

Antioxidant Profile of Commonly Found Foods in India and their ORAC Values

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Oxygen Radical Absorbance Capacity

ORAC Value

It's a lab test that attempts to quantify the "total antioxidant capacity" (TAC) of a food by placing a sample of the food in a test tube, along with certain molecules that generate free radical activity and certain other molecules that are vulnerable to oxidation. After a while, they measure how well the sample protected the vulnerable molecules from oxidation by the free radicals. The less free radical damage there is, the higher the antioxidant capacity of the test substance. There are actually a handful of different tests designed to measure total antioxidant capacity in this way, but the ORAC is probably the best known and most popular.

<https://www.scientificamerican.com/article/what-are-orac-values>

Food Item	Phytochemical/Antioxidant Profile	ORAC Value
Amaranth	Flavonoids, phenolics, carotenoids, xanthins, TAC, dietary fibre	9-370µmol TE/g
Apple	Quercetin, catechin, phloridzin, chlorogenic acid	5900 per 100 gram
Beet	Phenolics such as rutin, epicatechin, caffeic acid, ascorbic acid, carotenoids, flavonoids, betalains	840 per 100 gram
Cherries	Anthocyanins, polyphenolics, flavonol glycosides, catechins	4873 per 100 gram
Cranberries	Anthocyanins, proanthocyanidins, quercetin, triterpenoids, quinic acid, hippuric acid	9584 per 100 grams
Goji berries	Polysaccharides, beta-carotene, zeaxanthin	13,500 per 100 gram
Guava	Protocatechuic acid, quercetin, ferulic acid, ascorbic acid, quercetin, gallic acid, caffeic acid, triterpenoid acid alkaloids, steroids, glycosides, tannins, flavonoids, saponins, carotenoids	2550 per 100 gram
Kidney beans	Isoflavones, anthocyanins, phytohaemagglutinin, phytic acid, starch blockers, lectins	13,259 per 100 gram
Bell pepper, chilly, jalapeno)	Capsanthin, violaxanthin, lutein, quercetin, luteolin, lycopene	1072 per 100 gram
Pink grapefruit	Carotenoids, beta-carotene, lycopene, lutein, zeaxanthin, flavonoids	1904 per 100 gram

Pomegranate	Flavonoids, anthocyanins, punicalic acid, ellagitannins, alkaloids, fructose, sucrose, glucose, antiatherogenic, antihypertensive, anti-inflammatory properties, gllatannins, ellagic acid, gallic acid, punicalins, punicalagins	2860 per 100 gram
Raddish	Catechin, pyrogallol, vanillic acid, glucosinolates, phenolics	1750µmols/ltrs of trolox equivalent per 100 gram
Raspberries	Gallotannins, cumaric acid, flavonoids, quercetin, anthocyanins, ferulic acid, ellagic acid	6058 per 100 gram
Red cabbage	Alkaloids, glycosides, flavonoids, saponin, tannins, steroids, terpenes, phytosterol, anthocyanins	2359 per 100 gram
Red grapes	Myricetin, quercetin, resveratrol, peonidin, flavonoids, tannins, anthocyanins, kaempferol, cyaniding, ellagic acid, proanthocyanidins, flavonols	2016 per 100 gram
Red lentil	Quercetin diglycoside, catechin, digallate procyanidin, p-hydroxybenzoic, phenolic compounds, carotenoids, tocopherols, saponins, phytic acid, phytosterol	7280 µmol TE/100 gram
Red onion	Anthocyanins, flavonoids, catechin, quercetin	1034 µmol TE/100 gram
Red plum	Anthocyanins, chlorogenic acid, gallic acid, resorcinol, rutin, vanillic acid, cyaniding, glycitein, catechin, kaempferide, myricitrin, ellagic acid, quercetin, chalcone, caffeic acid	949 per 100 gram
Sapote	Ascorbic acid, carotenoids, polyphenolic compounds such as D-quercitol, quercetin, myricitrin, gallic acid, epigenin, lutein, lycopene, zeaxanthin, β-carotene	<0.1 to 16.7 micromol Trolox equiv/g
Strawberries	Tannins, ellagitannins, agrimonin, pedunculagin, proanthocyanins, flavonoids, salicylic acid, caffeic acid, chlorogenic acid, pelarogonidin, ellagic acid, procyanidins	5938 per 100 gram
Tomatoes	Ascorbic acid, carotenoids like lycopene, phytoene, β-carotene and polyphenols like flavonoids, flavanones, flavones	552 per 100 gram
Watermelon	Lycopene, β-carotene, phenolic compounds	216 per 100 gram
Apricot	β-carotene, organic acids, phenols, volatile compounds, estersn terpenoids, polyphenols, flavonoids	1115 µmol TE/100 gram
Cantaloupe	β-carotene, zeaxanthin, lutein, cryptoxanthin, tocopherol	253 µmol TE/100 gram

