			2	8	10
Maize (Corn)	1		1	8	10
Mango			2	5	7
Mate			2	1	3
Mugwort			2		2
Mulberry			1		1
Mushroom			1	2	3
Nettle		1		10	11
Orange			2	11	13
<i>Panax ginseng</i>	1	2	12	28	43
<i>Passiflora incarnata</i>				4	4
Peach			1	1	2
Peppermint		1	1	11	13
Pineapple			2	3	5
Pomegranate			11	17	28
<i>Poria cocos</i>		1	5	4	10
Red beet		1	4	11	16
Rhododendron				1	1
Rooibos			3	5	8
Rose hip			2	5	7
Roselle			5	13	18
Rosemary			2	3	5
Sage			4	7	11
Spearmint			1	6	7
Strawberry		1	5	18	24

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English or science name (Korean name)	-1990	1991-2000	2001-2010	2011-2019	Total
Sunflower		1	4	11	16
Swiss chard			1	2	3
Thistle	1		8	7	16
Tilia			1	2	3
Valerian			2	3	5
Fruit & vegetables			3	6	9
Medicinal plants, herbs & spices			4	14	18
Etc.	2	1	3	6	12
Total species no. 73+	7	30	245	610	892
Total review no. 892					

**Supplementary Table 2. The frequency of the raw material plants, the phytochemical ingredients and the pharmaceutical efficacy in the tea drink**

The raw material plants											
No.	Plant	Frequency	%	No.	Plant	Frequency	%	No.	Plant	Frequency	%
1	Tea	373	11.9	41	Mango	24	0.8	81	Persimmon	5	0.2
2	Citrus	248	7.9	42	Spearmint	23	0.7	82	Flax	4	0.1
3	Dandelion	137	4.4	43	Beet	22	0.7	83	Korean rosebay	4	0.1
4	Pomegranate	111	3.5	44	Burdock	22	0.7	84	Black carrot	3	0.1
5	Coconut	80	2.6	45	Wolfberry	22	0.7	85	Chard	3	0.1
6	Ginger	73	2.3	46	Bearberry	21	0.7	86	Cherry	3	0.1
7	Cinnamon	72	2.3	47	Orange	19	0.6	87	Honey	3	0.1
8	Crategus	71	2.3	48	Blackcurrant	18	0.6	88	Jujube	3	0.1
9	Red ginseng	63	2.0	49	Corn silk	18	0.6	89	Kava	3	0.1
10	Strawberry	62	2.0	50	Galangal	17	0.5	90	Mint	3	0.1
11	Blueberry	60	1.9	51	Cacao	16	0.5	91	Plantago	3	0.1
12	Chamomile	58	1.9	52	Hop	16	0.5	92	Saint	3	0.1
13	Ginseng	56	1.8	53	Jasmine	16	0.5	93	Schisandra	3	0.1
14	Lemonbalm	56	1.8	54	Chicory	15	0.5	94	Solomon's seal	3	0.1
15	Sunflower	54	1.7	55	Mate	15	0.5	95	Thyme	3	0.1
16	Basil	53	1.7	56	Chrysanthemum	14	0.4	96	Cornus	2	0.1
17	Lemongrass	53	1.7	57	Fennel	14	0.4	97	Hedysarum	2	0.1
18	Licorice	53	1.7	58	Lemon	14	0.4	98	Kudzu	2	0.1
19	Rosemary	52	1.7	59	Echinacea	13	0.4	99	Pine	2	0.1
20	Grape	49	1.6	60	Senega	13	0.4	100	Purple corn	2	0.1
21	Thistle	48	1.5	61	Coffee	12	0.4	101	Red chicory	2	0.1
22	Apple	46	1.5	62	Pineapple	12	0.4	102	Saffron	2	0.1
23	Blackberry	43	1.4	63	Sweet brier	12	0.4	103	Wasabi	2	0.1
24	Poria cocos	43	1.4	64	Angelica	11	0.4	104	Adzuki bean	1	0.0
25	Roselle	42	1.3	65	Morusalba	11	0.4	105	Bean	1	0.0
