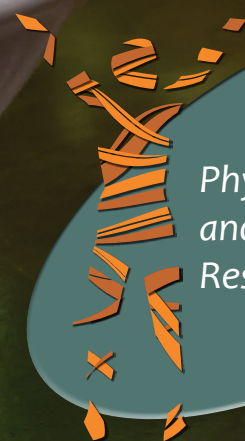


Nutritional composition of selected vegetables



Physical Activity
and Nutrition
Research

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CURTIN HEALTH INNOVATION
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Background

Vegetables WA is an association representing vegetable growers in Western Australia.¹ The organisation plays a role in advocacy, industry development and production sustainability for its members. Vegetables WA is a partner of Buy West Eat Best, a food labelling program managed by the Department of Agriculture and Food that identifies Western Australian grown, farmed, fished or produced food products.²

Vegetables WA commissioned the Centre of Excellence for Seafood, Science and Health (CESSH) to conduct an investigation of the nutritional composition of a list of selected vegetables commonly grown in Western Australia with a view to implement a community intervention to increase vegetable consumption across the State. Stage 1 of the project consisted of the identification of the generic nutritional composition of a list of selected vegetables and fruits, and the health benefits associated with its main nutrients.

Eating a variety of nutritious foods is essential to attain all the required nutrients without excess energy intake. The Dietary Guidelines for Australian Adults currently being updated by the National Health and Medical Research Council (NHMRC) recommend eating a variety of vegetables, legumes and fruits in the diet to ensure intake of a wide range of vitamins, minerals, dietary fibres and beneficial, nonnutrient phytochemicals found in plant foods. Vegetables should include green leafy varieties, red and yellow and starchy vegetables. Fruits should include those high in vitamin C and vitamin A.³

In addition to macronutrients (protein, carbohydrates and dietary fibre) and water, a number of essential micronutrients are found in vegetables and fruits. These micronutrients and the role they play are detailed in Table 1.



Table 1: Micronutrients found in vegetables and their role.

Vitamins	Role
Vitamin A	Helps maintaining normal reproduction, vision and immune function.
Vitamin B1 (Thiamin)	Supplying energy to tissues; breaking down and using the energy and nutrients in carbohydrates, proteins and fats.
Vitamin B2 (Riboflavin)	Obtaining energy from food; making Vitamin B6 active in the body; reducing a key cardiovascular risk factor; production of red blood cells and body growth.
Vitamin B3 (Niacin)	Obtaining energy from food; breaking down and using carbohydrates, proteins and fats and their building blocks; maintaining healthy skin and nerves; releasing Calcium from cellular stores.
Pantothenic acid	Making hormones, Vitamin A and D and substances that help make nerves work; helps make new fats and proteins in the body.
Vitamin B6 (Pyridoxine)	Breaking down, using and reforming the building blocks of proteins.
Vitamin B12 (Cyanocobalamin)	Normal nerve function; normal blood function.
Folate	Breaking down and using the building blocks of proteins; helps processes of tissue growth and cell function; maintaining good heart health; preventing neural tube defects in newborns.
Biotin	Breaking down and using the building blocks of fats and proteins.
Choline	Making nerve cell transmitters and cell membranes; inflammatory and allergic response; healthy kidneys and liver; reducing the risk of heart disease; fat and cholesterol transport and break down in the body.
Vitamin C (Ascorbic acid)	Protecting against oxidative damage; aiding absorption of iron and copper; formation of collagen; healthy bones; helps fight infection; helps regenerate and stabilise other vitamins such as Vitamin E or folate.
Vitamin D	Absorption of calcium and phosphorus; maintenance of calcium levels in blood; immune function; healthy skin; muscle strength.
Vitamin E (Tocopherol)	Acts as antioxidant particularly for fats; keeping heart, circulation, skin and nervous system in good condition.
Minerals	Role
Calcium	Development and maintenance of bones and teeth; good functioning muscles and nerves; heart function.
Chromium	Enhancing the action of insulin to regulate blood sugar.
Copper	Functioning of several enzymes; formation of connective tissue; iron metabolism and blood cell formation; nervous system, immune system and cardiovascular system function.
Fluoride	Healthy teeth and bones.
Iodine	Normal thyroid function (important in the growth and development of central nervous system); energy production; oxygen consumption in cells.
Iron	Haemoglobin in red blood cells (important for transport of oxygen to tissues); component of myoglobin (muscle protein).
Magnesium	Helps functioning of more than 300 enzyme systems; energy production; regulating potassium levels; the use of calcium; healthy bones.
Manganese	Healthy bones; carbohydrate, cholesterol and protein metabolism.
Molybdenum	Breakdown of proteins.
Phosphorus	Forms part of DNA and RNA; buffers the acidity of urine; protection of acid/base balance of blood; storage and transport of energy; helps activate some proteins.
Potassium	Nerve impulses; muscle contraction; regulates blood pressure
Selenium	Antioxidant; thyroid metabolism; part of several functional proteins in the body.
Sodium	Maintains water balance throughout the body; nerve impulses; transport of molecules across cell walls.
Zinc	Component of enzymes that help maintain structure of proteins and regulate gene expression; needed for growth, immunity, appetite and skin integrity.