Carrots	Phenolics, carotenoids, polyacetylenes, ascorbic acid, anthocyanins	666 $\mu\text{mol TE}/100$ gram
Jowar	Tannins, phenolic acid, anthocyanins, phytosterols, poliocosanols	240,000 $\mu\text{mol TE}/100$ gram
Mangoes	Mangiferin, gallic acid, gallotannins, quercetin, isoquercetin, ellagic acid, β -glucogallin, catechins, anthocyanins, kaempferol, rhamnetin, benzoic acid	2163.78 $\mu\text{mol Trolox}/100\text{gram}$
Orange bell pepper	Capsaicinoids, phenolics, ascorbic acid, carotenoids, capsanthin, violoxanthin, lutein, quercetin, luteolin	710 per 100 gram
Orange lentil	Phenolics, carotenoids, tocopherols, saponins, phytic acid, phytosterol	7282 $\mu\text{mol TE}/100$ gram
Orange tea (sweet orange, turmeric)	Tannins, alkaloids, saponins, flavonoids, terpenoids, cardiac glycosides,	3504 $\mu\text{mol TE}/100$ gram
Oranges	Carotenoids, isohesperidin, terpeniol, naringin, limonin, flavonoids, hesperidin, limonene	2540 per 100 gram
Passion fruit	Passaflorine, harmine, Harman, harmol, harmalin, carotenoids, vitexin, isovixetin, chrysin, scopoletin, carotenoids, theobromine, β -carotene, polyphenols	373.0 \pm 1.63 $\mu\text{mol TE}/\text{gram}$
Peaches	Alpha-glucosidase, procyanidin C1, procyanidin, trimer isomer 1, procyanidin trimer isomer 2, procyanidin B1, procyanidin dimer, epicatechin, phloridizin, lutein, zeaxanthin, β -cryptoxanthin	11.4 mM/kg of Trolox equivalents
Pumpkin	B-carotene, zeaxanthin, lutein, phenolic acid, flavonoles, β -cryptoxanthin	483 $\mu\text{mol TE}/100\text{g}$
Ragi	Tannin, phenol, flavonoids, alkaloids, saponin, glycosides, terpenoid, steroid	373.15 mg/100 g (Total phenolic content)
Sweet potato	β -carotene, flavonoids, terpenoids, tannins, saponins, glycosides, alkaloids, steroids, phenolic acid	766 $\mu\text{mol TE}/100$ gram
Turmeric	Curcumin, demethoxycurcumin, bisdemethoxycurcumin, zingiberene, curcumenol, curcumol, eugenol, tetrahydrocurcumin, triethylcurcumin, turmeric, turmerones, turmeronols	159277 $\mu\text{mol TE}/100$ gram
Yam	Steroid, terpenoid, oxalate, anthroquinine, phenol, saponins, tannins, flavonoid	125 $\mu\text{mol TE}/100$ gram