26	Nettle	41	1.3	66	Rooibos	11	0.4	106	Chlorella	1	0.0
27	Wild strawberry	39	1.2	67	Curcuma	10	0.3	107	Goji	1	0.0
28	Peppermint	38	1.2	68	Honeybush	9	0.3	108	Guarana	1	0.0
29	Peach	36	1.1	69	Mulberry	9	0.3	109	Juniper berry	1	0.0
30	Lychee	34	1.1	70	Passionflower	9	0.3	110	Pumpkin	1	0.0
31	Acai berry	32	1.0	71	Clove	8	0.3	111	Rice	1	0.0
32	Carrot	32	1.0	72	Corn	8	0.3	112	Rubus	1	0.0
33	Rosehip	32	1.0	73	Rose	8	0.3	113	Sweet orange	1	0.0
34	Berry	31	1.0	74	Mushroom	7	0.2	114	Tilia	1	0.0

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The raw material plants											
No.	Plant	Frequency	%	No.	Plant	Frequency	%	No.	Plant	Frequency	%
35	Elderberry	31	1.0	75	Mugwort	6	0.2				
36	Valerian	30	1.0	76	Tangerine	6	0.2				
37	Artichoke	28	0.9	77	Cranberry	5	0.2				
38	Sage	27	0.9	78	Hardy rubber	5	0.2				
39	Raspberry	25	0.8	79	Olive	5	0.2				
40	Lavender	24	0.8	80	Passiflora	5	0.2		Total	3,133	100.0
The phytochemical ingredients											
No.	Chemical	Frequency	%	No.	Chemical	Frequency	%	No.	Chemical	Frequency	%
1	Phenol	392	12.5	181	Nicotine	3	0.1	361	Estrone	1	0.0
2	Flavonoid	248	7.9	182	Nicotinic acid	3	0.1	362	Euscaphic acid	1	0.0
3	Catechin	108	3.4	183	Pachymaran	3	0.1	363	Farnesene	1	0.0
4	Vitamin C	101	3.2	184	Palmitic acid	3	0.1	364	Feruloylquinic acid	1	0.0
5	Anthocyanin	87	2.8	185	Phenylpropanoid	3	0.1	365	Flavolignan	1	0.0
6	Terpene	54	1.7	186	Phloridzin	3	0.1	366	Flavoprotein	1	0.0
7	Phenolic acid	49	1.6	187	Phosphorus	3	0.1	367	Fluorine	1	0.0
8	Carotenoid	48	1.5	188	Prostaglandin	3	0.1	368	Free sugar	1	0.0
9	Tannin	48	1.5	189	Punicalagin	3	0.1	369	Fumaric acid	1	0.0
10	Mineral	43	1.4	190	Pyrogallol	3	0.1	370	Galactogen	1	0.0
11	Ginsenoside	38	1.2	191	Serotonin	3	0.1	371	Galactoside	1	0.0
12	Vitamin	34	1.1	192	Sodium	3	0.1	372	Galanolactone	1	0.0
13	Tocopherol	31	1.0	193	Tangeretin	3	0.1	373	Gallagyl	1	0.0
14	Alkaloid	30	1.0	194	Taraxacine	3	0.1	374	Gallotannin	1	0.0
15	Glutathione	30	1.0	195	Taraxasterol	3	0.1	375	Gamma-aminobutyric-acid	1	0.0
16	Carotene	29	0.9	196	Thearubigin	3	0.1	376	Geranial	1	0.0
17	Amino acid	27	0.9	197	Tyrosine	3	0.1	377	Geraniol	1	0.0
18	Chlorogenic acid	27	0.9	198	Uric acid	3	0.1	378	Ginseol	1	0.0
19	Quercetin	26	0.8	199	Usnic acid	3	0.1	379	Glucagon	1	0.0
20	Caffeine	25	0.8	200	Xanthine	3	0.1	380	Gluconic acid	1	0.0
21	Fiber	25	0.8	201	Xanthohumol	3	0.1	381	Glucosamine	1	0.0
22	Saponin	25	0.8	202	Zinc	3	0.1	382	Glycan	1	0.0
23	Caffeic acid	24	0.8	203	Acaricide	2	0.1	383	Glycerol	1	0.0