Source: NHMRC.⁷

Method

A list of 42 vegetables and fruits was provided to CESSH by Vegetables WA (see Table 2).

The nutritional composition for each vegetable and fruit selected for the project was obtained using the NUTTAB 2010 Online Searchable Database. The NUTTAB 2010 is a reference database developed by Food Standards Australian New Zealand (FSANZ). The database contains nutrient data for 2,668 foods available in Australia and up to 245 nutrients per food.⁵ Although NUTTAB 2010 contains analytical data from the 1980s onwards, it contains a considerable amount of data collected from recent analyses. The database contains mainly analysed data for Australian foods; however, a small proportion of data are derived by calculation, imputation, or by borrowing from overseas food composition tables.⁶

NUTTAB 2010 was preferred to AUSNUT 2007, a nutrient database developed specifically for use with the National Children's Nutrition and Physical Activity Survey.⁷ NUTTAB 2010 is more comprehensive and contains new updated analytical data.

Table 2: List of 42 selected vegetables and fruits.

Vegetable	Variety	Scientific name
Artichoke		Cynara scolymus
Asparagus		Asparagus officinalis
Bean	green	Phaseolus vulgaris
Beetroot		Beta vulgaris
Broccoli		Brassica oleracea var. italica
Broccolini		
Brussels sprout		Brassica oleracea var. gemmifera
Cabbage		
Capsicum	green	Capsicum annum
Capsicum	red	Capsicum annum
Capsicum	yellow	Capsicum annum
Carrot		Daucus carota
Cauliflower		Brassica oleracea
Celery		Apium graveolens

Vegetable	Variety	Scientific name
Cucumber		Cucumis sativus
Eggplant		Solanum melongena
Fennel		Foeniculum vulgare var. dulce
Garlic		Allium sativum
Leek		Allium ampeloprasum
Lettuce	cos	Lactuca sativa
Lettuce	mesculum	Lactuca sativa
Lettuce	rocket	Lactuca sativa
Melon	rockmelon	Cucumis melo var. inodorus
Melon	watermelon	Citrullus lanatus (Thunb.) Mansf.
Mushroom	button	Agaricus bisporus
Mushroom	field	Agaricus bisporus
Onion	brown	Allium cepa
Onion	spring	Allium cepa
Onion	white	Allium cepa
Parsnip		Pastinaca sativa
Pea	green	Pisum sativum
Pumpkin		Cucurbita ssp.
Rhubarb		Rheum rhabarbarum
Snowpea		Pisum sativum
Spinach	baby	
Squash		Cucurbita pepo
Sweetcorn	baby	Zea mays
Sweetcorn	on cob	Zea mays
Tomato	baby	Lycopersicon esculentum
Tomato	gourmet	Lycopersicon esculentum
Tomato	Roma	Lycopersicon esculentum
Zucchini		Cucurbita pepo

Results

Using the NUTTAB 2010 Online Searchable Database, the nutritional composition of most selected vegetables and fruits could be established. The nutrient profile is based on the same preparation method (raw, either peeled or unpeeled), with the exception of baby sweetcorn, for which the nutrient profile was based on canned sweetcorn heated and drained.