Amla	Quercetin, kaemferol, gallic acid, corlagin, ellagic acid	261,500 per 100grams
Artichoke	Polyphenolic compounds, inulin, fiber, bile-expelling, hepatoprotective, urinate, choloretic activities, flavonoids, anthocyanins	7904 $\mu\text{mol TE}/100$ gram
Ashwagandha	Withanolides, withafarin, vinblastine, taxol, vindoline	967 $\mu\text{mol Trolox equiv.}/\text{gram}$
Asparagus	Glutathione, flavonoids, polyphenols, quercetin, isohamnetic, kaempferol, 2-Propanone, 1,3-dihydroxy 1), 2-Fruancarboxy aldehyde, 5-(hydroxymethyl) 2), Hexadecanoic acid 3), n-Hexadecanoic acid 4), Ethanol,2(Octyloxy)- 5), 1,9-Nonanediol 6)	2252 $\mu\text{mol Trolox equiv.}/\text{gram}$
Avocado	Carotenoids, alkanols, terpenoid, glycosides, flavonoids, coumarin	967 $\mu\text{mol Trolox equiv.}/\text{gram}$
Bamboo shoot	Saponins, glycosides, terpenoids, flavonoids, tannins, alkaloids, quercetin, phenols	<i>Not found</i>
Basil	Monoterpenes, limonene, myrcene, terpinolene, flavonoids like quercetin, kaempferol, rutin, phenolic acids, caffeic acid, caftaric acid, steroids, linalool, estragole, methyl cinnamate, eugenol, bicyclosesquiphellandrene, eucalyptol, α -bergamotene, germacrene, γ -cadinene	67553 $\mu\text{mol TE}/100$ gram
Beet greens	Ascorbic acid, cartotenoids, phenolic acid, flavonoids, betalains, phenolic compounds, flavonoids, chlorophyll A, B	967 $\mu\text{mol TE}/100$ gram
Bell pepper	Capsaicinoids, phenolics, ascorbic acid, carotenoids, capsanthin, violoxanthin, lutein, quercetin, luteolin	935 $\mu\text{mol TE}/100$ gram
Bitter melon	Alkaloids, tannins, saponin, flavonoids, cardiac glycosides, steroids, phenolics, carotenoids	237.9 \pm 3.2 $\mu\text{M}/\text{Trolox equivalents (TE)}$
Bokchoy	β -carotene, carotenoids, isothiocyanates	
Broccoli	Glucosinolates, dithiolthiones, indoles, glucaraphanin, s-methyl cysteine sulphoxide, isothiocyanates, indol-3-carbinol, carotenoids, phenolic compounds, flavonoids	890 per 100 gram
Brussel sprouts	Kaempferol, glucosinolate, polyphenols, flavonoids, isothiocyanates	980 per 100 gram
Celery	β -carotene, flavonoids, alkaloids, steroids, limonene, selinene, frocoumarin glycosides, flavonoids	497 $\mu\text{mol TE}/100$ gram

Chard	Palmetic, stearic, oleic, linoleic and linolenic acids, phospholipids, glycolipids, ascorbic acid, folic acid, pectin, saponins, flavonoids, phenolic acids, quercetin, kaempferol, rutin, vitexin	1,108 μ mol TE/100g
Cilantro	Borneol, linalool, cineole, cymene, terpineol, di-pentene, phellandrene, pinene, terpinolene, quercetin, kaempferol, rhamnetin, apigenin	5141 per 100 gram
Cucumber	Alkaloids, tannins, flavonoids, phenolic compounds, β -carotene, triterpenes, lignans	140 per 100 gram
Dandelion greens	β -carotene, polyphenols, sesquiterpene lactones, taraxacin, taraxasterol	9666 μ mol TE/100 gram
Dill	Flavonoids, reducing sugars, saponins, anthraquinones, cardiac glycosides, terpenoids, phlobatannins	4392 per 100 gram
Fennel bulb	Chlorogenic acid, limonene, quercetin	307 μ mol TE/100 gram
Fiddlehead fern	Alkaloids, anthraquinones, anthranol glycosides, cardiac glycosides, cyanidins, flavonoids, glucosides, leucoanthocyanins, phenolic compounds, phytosterols, saponins, steroids, tannins, terpenoids	<i>Not found</i>
Green apple	Quercetin, catechin, phloridzin, chlorogenic acid	3898 μ mol TE/100 gram
Green cabbage	Anthocyanidins, isothiocyanates, phenolics, flavonoids	300 μ mol TE/100 gram
Green grapes	Phenolic acids, stilbenes, anthocyanins, proanthocyanidins, β -carotene, quercetin, lutein, lycopene, ellagic acid	1018 μ mol TE/100 gram
Green lentils	Phenolics, carotenoids, tocopherols, saponins, phytic acid, phytosterol, procyanidin, flavanols	1573 μ mol TE/100 gram
Green olives	Oleuropein, ligustroside, oleocelein, flavonoids, triterpenoids, hydroxytyrosol, tyrosol, oleonolic acid, quercetin	3130 μ mol TE/100 gram
Green peas	α -carotene, β -carotene, lutein, ferulic acid, caffeic acid, flavonoids, catechin, epicatechin	120 μ mol TE/100 gram
Green onion	Phenolic acids, flavonoids, cepaenes, thiosulfinates, anthocyanins, ferulic acid, gallic acid, caffeic acid, p-hydrobenzoic acid, vanillic acid, coumaric acid, protocatechuic acid, catechin, rutin, quercetin, kaempferol	1911 μ mol TE/100 gram