24	Fatty acid	23	0.7	204	Acetylene	2	0.1	384	Glycogen	1	0.0
25	Insulin	22	0.7	205	Adenosine	2	0.1	385	Glycolic acid	1	0.0

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The phytochemical ingredients											
No.	Chemical	Frequency	%	No.	Chemical	Frequency	%	No.	Chemical	Frequency	%
26	Coumarin	20	0.6	206	Angiotensin	2	0.1	386	Glycoprotein	1	0.0
27	Carbohydrate	19	0.6	207	Arbutin	2	0.1	387	Glycosyl	1	0.0
28	Protein	19	0.6	208	Arctigenin	2	0.1	388	Gnetin H	1	0.0
29	Rosmarinic acid	19	0.6	209	Aspalathin	2	0.1	389	Hexosaminidase	1	0.0
30	Cholesterol	18	0.6	210	Benzodiazepine	2	0.1	390	Heyneanol A	1	0.0
31	Linoleic acid	18	0.6	211	Betaine	2	0.1	391	Hippuric acid	1	0.0
32	Glucose	17	0.5	212	Biotin	2	0.1	392	Histidine	1	0.0
33	Organic acid	17	0.5	213	Cadinene	2	0.1	393	Hopeaphenol	1	0.0
34	Saccharide	17	0.5	214	Caffeoylquinic acid	2	0.1	394	Hydrazone	1	0.0
35	Sugar	17	0.5	215	Catechol	2	0.1	395	Hydrocinnamic acid	1	0.0
36	Flavonol	15	0.5	216	Ceramide	2	0.1	396	Hydroxychavicol acetate	1	0.0
37	Proanthocyanidin	15	0.5	217	Chalcone	2	0.1	397	Hydroxycitric	1	0.0
38	Flavone	14	0.4	218	Chloroform	2	0.1	398	Hydroxyproline	1	0.0
39	Rutin	14	0.4	219	Chondroitin	2	0.1	399	Hyricetin	1	0.0
40	Gingerol	13	0.4	220	Chrysanthenone	2	0.1	400	Intereukin	1	0.0
41	Glucosidase	13	0.4	221	Citral	2	0.1	401	Isoflavin	1	0.0
42	Vitamin A	13	0.4	222	Citronellol	2	0.1	402	Isoflavone	1	0.0
43	Cinnamic acid	11	0.4	223	Corosolic acid	2	0.1	403	Isolectin	1	0.0
44	Gallic acid	11	0.4	224	Coumaroylquinic acid	2	0.1	404	Isopelletierine	1	0.0
45	Hesperidin	11	0.4	225	Crysantenyl acetate	2	0.1	405	Isoxanthohumol	1	0.0
46	Limonene	11	0.4	226	Cuminaldehyde	2	0.1	406	Kaempfride	1	0.0
47	Lipid	11	0.4	227	Cyclooxygenase	2	0.1	407	Kaempherol	1	0.0
48	Luteolin	11	0.4	228	Cynarin	2	0.1	408	Keratin	1	0.0
49	Naringin	11	0.4	229	Cytokinin	2	0.1	409	Kinase	1	0.0
50	Pyridoxine	11	0.4	230	Esculetin	2	0.1	410	Kojic acid	1	0.0
51	Tannic acid	11	0.4	231	Ester	2	0.1	411	Lanostane	1	0.0
52	Calcium	10	0.3	232	Estragole	2	0.1	412	Licoricidin	1	0.0
53	Limonoid	10	0.3	233	Fenchone	2	0.1	413	Licorisoflavan	1	0.0
54	Phytosterol	10	0.3	234	Fluoride	2	0.1	414	Linarin	1	0.0
55	Sitosterol	10	0.3	235	Gintonin	2	0.1	415	Linolenate	1	0.0
56	Theaflavin	10	0.3	236	Glucuronic acid	2	0.1	416	Lipolytic	1	0.0
57	Thiamine	10	0.3	237	Gymnemic acid	2	0.1	417	Liquilitigenin	1	0.0
58	Amine	9	0.3	238	Hesperetin	2	0.1	418	Lithospermic acid	1	0.0