The nutritional composition of the following vegetables and fruits could not be found on either NUTTAB 2010 or AusNut 07: broccolini, yellow capsicum, lettuce (mesculum), lettuce (rocket), mushroom (field), spinach (baby), tomato (gourmet), tomato (baby), and tomato (Roma).

The nutrient profile of the selected vegetables and fruits found using the Online Searchable Database are presented in Table 3 (vitamins) and Table 4 (minerals). Where more than one variety of a generic vegetable/fruit exists, all varieties found on NUTTAB 2010 are included.



Table 3: Micronutrient composition of selected vegetables and fruits (vitamins).

Item	Scientific name	Nutritional composition (value per 100mg) – Vitamins											
		Vitamin B1 (mg)	Vitamin B2 (mg)	Vitamin B3 (mg)	Pantothenic acid (mg)	Vitamin B6 (mg)	Folate (µg)	Vitamin C (mg)	Alpha tocopherol (mg)	Beta tocopherol (mg)	Delta tocopherol (mg)	Gamma tocopherol (mg)	Vitamin E (mg)
Artichoke, globe, raw	Cynara scolymus	0.06	0.08	0.6	NA	NA	NA	16	NA	NA	NA	NA	NA
Asparagus, raw	Asparagus officinalis	0.15	0.12	1	0.17	0.12	114	15	0.6	NA	NA	NA	0.6
Bean, green, fresh, raw	Phaseolus vulgaris	0.044	0.1	0.44	0.1	0.11	21	23	0	NA	NA	NA	0
Beetroot, fresh, peeled, raw	Beta vulgaris	0.027	0.018	0.37	0	0.12	120	5	0.1	NA	NA	NA	0.08
Broccoli, fresh, raw	Brassica oleracea var. italica	0.075	0.206	0.47	0.47	0.09	49	99	0.2	NA	NA	NA	0.18
Brussels sprout, fresh, raw	Brassica oleracea var. gemmifera	0.09	0.15	0.7	NA	NA	61	110	NA	NA	NA	NA	NA
Cabbage, bok choy, raw	NA	0.114	0.125	0	0	0.52	40	18	0.1	NA	NA	NA	0.14
Cabbage, chinese, raw	Brassica pekinensis	0.03	0.04	0.4	NA	NA	170	20	NA	NA	NA	NA	NA
Cabbage, chinese flowering, raw	Brassica parachinensis	0.01	0.1	0.8	NA	NA	425	46	NA	NA	NA	NA	NA
Cabbage, mustard, raw	Brassica juncea	0.06	0.09	0.6	NA	NA	278	100	NA	NA	NA	NA	NA