Green tea	Epigallocatechin gallate, flavonoids, tannins, caffeine, polyphenols, boheic acid, theophylline, theobromine, anthocyanins, gallic acid, catechins	1348/gram
Kale	Glucosinolates, carotenoids, phenolic compounds, quercetin, kaempferol, β -carotene, flavonoids, polyphenols	1770 per 100 gram
Kiwi	Carotenes, luteins, xanthophylls, lutein, zeaxanthin, phenolic compounds, flavonoids, anthocyanins	698 per 100 gram
Leeks	β -carotene, lutein, zeaxanthin, flaonoids, kaempferol, quercetin, polyphenols, gallic acid, allicin, alliin, sulfuraphane, isothiocynates, chlorophyllin	490 μ mol TE/100 gram
Lettuce	Phenolic compounds, flavonoids, ascorbic acid, β -carotene, chlorophyll, anthocyanins	396 per 100 gram
Lime	Rutin, quercetin, kaempferol, nobiletin, essential oils	823 μ mol TE/100 gram
Moringa	Alkaloids, saponins, tannins, steroids, phenolic acids, glucosinolates, flavonoids and terpenes	1,576 per/gram
Mustard greens	Phenolic compounds, lutein, zeaxanthin, carotenoids, anthocyanin, β -carotene, retinol	1200 μ mol TE/100 gram
Okra	β -cellulose, hemicelluloses, lignin, pectin, flavonoi glycosides, gossupetin, hibiscetin glucosides, polyphenols, isoquercetin	1889 \pm 200 μ mol TE/100 gram
Olive oil, extra virgin	Phenol alcohols and acids, secoiridoids, lignans, flavones, benzoic acid, cinnamic acid, flavonoids	219 μ mol TE/100 gram
Oregano	Carvacrol, thymol, flavonoids, phenolic acid	200,129 μ mol TE/100 gram (dry); 13970 μ mol TE/100 gram (fresh)
Parsely	Flavonoid, kaempferol, quercetin, glycosylated flavones, apigenin, luteolin	74349 μ mol TE/100 gram
Pepper (bell, chilly, jalapeno)	Phenol, flavonoid, proanthocyanidins, oleoresin, phenolics, carotenoids, capsaicinoids, reducing sugars	615 μ mol TE/100 gram
Radish green	Glucosinolates, phenolics, catechin, pyrogallol, vanillic acid	1736 μ mol TE/100 gram

Rosemary	Tannic acid, borneol, iso-bornyl acetate, carnosol, cineole, pinene, camphor, linalool, rosmanol, terpeniol, verbinol, rosmarinic acid, flavonoids, limonene, carnosic acid, epirosmanol, rosmanol, methylcarnosate, isorosmanol	165280 per 100 gram
Sage	Phenolic compounds, carnosol, carnosic acid, rosmarinic acid, rosmadial, rosmanol, epirosmanol, methyl carnosate	32004 $\mu\text{mol TE}/100$ gram
Soyabeans	Phenolic acids, flavonoids, isoflavones, saponins, phytosterol, sphigolipids, chlorogenic acid isomers, caffeic acid, ferulic acid	5764 $\mu\text{mol TE}/100$ gram
Spinach	Phitobatamin, saponin, phenol, tannins, glycosides, flavonoids, steroids, terpenes, cardenolides, lutein, zeaxanthin, neoxanthin, violaxanthin	1260 per 100 gram
Sprouts	Phenolics, flavonoids, ascorbic acid, resveratol, gibberellic acid	930 $\mu\text{mol TE}/100$ gram
Swiss chard	B-carotene, polyphenols, vitamin C, vitamin E, carotenoid, selenium, flavonoids, lutein, zeaxanthin	1108 $\mu\text{mol TE}/100$ gram
Thyme	Geranial, linalool, γ -terpinoel, carvacrol, thymol, trans-thujan-4-ol/terpinen-4-ol, flavonoids, apigenin, naringenin, luteolin, thymonin	27426 $\mu\text{mol TE}/100$ gram
Tiger figs	Polyphenolic flavonoids, carotenes, lutein, tannins, chlorogenic acid, gallic acid, ferulic acid	3383 $\mu\text{mol TE}/100$ gram
Turnip greens	Glucosinolates, isothiocyanates, flavonoids, phenylpropanoids	1177 \pm 211 $\mu\text{mol TE}/100$ gram
Zucchini	Pepo, lutein, β -carotene, zeaxanthin, dehydroascorbic acid	180 $\mu\text{mol TE}/100$ gram
Acai berries	Anthocyanins, proanthocyanidins, flavonoids	102700 $\mu\text{mol TE}/100$ gram
Black beans	Flavonoids, anthocyanins	2,249 $\mu\text{mol TE}/100\text{g}$
Black lentil	Phenolics, carotenoids, tocopherols, saponins, phytic acid, phytosterol	6416 $\mu\text{mol TE}/100$ gram
Black pepper	Volatile oil, oleoresins, alkaloids, piperine	27618 $\mu\text{mol TE}/100$ gram
Black quinoa	Kaempferol, quercetin, phenolics, betacyanins, tocopherols, carotenoids	4,800 $\mu\text{mol TE}/100\text{g}$