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The phytochemical ingredients											
No.	Chemical	Frequency	%	No.	Chemical	Frequency	%	No.	Chemical	Frequency	%
59	Amylase	9	0.3	239	Hydroquinone	2	0.1	419	Loricrin	1	0.0
60	Arginine	9	0.3	240	Hydroxycinnamate	2	0.1	420	Lupeol	1	0.0
61	Chlorophyll	9	0.3	241	Isosilybin	2	0.1	421	Lutein	1	0.0
62	Ferulic acid	9	0.3	242	Lactate dehydrogenase	2	0.1	422	Lysin	1	0.0
63	Pinene	9	0.3	243	Lactic acid	2	0.1	423	Malondialdehyde	1	0.0
64	Triglyceride	9	0.3	244	Lauric acid	2	0.1	424	Malvidin	1	0.0
65	Amino butric acid	8	0.3	245	Leucine	2	0.1	425	Mangiferin	1	0.0
66	Apigenin	8	0.3	246	Lignin	2	0.1	426	Mannitol	1	0.0
67	Cinnamaldehyde	8	0.3	247	Linalyl acetate	2	0.1	427	Melatonin	1	0.0
68	Coumaric acid	8	0.3	248	Maltol	2	0.1	428	Mentone	1	0.0
69	Eugenol	8	0.3	249	Manganese	2	0.1	429	Methanol	1	0.0
70	Iron	8	0.3	250	Menthone	2	0.1	430	Methylchavicol	1	0.0
71	Kaempferol	8	0.3	251	Naringenin	2	0.1	431	Methylxanthine	1	0.0
72	Potassium	8	0.3	252	Neohesperidin	2	0.1	432	Mobiletin	1	0.0
73	Silymarin	8	0.3	253	Niacin	2	0.1	433	Morphine	1	0.0
74	Steroid	8	0.3	254	Omega-3	2	0.1	434	Mucin	1	0.0
75	Alcohol	7	0.2	255	Oxalic acid	2	0.1	435	Mucopolysaccharide	1	0.0
76	Aldehyde	7	0.2	256	Pachymic acid	2	0.1	436	Muscarine	1	0.0
77	Benzen	7	0.2	257	Panaxa diol	2	0.1	437	Myricetin	1	0.0
78	Choline	7	0.2	258	Pantothenic acid	2	0.1	438	N-Butanol	1	0.0
79	Cyanidin	7	0.2	259	Phenylethyl alcohol	2	0.1	439	Narirutin	1	0.0
80	Ellagic acid	7	0.2	260	Phloretin	2	0.1	440	Neochlogenic acid	1	0.0
81	Folate	7	0.2	261	Piceid	2	0.1	441	Neoxanthine	1	0.0
82	Glycoside	7	0.2	262	Polyphenol	2	0.1	442	Neral	1	0.0
83	Procyanidin	7	0.2	263	Poncirin	2	0.1	443	Nigrum	1	0.0
84	Salicylic acid	7	0.2	264	Preynlaringenin	2	0.1	444	Nisin	1	0.0
85	Sterol	7	0.2	265	Propargite	2	0.1	445	Nitrate	1	0.0
86	Stilbene	7	0.2	266	Punicic acid	2	0.1	446	Nitrogen	1	0.0
87	Theanine	7	0.2	267	Quinic acid	2	0.1	447	Nitrophenol	1	0.0
88	Acetic acid	6	0.2	268	Quinone	2	0.1	448	Nitrosamine	1	0.0
89	Alanine	6	0.2	269	Resveratol	2	0.1	449	Oleanolic acid	1	0.0
90	Ash	6	0.2	270	Rosemanol	2	0.1	450	Oligostilbenoid	1	0.0
91	Cytokine	6	0.2	271	Silibinin	2	0.1	451	P-Glycoprotein	1	0.0

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The phytochemical ingredients											
No.	Chemical	Frequency	%	No.	Chemical	Frequency	%	No.	Chemical	Frequency	%
92	Ellagitannin	6	0.2	272	Silybin	2	0.1	452	Pachyman	1	0.0
93	Estrogen	6	0.2	273	Silychristin	2	0.1	453	Pallidol	1	0.0