Cabbage, red, raw	Brassica oleracea var. capitata	0.09	0.13	0.5	NA	NA	57	69	NA	NA	NA	NA	NA
Cabbage, savoy, raw	Brassica oleracea var. sabauda	0.05	0.05	0.4	NA	NA	15	46	NA	NA	NA	NA	NA
Cabbage, white, raw	Brassica oleracea var. capitata	0.061	0.049	0.49	0.13	0.1	16	55	0	NA	NA	NA	0
Capsicum, green, raw	Capsicum annuum	0.033	0.033	0.54	0	0	10	98	0	NA	NA	NA	0.05
Capsicum, red, raw	Capsicum annuum	0.035	0.044	0.88	0.12	0.3	60	152	3.9	0.2	0	0.3	4.03
Carrot, baby, peeled, raw	Daucus carota	0.04	0.03	0.5	NA	NA	33	7	NA	NA	NA	NA	NA
Carrot, mature, peeled, raw	Daucus carota	0.079	0.04	0.69	0.15	0.33	18	6	0.4	NA	NA	NA	0.42
Cauliflower, raw	Brassica oleracea	0.077	0.096	0.48	0.48	0.04	62	67	0	NA	NA	NA	0
Celery, raw	Apium graveolens	0.031	0.021	0.42	0	0.03	13	5	0	NA	NA	NA	0.02
Cucumber, apple crystal, unpeeled, raw	Cucumis sativus	0.03	0.02	0.2	NA	NA	7	10	NA	NA	NA	NA	NA
Cucumber, common, peeled, raw	Cucumis sativus	0.02	0.01	0.2	NA	NA	14	8	NA	NA	NA	NA	NA
Cucumber, common, unpeeled, raw	Cucumis sativus	0.02	0.02	0.2	0.14	0.1	7	7	0	0	0	0	0
Cucumber, lebanese, unpeeled, raw	Cucumis sativus	0.018	0.018	0.27	0.17	0	0	13	0	NA	NA	NA	0
Cucumber, telegraph, unpeeled, raw	Cucumis sativus	0.03	0.01	0.3	NA	NA	7	8	NA	NA	NA	NA	NA
Eggplant, raw	Solanum melongena	0.047	0.038	0.66	0.24	1.81	0	3	3	NA	NA	NA	2.99
Fennel, raw	Foeniculum vulgare var. dulce	0.03	0.03	0.1	NA	NA	NA	9	NA	NA	NA	NA	NA
Garlic, peeled, raw	Allium sativum	0.09	0.06	0.8	NA	NA	3	11	NA	NA	NA	NA	NA
Leek, raw	Allium ampeloprasum	0.045	0.072	0.36	0	0.08	0	27	0.4	NA	NA	NA	0.35
Lettuce, cos, raw	Lactuca sativa	0.03	0.06	0.3	0	0.06	57	13	0.2	NA	NA	NA	0.21
Lettuce, iceberg, raw	Lactuca sativa	0.032	0.032	0.43	0	0.05	24	4	0	NA	NA	NA	0.04
Lettuce, mignonette, raw	Lactuca sativa	0.05	0.07	0.3	NA	NA	57	12	NA	NA	NA	NA	NA