Black rice	Flavonoids, anthocyanins, proanthocyanidins, tocopherols, tocotrienols, oryzanols, phenols, zeaxanthin	2,125 μ mol TE/100g
Black tea	Epigallocatechin gallate, flavonoids, tannins, caffeine, polyphenols, boheic acid, theophylline, theobromine, anthocyanins, gallic acid, catechins, theaflavins, thearubigins	2329-2957 mg gallic acid/L
Blackberries	Anthocyanins, flavonoids, tannins, ellagic acid, ellagitannins, quercetin, gallic acid, cyanidins	7701 per 100 gram
Blueberries	Flavonoids, quercetin, polyphenols, anthocyanins, proanthocyanidins, phenolic acids, stilbene derivatives, polyphenols	9019 per 100 gram
Eggplant	Phenolic compounds, reducing sugars, anthocyanin, phenols, glycoalkaloids, amide proteins, nasunin, lutein, zeaxanthin	390 per 100 gram
Jamun	Ellagic acid/ellagitannins, catechol and -OH groups, kaempferol, quercetin, myricetin, isoquercetin, myricetin-3-L-arabinoside, quercetin-3-D-galactoside, dihydromyricetin, oleonic acid, acetylcatechol, eugenol-triterpenoid A and eugenol-triterpenoid B	More than 100,000 μ mol TE/100 gram
Olives (black, purple)	Oleuropein, ligustroside, oleacein, flavonoids, triterpenoids, hydroxytyrosol, tyrosol, oleonic acid, quercetin	3130 μ mol TE/100 gram
Pepper (bell, chilly)	Piperine, volatile oils, oleoresins, alkaloids	27,618 μ mol TE/100 gram
Plums	Hydroxycinnamic acids, chlorogenic neochlorogenic p-coumaric, caffeic, ferulic acid	4118 μ mol per 100 gram
Poppy seeds	Benzylisoquinoline alkaloids like morphine, codeine and sanguinarine	406 μ mol per 100 gram
Prunes	Phenolic acid, neochlorogenic and chlorogenic acid	5770 μ mol per 100 grams
Purple cabbage	Folic acid, phenolics, carotenoids, selenium, glucosinolates, flavonoids, anthocyanins, kaempferol	2210 μ mol TE/100 gram
Purple carrot	Phenolics, carotenoids, polyacetylene, ascorbic acid, anthocyanins	697 μ mol TE/100 gram
Purple grapes	Phenolic acids, stilbenes, anthocyanins, proanthocyanidins, quercetin, lutein, lycopene, ellagic acid	1339 μ mol TE/100 gram