94	Ethanol	6	0.2	274	Stigmasterol	2	0.1	454	Palmitine	1	0.0
95	Ethyl acetate	6	0.2	275	Superpxidase dismutase	2	0.1	455	Panax saponin	1	0.0
96	Folic acid	6	0.2	276	Synephrine	2	0.1	456	Panaxynol	1	0.0
97	Menthol	6	0.2	277	Taxifolin	2	0.1	457	Pancreatic lipase	1	0.0
98	Nobiletin	6	0.2	278	Tumulosic acid	2	0.1	458	Patuletin	1	0.0
99	Pectin	6	0.2	279	Valine	2	0.1	459	Pelargonidin	1	0.0
100	Riboflavin	6	0.2	280	Vanillic acid	2	0.1	460	Penolic acid	1	0.0
101	Vitamin B <sub>12</sub>	6	0.2	281	Vitamin K	2	0.1	461	Pentane	1	0.0
102	Vitamin D	6	0.2	282	Xanthone	2	0.1	462	Pentose	1	0.0
103	Acid	5	0.2	283	Zeaxanthin	2	0.1	463	Peonidin	1	0.0
104	Amyloid	5	0.2	284	24-Trien-21- oic acid	1	0.0	464	Peroxidase	1	0.0
105	Borneol	5	0.2	285	Acetaldehyde	1	0.0	465	Phenylalanine	1	0.0
106	Camphor	5	0.2	286	Acetaminophen	1	0.0	466	Phenylpropyacetate	1	0.0
107	Catalase	5	0.2	287	Acetoxychavicol acetate	1	0.0	467	Phoapholipase	1	0.0
108	Cineole	5	0.2	288	Acetyl coa carboxylase	1	0.0	468	Phosphatase	1	0.0
109	Citric acid	5	0.2	289	Acetylcoenzyme	1	0.0	469	Phosphoenol pyruvate	1	0.0
110	Curcumin	5	0.2	290	Acetylsalicylic acid	1	0.0	470	Phosphomolycddic acid	1	0.0
111	Ergosterol	5	0.2	291	Acrtiin	1	0.0	471	Phosphous	1	0.0
112	Glucan	5	0.2	292	Aggrecan	1	0.0	472	Physalien	1	0.0
113	Glucoside	5	0.2	293	Aglycone	1	0.0	473	Phytoalexin	1	0.0
114	Glutamic acid	5	0.2	294	Aldehyde dehydrogenase	1	0.0	474	Potassium chloride	1	0.0
115	Glycyrrhizin	5	0.2	295	Aldose	1	0.0	475	Prolactin	1	0.0
116	Hydroxybenzoic acid	5	0.2	296	Alkaline phosphatase	1	0.0	476	Proline	1	0.0
117	Ketone	5	0.2	297	Alkane	1	0.0	477	Protein kinase	1	0.0
118	Lignan	5	0.2	298	Alkyl	1	0.0	478	Protoberine	1	0.0
119	Malic acid	5	0.2	299	Alpinin	1	0.0	479	Pulegone	1	0.0
120	Oleic acid	5	0.2	300	Amide	1	0.0	480	Purine	1	0.0
121	Shogaol	5	0.2	301	Ampelosin	1	0.0	481	Pyracanthoside	1	0.0



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The phytochemical ingredients											
No.	Chemical	Frequency	%	No.	Chemical	Frequency	%	No.	Chemical	Frequency	%
122	Superpxide dismutase	5	0.2	302	Amyloid protein	1	0.0	482	Pyrimethamine	1	0.0
123	Theobromine	5	0.2	303	Anthocyanidin	1	0.0	483	Quercetin	1	0.0
124	Acetylcholine	4	0.1	304	Anticholinesterase	1	0.0	484	Quinine	1	0.0
125	Aspartate	4	0.1	305	Apolipoprotein	1	0.0	485	Resin	1	0.0
126	Bisabolol	4	0.1	306	Arachidonic acid	1	0.0	486	Resorcinol	1	0.0
127	Butylated hydroxyanisole	4	0.1	307	Arctiin	1	0.0	487	Rhodamine	1	0.0