		Nutritional composition (value per 100mg) – Vitamins											
Item	Scientific name	Vitamin B1 (mg)	Vitamin B2 (mg)	Vitamin B3 (mg)	Pantothenic acid (mg)	Vitamin B6 (mg)	Folate (µg)	Vitamin C (mg)	Alpha tocopherol (mg)	Beta tocopherol (mg)	Delta tocopherol (mg)	Gamma tocopherol (mg)	Vitamin E (mg)
Melon, honey dew, white skin, peeled, raw	Cucumis melo var. inodorus	0.02	0.02	0.2	NA	NA	NA	20	NA	NA	NA	NA	NA
Melon, honey dew, yellow skin, peeled, raw	Cucumis melo var. inodorus	0.02	0.01	0.2	NA	NA	NA	12	NA	NA	NA	NA	NA
Melon, rockmelon (cantaloupe), peeled, raw	Cucumis melo L. var. reticulatus Naudin	0.024	0.024	0.24	0	0.03	19	41	0	NA	NA	NA	0
Melon, watermelon, peeled, raw	Citrullus lanatus (Thunb.) Mansf.	0.019	0.013	0.19	0.17	0.04	0	8	0	NA	NA	NA	0
Mushroom, common, raw	Agaricus bisporus	0.025	0.369	3.17	1.15	0.02	18	1	0	NA	NA	NA	0
Onion, mature, brown skinned, peeled, raw	Allium cepa	0.02	0.06	1.1	NA	NA	25	32	NA	NA	NA	NA	NA
Onion, spring, raw	Allium cepa	0.041	0.02	0.41	0.16	0.04	0	6	0	NA	NA	NA	0
Onion, mature, white skinned, peeled, raw	Allium cepa	0.081	0.102	1.12	0.23	0.06	27	12	0.2	NA	NA	NA	0.22
Parsnip, peeled, raw	Pastinaca sativa	0.084	0.094	0.52	0.16	0.06	39	8	0.5	0	0	0	0.48
Pea, green, fresh, raw	Pisum sativum	0.317	0.143	2.35	0.33	0.2	56	33	0	0	0	0.9	0.09
Pumpkin, butternut, peeled, raw	Cucurbita ssp.	0.05	0.05	1	NA	NA	41	17	NA	NA	NA	NA	NA
Pumpkin, golden nugget, peeled, raw	Cucurbita	0	0	0	0.14	0.05	15	11	0.3	NA	NA	NA	0.29
Pumpkin, jarrahdale, peeled, raw	Cucurbita	0.006	0.009	0.39	0.21	0.11	25	12	0.4	0	0	0	0.39
Pumpkin, peeled, raw	Cucurbita ssp.	0.03	0.09	0.8	NA	NA	13	24	NA	NA	NA	NA	NA
Pumpkin, queensland blue, peeled, raw	Cucurbita	0.11	0.04	0.7	NA	NA	NA	8	NA	NA	NA	NA	NA
Rhubarb, stalk, raw	Rheum rhabarbarum	0.01	0.086	0.86	0.16	0.08	15	44	0.1	NA	NA	NA	0.05
Snowpea, raw	Pisum sativum	0.02	0.06	1.1	NA	NA	25	32	NA	NA	NA	NA	NA
Spinach, English, raw	Spinacia oleracea	0.066	0.175	0.44	0	0.15	120	29	1.2	NA	NA	NA	1.21
Spinach, water, raw	Ipomoea aquatica	0.01	0.15	0.8	NA	NA	225	28	NA	NA	NA	NA	NA
Squash, button, raw	Cucurbita pepo	0.04	0.06	0.4	NA	NA	17	26	NA	NA	NA	NA	NA
Squash, scallopini, raw	Cucurbita pepo	0.03	0.05	0.7	NA	NA	17	26	NA	NA	NA	NA	NA
Sweetcorn, baby, canned in brine, heated, drained	Zea mays	0	0	0.2	NA	NA	31	4	NA	NA	NA	NA	NA
Sweetcorn, fresh on cob, raw	Zea mays	0.167	0.068	1.26	0.52	0.19	47	5	0.1	NA	NA	NA	0.09
Tomato, cherry, raw	Lycopersicon esculentum	0.06	0.04	1	NA	NA	18	28	NA	NA	NA	NA	NA
Tomato, common, raw	Lycopersicon esculentum	NA	NA	NA	0	0.03	16	18	0.2	0.1	0	0.2	0.26
Tomato, hydroponic, raw		0.03	0.02	0.5	0	0.04	12	16	0.7	0	0	0.1	0.68
Zucchini, golden, raw	Cucurbita pepo	0.04	0.06	0.6	NA	NA	17	30	NA	NA	NA	NA	NA
Zucchini, green skin, raw	Cucurbita pepo	0.028	0.056	0.56	0.21	0.03	18	22	0.6	NA	NA	NA	0.55