Raisins	Catechin, quercetin, rutin, phenolic compounds, flavonol glycosides, phenolic acids,	2830 μmol per 100 gram
Purple onions	Anthocyanins, flavonoids, phenolic acids, chlorogenic, syringic acid, quercetin	450 μmol per 100 gram
Aloe vera	Campesterol, β -sitosterol, lupeol, cholesterol, polyphenols	2400 μmol per 100 gram
Apples	Quercetin, catechin, phloridizin, chlorogenic acid	3082 $\mu\text{mol TE}/100$ gram
Cauliflower	Carotenoid, flavonoid, polyphenolic compounds, protocatechuic acid, quercetin, pyrogallol, vanillic acid, coumaric acid, kaempferol	870 $\mu\text{mol TE}/100$ gram
Cassava flour	Coniferaldehyde, isovanillin, 6-deoxyjacareubin, scopoletin, syringaldehyde, pinoresinol, p-coumaric acid, ficusol, balanophonin, ethamivan, alkaloids, flavonoids, tannin, cyanogenic glycoside	<i>Not found</i>
Coconut	Gallic acid, syringic acid, (-)-epigallocatechin, caffeic, ferulic acid, catechin, epicatechin, p-hydroxybenzoic acid, phenols, flavonoids, glycosides, tannins, alkaloids, saponins	17775 $\mu\text{mol TE}/100$ gram
Coconut water	Plant hormones, electrolytes, alycosides, plemolics, terpenoids, alkaloids, steroids, alkaloids, flavonoids, tannins	17775 $\mu\text{mol TE}/100$ gram
Garlic	Flavonoids, diallyl sulphate, alliin, ajoene, allicin, allyl cysteine	5346 $\mu\text{mol TE}/100$ gram
Horseradish	Sinigrin, glucosinolates, isothiocyanates, allyl and phenethyl isothiocyanates, flavonoid	<i>Not found</i>
Kohlrabi	Glucosinolates, phenols, ascorbic acid, anthocyanins, carotenoids, isothiocyanates	16.69-21.93 $\mu\text{gram}/\text{mL}$
Litchi	Flavonoids, gallic acid, phenolic compounds, ascorbic acid, anthocyanins, quercetinpe	430.49 to 1752.30 $\mu\text{mol TE}/100$ gram
Pear (flesh)	Copper, polyphenol, caffeic acid, flavonoids, betalains	2941 $\mu\text{mol TE}/100$ gram
Pumpkin seeds (outer)	Carotenoids, squalene, tocopherols, phytoestrogenes, phytosterol, polyphenols, hydrocarbon, triterpenoids, selenium	6416 $\mu\text{mol TE}/100$ gram

Sesame seeds	Sesamin, sesamol, anthrasesamone F, sesamolin, phenolics, flavonoids	89.5 ± 5.5 to 164.4 ± 15.9 µmol TE/100 gram
Shallots	Flavones, polyphenolic derivatives like quercetin, cysteine sulfoxides	<i>Not found</i>
Tofu	Isoflavones, genistein, saponins, beta-sitosterol, daidzein	90 µmol TE/100 gram
Turnip	Glucosinolates, isothiocyanates, flavonoids, phenolics, indoles, volatiles	461±63 µmol TE/100 gram
White asparagus	Rutin, quercetin, polyphenols, flavonoids	296 µmol TE/100 gram
Potatoes	Phenolics, flavonoids, polyamines, carotenoids, anthocyanin	4649 per 100 gram
White button mushroom	Glycoproteins, tocopherols, polyphenols, ergothioneine	6.9 µmol TE/100 gram
White onion	Phenolics, flavonoids, fructans, organosulfur compounds	913 µmol TE/100 gram
White pepper	Alkaloids, tannins, flavonoids, cardiac glycosides	40700 µmol TE/100 gram
White rice	Phenolic acid, flavonoids, tocopherols, tocotrenols, γ-oryzanol, phytic acid, flavones, flavonols, carotenoids, lutein, zeaxanthin	30 µmol TE/100 gram (cooked)
White sweet potatoes	Reduced sugar, beta carotene, flavonoids, phenolics, anthocyanins	766 µmol TE/100 gram
Almonds	Protocatechic acid, methylquercetin, catechin, p-hydroxybenzoic acid, vanillic acid, flavonoids, resveratrol, kaempferol	7291 µmol per 100 gram
Barley	Phenolic acids, flavonoids, lignans, tocols, phytosterol, folate, tocotrienols, tocopherols	25500 µmol TE/100 gram
Brown lentil	Polyphenols, procyanidin, flavonols	7282 µmol per 100 gram
Brown rice	Dietary fibre, functional lipids, phytosterols, phenolic acids, flavonoids, anthocyanins, proanthocyanins, tocopherols, tocotrienols, γ-aminobutyric acid, γ-oryzanol, phenolic acids	330 µmol TE/100 gram
Buckwheat	Flavonoids, phytosterol, fagopyrins, fagopyritols, phenolic compounds, starch, fibre, lignans, quercetin	9.5 µmol TE/100 gram