128	Chicoric acid	4	0.1	308	Arsenic	1	0.0	488	Rosemarinic acid	1	0.0
129	Cinnamyl acetate	4	0.1	309	Arsenite	1	0.0	489	Rugosin	1	0.0
130	Collagen	4	0.1	310	Aspartate transaminase	1	0.0	490	Sabinene	1	0.0
131	Cryptoxanthin	4	0.1	311	Aspartic acid	1	0.0	491	Salicylaldehyde	1	0.0
132	Flavan	4	0.1	312	Azulene	1	0.0	492	Salvianolic acid	1	0.0
133	Flavanol	4	0.1	313	Betulinic acid	1	0.0	493	Scopolamine	1	0.0
134	Glabridin	4	0.1	314	Bilirubin	1	0.0	494	Serine	1	0.0
135	Hexane	4	0.1	315	Bromelain	1	0.0	495	Sesquilignan	1	0.0
136	Hydroxycinnamic acid	4	0.1	316	Butanol	1	0.0	496	Silydianin	1	0.0
137	Lectin	4	0.1	317	Butyric acid	1	0.0	497	Sorbitol	1	0.0
138	Linalool	4	0.1	318	Caffeoyl	1	0.0	498	Squalene	1	0.0
139	Linolenic acid	4	0.1	319	Caffeoylshikimic acid	1	0.0	499	Stilbenoid	1	0.0
140	Lipopolysaccharide	4	0.1	320	Calcitonin	1	0.0	500	Streptozotocin	1	0.0
141	Phytoestrogen	4	0.1	321	Caralase	1	0.0	501	Succinic acid	1	0.0
142	Polysaccharide	4	0.1	322	Carbenoxolone	1	0.0	502	Sucrose	1	0.0
143	Protocatechuic acid	4	0.1	323	Carbon tetrachloride	1	0.0	503	Sulfur	1	0.0
144	Quercitrin	4	0.1	324	Carboxlic acid	1	0.0	504	Tagetone	1	0.0
145	Selenium	4	0.1	325	Carboxykinase	1	0.0	505	Tangeratin	1	0.0
146	Thujone	4	0.1	326	Camitine	1	0.0	506	Taraxenol	1	0.0
147	Ursolic acid	4	0.1	327	Carnosine	1	0.0	507	Taraxicin	1	0.0
148	Valerenic acid	4	0.1	328	Carnosol	1	0.0	508	Taraxin	1	0.0
149	Vitamin B	4	0.1	329	Carvactrol	1	0.0	509	Taraxol	1	0.0
150	Acetylcholinesterase	3	0.1	330	Carvone	1	0.0	510	Taurine	1	0.0
151	Anethole	3	0.1	331	Caspase	1	0.0	511	Terpinene	1	0.0
152	Anthraquinone	3	0.1	332	Cathepsin	1	0.0	512	Terpinol	1	0.0

(continued)

The phytochemical ingredients											
No.	Chemical	Frequency	%	No.	Chemical	Frequency	%	No.	Chemical	Frequency	%
153	Apimaysin	3	0.1	333	Chitosan	1	0.0	513	Theasinensin	1	0.0
154	Asparagine	3	0.1	334	Chlorine	1	0.0	514	Theoflavin	1	0.0
155	Aspartate aminotransferase	3	0.1	335	Chlororamphenicol	1	0.0	515	Theophylline	1	0.0
156	Bergamotene	3	0.1	336	Chromane	1	0.0	516	Threonine	1	0.0
157	Butylated hydroxytoluene	3	0.1	337	Cinnamic aldehyde	1	0.0	517	Thrombin	1	0.0
158	Campesterol	3	0.1	338	Cinnzeylanol	1	0.0	518	Thymol	1	0.0
159	Camphene	3	0.1	339	Cirsimaritin	1	0.0	519	Tiliroside	1	0.0
160	Chamazulene	3	0.1	340	Citraurin	1	0.0	520	Tocotrienol	1	0.0
161	Copper	3	0.1	341	Cobalt	1	0.0	521	Trace mineral	1	0.0
162	Cortisol	3	0.1	342	Colesterol	1	0.0	522	Transvaccenic acid	1	0.0
163	Cytochrome	3	0.1	343	Creatin	1	0.0	523	Traxacerin	1	0.0