Table 4: Micronutrient composition of selected vegetables and fruits (minerals).

Item	Scientific name	Nutritional composition (value per 100mg) – Vitamins											
		Calcium (mg)	Copper (mg)	Fluoride (µg)	Iodine (µg)	Iron (mg)	Magnesium (mg)	Manganese (mg)	Phosphorus (mg)	Potassium (mg)	Selenium (µg)	Sodium (mg)	Zinc (mg)
Artichoke, globe, raw	Cynara scolymus	30	NA	NA	NA	NA	18	NA	NA	360	NA	6	0.6
Asparagus, raw	Asparagus officinalis	11	NA	0.08	0	NA	15	0.218	49	320	0	2	0.2
Bean, green, fresh, raw	Phaseolus vulgaris	49	0.075	0	20	1.07	30	0.344	42	221	0	2	0.54
Beetroot, fresh, peeled, raw	Beta vulgaris	7	NA	0.055	0	NA	24	0.295	38	266	0	49	0.73
Broccoli, fresh, raw	Brassica oleracea var. italica	33	NA	0.052	84.57	0	22	0.221	81	345	0	22	0.6
Brussels sprout, fresh, raw	Brassica oleracea var. gemmifera	15	NA	NA	NA	0.9	18	NA	NA	380	NA	30	0.3
Cabbage, bok choy, raw	NA	86	0.041	0	4.1	1.46	19	0.269	28	260	0	59	0.36
Cabbage, chinese, raw	Brassica pekinensis	25	NA	NA	NA	0.3	8	NA	NA	250	NA	6	0.2
Cabbage, chinese flowering, raw	Brassica parachinensis	70	NA	NA	NA	1.7	12	NA	NA	340	NA	13	0.5
Cabbage, mustard, raw	Brassica juncea	130	NA	NA	NA	0.7	11	NA	NA	450	NA	3	0.1
Cabbage, red, raw	Brassica oleracea var. capitata	35	NA	NA	NA	0.6	14	NA	NA	450	NA	16	0.3
Cabbage, savoy, raw	Brassica oleracea var. sabauda	39	NA	NA	NA	0.6	14	NA	NA	340	NA	23	0.3
Cabbage, white, raw	Brassica oleracea var. capitata	35	0.021	27.84	0	0.51	15	0.119	40	293	0	15	0.26
Capsicum, green, raw	Capsicum annuum	9	0.072	88.13	0	0.58	10	0.133	20	165	0.4	2	0.19
Capsicum, red, raw	Capsicum annuum	4	0.091	0	0	0.3	6	0.139	28	174	0.5	2	0.19
Carrot, baby, peeled, raw	Daucus carota	42	NA	NA	0	0.5	11	NA	NA	210	NA	51	0.2
Carrot, mature, peeled, raw	Daucus carota	30	0.049	86.04	0	0.28	12	0.299	36	279	0	40	0.2
Cauliflower, raw	Brassica oleracea	18	0.029	87.79	0	0.48	15	0.158	50	297	0	31	0.25
Celery, raw	Apium graveolens	44	0.021	0	0	0.25	10	0.131	29	267	1.8	97	0.21
Cucumber, apple crystal, unpeeled, raw	Cucumis sativus	28	NA	NA	0.2	0.3	13	NA	NA	100	0	19	0.5
Cucumber, common, peeled, raw	Cucumis sativus	13	NA	NA	NA	0.3	9	NA	NA	97	NA	21	0.4
Cucumber, common, unpeeled, raw	Cucumis sativus	18	0.024	0	0.1	0.22	14	0.08	18	136	0	10	0.18
Cucumber, lebanese, unpeeled, raw	Cucumis sativus	57	0.03	0	0.2	0.27	10	0.069	44	87	0	19	0.18
Cucumber, telegraph, unpeeled, raw	Cucumis sativus	49	NA	NA	0.2	0.3	13	NA	NA	210	0	16	0.2
Eggplant, raw	Solanum melongena	22	0.081	0	NA	0.19	8	0.16	28	160	0	5	0.09
Fennel, raw	Foeniculum vulgare var. dulce	20	NA	NA	NA	0.1	10	NA	NA	280	NA	38	0.1
Garlic, peeled, raw	Allium sativum	30	NA	NA	NA	1.7	25	NA	NA	510	NA	8	1
Leek, raw	Allium ampeloprasum	30	0.057	0	NA	0.63	13	0.408	39	232	0	15	0.27
Lettuce, cos, raw	Lactuca sativa	20	0.068	0	2.1	0.7	13	0.35	31	210	0.6	18	0.31
Lettuce, iceberg, raw	Lactuca sativa	19	0.055	160.46	2.1	0.61	11	0.14	25	205	0.5	26	0.21
Lettuce, mignonette, raw	Lactuca sativa	20	0.077	NA	2.1	1.1	13	NA	NA	230	0.8	18	0.28
Melon, honey dew, white skin, peeled, raw	Cucumis melo var. inodorus	39	NA	NA	NA	0.3	16	NA	NA	160	NA	44	0.2