Cashew	Phenolics, triterpenoids, xantoprotein, flavonoids, polyphenols, carotenoids	1948 $\mu\text{mol TE}/100 \text{ gram}$
Cocoa powder	Procyanidins, theobromine, catechins, epicatechins, caffeine, polyphenols, methylxanthine compounds	80933 $\mu\text{mol TE}/100 \text{ gram}$
Coffee	Phenolic compounds, chlorogenic acid, hydrocinnamic acids, polyphenol	15000-17000 $\mu\text{mol TE}/100 \text{ gram}$
Cumin	Volatile essential oils, free amino acids, flavonoid glycosides, apigenin, luteolin, phenolic acids, coumarins, cuminal, cuminaldehyde, essential oil, cuminal, γ -terpinene, β -pinene, safranal	76800 $\mu\text{mol TE}/100 \text{ gram}$
Dates	Carotenoids, polyphenols, isoflavons, lignans, flavonoids, tannins, sterols, p-coumaric, ferulic acid, sinapic acid, procyanidins	3895 $\mu\text{mol TE}/100 \text{ gram}$
Flax seeds (meal, oil, seeds)	Lignans, triterpenes, campesterol, stigmasterol, sitosterol, linyastatin, neolinustatin, linamarin, lotaustralin	19600 $\mu\text{mol TE}/100 \text{ gram}$
Hemp seeds	Phenolic compounds, tocopherols, phytosterol, flavonones, flavonols, isoflavones, lignanamides	(oil) 28 to 220 $\mu\text{mol TE}/\text{g}$
Jaggery	Phenolic compounds, phenolic acids, flavonoids, glycosides	3837 $\pm 154 \mu\text{mol TE}/100 \text{ gram}$
Milletts	Carotenoids, phenolics, tocopherols, ferulic acid, chlorogenic acid, syringic acid, caffeic acid, p-coumaric	47.64 to 373.15 mg/100 g (Total Phenolic Content)
Mushroom	Phenol, flavonoids, alkaloids, steroids, saponins, terpenoids, cardiac glycosides, polysaccharide, tocopherols, phenolics, carotenoids, ergosterol, ascorbic acid	9.7 $\mu\text{mol TE}/100 \text{ gram}$
Nut and seed butter	Carotenoids, tocopherols, polyphenols, proanthocyanidins, flavonoids, resveratrol	3432 $\mu\text{mol TE}/100 \text{ gram}$
Oats	Tocopherols, tocotrienols, phenolic acid, sterols, selenium, avenanthramides, polyphenols, ferulic acid, flavonoids, phytic acid, flavonoids	15000 $\mu\text{mol TE}/100 \text{ gram}$
Peanuts	Flavonoids, catechin, epicatechin, apigenin, luteolin, coumaric acid, resveratrol, phytic acid	3000-5000 $\mu\text{mol TE}/100 \text{ gram}$
Quinoa	Phenolics, betanins, carotenoids, kaempferol	3200 $\mu\text{mol TE}/100 \text{ gram}$

Soy sauce	Phenolic acids, flavonoids, isoflavones, saponins, phytosterols, sphingolipids, daidzein	4944 $\mu\text{mol TE}/100 \text{ gram}$
Rice brain oil	γ -oryzanol, tocopherols, tocotrienols, hypoallergenic protein, ferulic acid, sterols, triterpene alcohol	1101.31 $\mu\text{mol TE}/100 \text{ gram}$
Rye	Tocols, polyphenols, ferulic acid, alkylresorcinols, phenolic acids, sterols	(of whole rye bread) 23.76 \pm 1.64 $\mu\text{mol TE}/\text{g}$
Sunflower seeds	Polyphenols, caffeic, chlorogenic, caffeoylquinic, sinapic, ferulic, gallic, coumaric, protocatechiuc acids, glucoside, glucopyroanoside, cynarine, rosmarinic acid, myricetin, rutin	1.5 Trolox equivalentents
Tamarind (seeds)	Alkaloids, glycoside, terpenoi, flavonoids, tannins, saponin, reducing sugar, phenolic antioxidants, epicatechin	3500 $\mu\text{mol TE}/100 \text{ gram}$
Teff	Flavonoids, saponins, tannins, glycoside, steroids, protocatechuic, gentisic, vanillic, syringic	<i>Not found</i>
Triphala	Phytosterols, alkaloids, oils, saponins, phenols, flavonoids, tannins, steroids, terpenoids, cardiac glycosides, coumarins	706250 $\mu\text{mol TE}/100 \text{ gram}$
Walnut	Melatonin, polyphenols, syringic acid, naphthoquinone juglone, ellagitannins	13541 $\mu\text{mol TE}/100 \text{ gram}$
Wheat	Phenolic acids, carotenoids, tocopherols, alkylresorcinols, sterols, steryl ferulates, benzoxazinoids, lignans, ferulic acid, vanillic -acid	51.89-64.65 $\mu\text{mol TE}/100 \text{ gram}$
Tiger figs	Flavonoids, gallic acid, chlorogenic acid, rutin, epicatechin	3383 $\mu\text{mol TE}/100 \text{ gram}$
Zucchini	Pepo, lutein, β -carotene, zeaxanthin, dehydroascorbic acid	180 $\mu\text{mol TE}/100 \text{ gram}$
Apple cider vinegar	Gallic acid, catechin, epicatechin, chlorogenic acid, caffeic acid, p-coumaric acid	270 $\mu\text{mol TE}/100 \text{ gram}$
Asian pear	Phenolic compounds	3172 per 100 gram
Banana	Ascorbic acid, tocopherol, β -carotene, phenolic groups, dopamine, gallocatechin, anthocyanins, delphinidin, cyaniding, catecholamines, carotenoids, β -carotene, α -carotene	1037 per 100 gram