164	Estradiol	3	0.1	344	Creatinine	1	0.0	524	Trypsin	1	0.0
165	Fat	3	0.1	345	Cyanogenic glycoside	1	0.0	525	Valepotriate	1	0.0
166	Flavanone	3	0.1	346	Cyclodextrin	1	0.0	526	Valeranone	1	0.0
167	Flavonolignan	3	0.1	347	Cyclophosphamide	1	0.0	527	Valerenal	1	0.0
168	Fructose	3	0.1	348	Cystein	1	0.0	528	Vinifferin	1	0.0
169	Genetistic acid	3	0.1	349	Dehydroburiconic acid	1	0.0	529	Vinylpyrrolidine	1	0.0
170	Glutamate	3	0.1	350	Dehydropachymic acid	1	0.0	530	Vitamin P	1	0.0
171	Histamine	3	0.1	351	Dehydrosilibinin	1	0.0	531	Xantine oxidase	1	0.0
172	Hyperoside	3	0.1	352	Delphinidin	1	0.0				
173	Isoquercetin	3	0.1	353	Depside	1	0.0				
174	Isoquercitrin	3	0.1	354	Diaporase	1	0.0				
175	Lipoprotein	3	0.1	355	Dichloromethane	1	0.0				
176	Lycopene	3	0.1	356	Dihydrocarvone	1	0.0				
177	Magnesium	3	0.1	357	Diosmin	1	0.0				
178	Maysin	3	0.1	358	Eriocitrin	1	0.0				
179	Methoxymaysin	3	0.1	359	Estriol	1	0.0				
180	Methyl acetate	3	0.1	360	Estrogenic	1	0.0				
									Total	3,129	100.0
The pharmaceutical efficacy											
No.	Efficacy	Frequency	%	No.	Efficacy	Frequency	%	No.	Efficacy	Frequency	%
1	Antioxidant	1,960	28.3	41	Staminer enhancemen	22	0.4	81	Hypotension improvement	6	0.1

The knowledge maps of tea drinks

(continued)

The pharmaceutical efficacy											
No.	Efficacy	Frequency	%	No.	Efficacy	Frequency	%	No.	Efficacy	Frequency	%
2	Anti-inflammatory	711	10.3	42	Osteoporosis prevention	21	0.4	82	Homeostasis	6	0.1
3	Anticancer	685	9.9	43	Rheumatoid arthritis relief	21	0.4	83	Enzyme activity	6	0.1
4	Antimicrobial	668	9.7	44	Radiation protection	20	0.3	84	Stomatitis prevention	5	0.1
5	Anti-diabetes	253	3.7	45	Improves memory	19	0.3	85	Alcoholic liver disease improvement	5	0.1
6	Cardiovascular disease	227	3.3	46	Wound healing	19	0.3	86	Angina improvement	5	0.1
7	Antihypertensive	146	2.1	47	Pain relief	18	0.3	87	Pest management	4	0.1
8	Weight control	122	1.8	48	Degenerative diseases improvement	16	0.3	88	Skin aging relief	4	0.1
9	Hepatic-health	120	1.7	49	Asthma relief	15	0.3	89	Psoriasis prevention	3	0.1
10	Diuretic activity	113	1.6	50	Vitamin D-receptor increment	14	0.2	90	Nausea improvement	3	0.1
11	Gastric function improve	109	1.6	51	Antivirus	14	0.2	91	Metabolic disorders improvement	3	0.1
12	Antimutagenic activity	98	1.4	52	Antiproliferative effect	14	0.2	92	Whitening effect	3	0.1
13	Vascular improve	91	1.3	53	Hypoglycemic relief	12	0.2	93	Rhinitis improvement	3	0.1