		Nutritional composition (value per 100mg) – Vitamins											
Item	Scientific name	Calcium (mg)	Copper (mg)	Fluoride (µg)	Iodine (µg)	Iron (mg)	Magnesium (mg)	Manganese (mg)	Phosphorus (mg)	Potassium (mg)	Selenium (µg)	Sodium (mg)	Zinc (mg)
Melon, honey dew, yellow skin, peeled, raw	Cucumis melo var. inodorus	38	NA	NA	NA	0.4	9	NA	NA	150	NA	40	0.1
Melon, rockmelon (cantaloupe), peeled, raw	Cucumis melo L. var. reticulatus Naudin	9	0.024	62.38	0	0.28	10	0.044	14	251	0	17	0.13
Melon, watermelon, peeled, raw	Citrullus lanatus (Thunb.) Mansf.	6	0.035	0	0.2	0.42	7	0.036	16	123	0.1	2	0.25
Mushroom, common, raw	Agaricus bisporus	3	0.342	38.08	0	0.27	10	0.058	110	310	15.4	8	0.56
Onion, mature, brown skinned, peeled, raw	Allium cepa	23	0.042	0	0.5	0.37	9	0.125	39	163	0	11	0.18
Onion, spring, raw	Allium cepa	22	NA	NA	NA	0.5	11	NA	NA	140	NA	13	0.1
Onion, mature, white skinned, peeled, raw	Allium cepa	29	0.046	41.1	0.5	0.31	13	0.092	36	183	0	14	0.24
Parsnip, peeled, raw	Pastinaca sativa	39	0.069	0	NA	0.3	24	0.147	59	428	0	19	0.41
Pea, green, fresh, raw	Pisum sativum	30	0.147	0	4.9	1.78	32	0.587	117	264	2	1	1.03
Pumpkin, butternut, peeled, raw	Cucurbita ssp.	18	0.076	0	0	0.32	17	0.125	50	382	0	1	0.15
Pumpkin, golden nugget, peeled, raw	Cucurbita	22	NA	NA	NA	0.2	6	NA	NA	230	NA	1	0.3
Pumpkin, jarrahdale, peeled, raw	Cucurbita	17	0.044	54.95	0	0.11	9	0.113	21	198	0	0	0.06
Pumpkin, peeled, raw	Cucurbita ssp.	22	0.057	33.1	0	0.24	14	0.108	39	338	1.1	1	0.14
Pumpkin, queensland blue, peeled, raw	Cucurbita	41	NA	NA	NA	0.9	13	NA	NA	340	NA	2	0.3
Rhubarb, stalk, raw	Rheum rhabarbarum	26	NA	NA	NA	0.3	10	NA	NA	130	NA	12	0.3
Snowpea, raw	Pisum sativum	24	0.063	0	NA	0.86	34	0.337	42	400	0	1	0.57
Spinach, English, raw	Spinacia oleracea	58	0.041	0	9	3.5	74	0.729	43	623	0	23	0.66
Spinach, water, raw	Ipomoea aquatica	68	NA	NA	NA	2.4	29	NA	NA	460	NA	25	0.2
Squash, button, raw	Cucurbita pepo	6	NA	NA	NA	0.3	12	NA	NA	140	NA	1	0.2
Squash, scallopini, raw	Cucurbita pepo	19	NA	NA	NA	0.8	10	NA	NA	180	NA	9	0.3
Sweetcorn, baby, canned in brine, heated, drained	Zea mays	8	0.07	NA	NA	0.9	12	0.15	33	66	NA	350	0.4
Sweetcorn, fresh on cob, raw	Zea mays	8	0.057	93.89	0	1.01	32	0.277	113	346	1.3	3	0.7
Tomato, cherry, raw	Lycopersicon esculentum	11	0.047	NA	0.2	0.5	12	NA	NA	240	0.6	10	0.14
Tomato, common, raw	Lycopersicon esculentum	9	0.042	130	0.1	0.27	7	0.092	26	214	0.4	8	0.31
Tomato, hydroponic, raw		10	0.038	0	0.1	0	6	0.06	19	180	0.4	3	0.1
Zucchini, golden, raw	Cucurbita pepo	16	NA	NA	NA	0.4	10	NA	NA	230	NA	1	0.7
Zucchini, green skin, raw	Cucurbita pepo	17	0.071	70.15	0	0.49	16	0.144	36	191	0	1	0.33

Issues identified

When consulting the NUTTAB 2010 Online Searchable Database, several issues were identified:

- NUTTAB 2010 does not contain nutrient information for the following vegetables and fruits: varieties: broccolini, capsicum (yellow), lettuce (mesclum), lettuce (rocket), mushroom (field), spinach (baby), tomato (baby), tomato (gourmet), and tomato (Roma);
- Nutrient data are based on sampling which in some cases was completed as far back as the 1980s;
- No tests have been conducted in Western Australia; the majority of nutrient profiles were obtained through sampling conducted in NSW, some were conducted in SA and Victoria;
- Although the majority of the data were obtained through direct testing, values of some nutrients were either imputed or derived from other varieties.

As an example, the information below is provided under 'sampling details' for the item 'Brussels sprout, fresh, raw':

Proximates, vitamins and minerals were derived from a composite of five 1 kg purchases of fresh Brussels sprouts from Sydney outlets during March-June 1982 (Will et al. 1984). Folate was borrowed from the USDA, record 11098. Retinol, folic acid and cholesterol were imputed.



References

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