Chamomile tea	Bisabolol oxides, α -bisabolol, chamazulene, azulenesse, farnesene, spiro-ether quiterpene lactones, glycosides, hydroxycoumarins, flavonoids, apigenin, luteolin, patuletin, quercetin, coumarins, herniarin, umbelliferone, terpenoids, mucilage	218600 per 100 gram
Chickpea	Coumaric acid, flavonols, hydroxybenzoates, isoflavones, phenols, saponins	847 $\mu\text{mol TE}/100\text{ gram}$
Corn	Polyphenols, phenolic acids, flavonoids, anthocyanins, glycosides, carotenoids, polysaccharides, lutein, zeaxanthin	400 per 100 grams
Ginger (root, spice, tea)	Polyphenols, β -carotene, flavonoids, tannins, phenolic compounds, alkanones, gingerols, gingeridols	14840 $\mu\text{mol TE}/100\text{ gram}$
Golden raisin	Phenolic content, tannin, flavonoid, carotenoids	10450 $\mu\text{mol TE}/100\text{ gram}$
Jackfruit	Phenolic compounds, flavonoids, stilbenoids, arylbenzofurans, carotenoids, volatile acid sterols, tannins, saponins	(not established)
Lemon	Alkaloids, flavonoids, phenols, quinines, terpenoids, phenolic acids	1225 $\mu\text{mol TE}/100\text{ gram}$
Mustard (Dijon, spice, yellow)	Fibre, chlorophylls, glucosinolates, polyphenols, volatile components, isothiocyanates, isothiocyanate, caffeic acid, quercetin	29257 $\mu\text{mol TE}/100\text{ gram}$
Pineapple	Phenolic content, ferulic acid, p-coumaric acid, caffeic acid, vanillic acid, p-hydroxybenzoic acid, β -carotene	1229 per 100 gram
Quinoa	Phenolics, betanins, carotenoids, quercetin, kaempferol	3200 $\mu\text{mol TE}/100\text{ gram}$
Sea buck thorn	Catechin, AA, myricetin, quercetin, trans-resveratrol	895,281 $\mu\text{mol TE}/100\text{gram}$
Squash (all types)	Fibre, quinic acid, p-coumaric acid, cirsiolol, luteolin, β -carotene	396 $\mu\text{mol TE}/100\text{ gram}$
Star fruit	Saponins, flavonoids like quercetin, epicatechin, alkaloids, tannins, epicatechin, gallic acid, flavonoid C-glycoside	5900 $\mu\text{mol TE}/100\text{ gram}$
Yellow bell pepper	Capsaicin, phenolics, flavonoids, flavonols	1043 $\mu\text{mol TE}/100\text{ gram}$

Yellow carrot	Carotenoids, anthocyanins, phenolics, polyacetylenes, ascorbic acid	436 $\mu\text{mol TE}/100 \text{ gram}$
Yellow cauliflower	Quercetin, pyrogallol, vanillic acid, coumaric acid, kaempferol	870 $\mu\text{mol TE}/100 \text{ gram}$
Yellow lentil	Flavanols, polyphenols, tocopherols, saponins, phytic acid, phytosterols, carotenoids	7282 $\mu\text{mol TE}/100 \text{ gram}$

The information presented in this document is based on the analysis and interpretation of existing data, publications, and sources available up until June 2021. While efforts have been made to ensure accuracy, completeness, and reliability, we cannot guarantee the absolute reliability or up-to-date nature of the information provided. It is advised to independently verify the information and consult with appropriate professionals or experts before making any decisions or taking any actions based on the contents of this research. Furthermore, this research is not exhaustive and may not cover all relevant sources or perspectives. It is always recommended to explore additional sources and seek comprehensive and current information for a thorough understanding of the topic. The author(s) of this research cannot be held liable for any errors, omissions, or inaccuracies in the information presented herein, nor for any losses, damages, or consequences that may arise from the use of this research.