14	Antipyretic	84	1.2	54	Calming effect	12	0.2	94	Cell proliferation and macrophage activation	3	0.1
15	Hyperlipidmia	72	1.0	55	Dna damage relief	11	0.2	95	Enteritis relief	3	0.1
16	Analgesic	69	1.0	56	Menopausal phase	11	0.2	96	Dermatitis relief	3	0.1
17	Nerve cell protection	64	0.9	57	Health promotion	11	0.2	97	Antiprostata cancer agents	3	0.1
18	Detoxification	61	0.9	58	Joint pain therapy	11	0.2	98	Muscle pain relief	2	0.0
19	Tonic effect	46	0.7	59	Appetite improvement	11	0.2	99	Chronic hepatitis C prevention	2	0.0
20	Immune activity	44	0.6	60	Improve alcoholic fatty liver	11	0.2	100	Urination	2	0.0
21	Anti-stress	42	0.7	61	Sleep aid	10	0.2	101	Leukoplakia relief	2	0.0
22	Allergy improvement	40	0.7	62	Gastritis relief	10	0.2	102	Reduction of urinary diseases	2	0.0

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The pharmaceutical efficacy											
No.	Efficacy	Frequency	%	No.	Efficacy	Frequency	%	No.	Efficacy	Frequency	%
23	Insomnia improvement	37	0.6	63	Tooth decay prevention	10	0.2	103	Sight protection	2	0.0
24	Apophlegmatic effect	36	0.6	64	Neurodegenerative diseases improvement	10	0.2	104	Premenstrual syndrome relief	2	0.0
25	Aroma effect	35	0.6	65	Antibreast cancer	10	0.2	105	Wilson's disease improvement	2	0.0
26	Antiaging	35	0.6	66	Pancreas function recovery	9	0.2	106	Tocolytic activity	2	0.0
27	Effect toxins reduction	32	0.5	67	Periodontal disease improvement	9	0.2	107	Antihepatoma	2	0.0
28	Skin care	32	0.5	68	Anticoagulant	9	0.2	108	Anti-convulsant	2	0.0
29	Anti colon cancer	31	0.5	69	Choleretic	8	0.1	109	Enterobifidobacterium species increase	1	0.0
30	Anemia improvement	30	0.5	70	Sleep induced	8	0.1	110	Fibrosis reduction	1	0.0
31	Brain function improvement	28	0.5	71	Osteoarthritis relief	8	0.1	111	Nitrate elimination	1	0.0
32	Alzheimer's disease prevention	28	0.5	72	Phenylpropanoid pathway active	8	0.1	112	Alphaamylase inhibition	1	0.0
33	Heavy metal removal	28	0.5	73	Diversion	7	0.1	113	Gout relaxation	1	0.0
34	Dementia prevention	28	0.5	74	Protein digestion	7	0.1	114	Antileukaemic activity	1	0.0
35	Fatigue recovery	28	0.5	75	Cellulose supplement	7	0.1	115	Antidiarrheal effect	1	0.0
36	Melanin synthesis inhibition	25	0.4	76	Urolithiasis improvement	7	0.1	116	Antigenotoxicity	1	0.0
37	Reduced anxiety	25	0.4	77	Suncare	7	0.1				
38	Depression relief	24	0.4	78	Antithrombosis activity	7	0.1				
39	Hangover cure	23	0.4	79	Muscular disease delay	6	0.1				
40	Antihelminthic	23	0.4	80	Eczema relief	6	0.1		Total	6,917	100.0