

## COMPOSITION OF RAW VEGETABLES IN 100 GRAMS (ABOUT 38 UNOZ), AS PURCHASED

Y.H. Yang

Item No.	Food and Description	Energy Kcal	Protein g	Calcium mg	Iron mg	Vitamin A Value	Ascorbic Acid mg	Refuse %
						I.U.	mg	%
<b>A. High Nutrition (Vitamin A value more than 2,000 I.U.)</b>								
1. Amaranth, Chinese spinach	23	2.2	168	2.5	3,845	50	37	
2. Basil, sweet, leaves and stems	31	2.4	234	3.5	5,475	20	43	
3. Beet greens	13	1.2	67	1.8	3,415	17	44	
4. Bitter melon leaves	44	5.6	288	5.0	8,475	170	0	
5. Broccoli, flower cluster	25	2.8	80	.9	3,000*	88	22	
6. Carrot Beta III	25	.6	22	.4	19,470**	5	41	
7. Carrot, common	25	.6	22	.4	6,490	5	41	
8. Carrot tops	31	1.8	105	2.7	3,335	46	7	
9. Cassava young leaves	52	6.0	125	2.4	11,885	71	13	
10. Chinese celery leaves	36	5.5	245	3.1	8,865	91	5	
11. Chives	28	1.8	69	1.7	5,800	56	0	
12. Chrysanthemum	14	1.4	50	2.0	4,215	22	15	
13. Collards, leaves and stems	40	3.6	203	1.0	6,500	92	0	
14. Coriander, Chinese parsley	32	2.2	178	2.6	5,440	129	22	
15. Dandelion greens	43	2.6	178	2.9	13,300	33	5	
16. Edible hibiscus "Sunset"	47	5.7	580	3.0	13,000	118	25	*
17. Endives	15	1.3	61	1.3	2,475	8	25	
18. Kale, leaves and stems	28	3.0	132	1.6	6,585	93	26	
19. Malunggay, drumstick leaves	46	3.4	215	2.1	7,395	142	39	
20. Mint leaves	32	3.0	194	3.8	3,600	64	0	
21. Mustard greens	22	2.1	128	2.1	4,900	68	30	
22. New Zealand spinach	18	2.1	55	2.5	4,085	29	5	
23. Ongchoy, kangkong, Ipomoea aquatica	23	2.4	59	2.0	5,105	26	17	
24. Pakchoy, Chinese green spoon cabbage	15	1.5	157	.8	2,945	24	20	
25. Parsley, curly	44	3.6	203	6.2	8,500	172	0	
26. Papaya, young leaves	37	3.6	173	.4	9,715	70	29	
27. Pepper leaves	53	5.8	246	1.4	10,350	68	0	
28. Pepper, red, chili	100	5.5	86	3.6	11,000	93	13	
29. Pumpkin leaves and flowers	20	3.0	37	2.1	3,235	11	0	
30. Radish tops	33	3.3	220	4.1	4,115	81	0	
31. Rape leaves and stems	22	2.2	110	1.0	3,765	39	13	
32. Sesbania grandiflora leaves	77	8.7	404	5.0	10,385	58	0	
33. Spinach	16	2.0	57	1.9	4,940	31	39	
34. Sweet potato, orange-coloured flesh varieties	92	1.4	26	.6	7,130**	17	19	
35. Sweet potato tops	34	2.6	70	3.7	5,635	25	19	
36. Swiss chard	23	2.2	81	2.9	5,980	29	23	
37. Taro leaves	38	2.4	147	2.4	11,210	78	65	
38. Water cress	17	2.0	139	1.6	4,510	72	8	
*Value for leaves is 16,000 I.U.; flower cluster, 3,000 I.U.; stalks, 400 I.U.								
**Calculated basing on information from Agnew Seed Company.								
***Value for deep orange-coloured varieties. Pale varieties have very little vitamin A value.								
<b>B. Medium Nutrition (Vitamin A value 500-2,000 I.U.)</b>								
39. Asparagus	15	1.4	12	.9	505	18	44	
40. Celery, Chinese, stems	15	2.2	93	1.2	615	11	25	
41. Cantaloup	15	.4	7	.2	1,700	17	50	
42. Lettuce, Butter head, Manoa	10	.9	26	1.5	720	6	26	
43. Lettuce, Romaine, loose head	12	.8	44	.9	1,215	12	36	
44. Lima bean, immatured seeds	123	8.4	52	2.8	650	29	0	
45. Okinawa spinach ( <i>Gymura bicolor</i> )	31	3.7	12	2.3	1,165	28	0	
46. Onion, young green	35	1.4	49	1.0	1,910	31	0	
47. Papaya, ripe fruit	20	.4	13	.2	1,175	38	33	
48. Pea seeds, raw	94	6.2	32	1.2	675	27	0	
49. Pumpkin	18	.7	14	.6	1,120	6	30	

**COMPOSITION OF RAW VEGETABLES IN 100 GRAMS (ABOUT 3½ OUNCES) AS PURCHASED**

Item No.	Food and Description	Energy Kcal	Protein g	Calcium mg	Iron mg	Vitamin A Value I.U.	Ascorbic Acid mg	Refuse %
						Value I.U.	Ascorbic Acid mg	
<b>B. Medium Nutrition - continued</b>								
51. Snap bean, immatured pods		28	1.7	49	0.7	530	17	12
52. Tomato		22	1.1	13	.5	900	23	0
<b>C. Low Nutrition (Vitamin A value less than 500 I.U.)</b>								
53. Avocado		125	1.6	8	.5	220	11	25
54. Bamboo shoots in sheath		8	.8	4	.1	5	1	71
55. Banana, common		77	1.0	8	.7	365*	5	46
56. Beet, common, red		21	.8	8	.3	10	5	51
57. Bitter melon		15	.6	21	1.8	150	46	20
58. Cabbage, common varieties		22	1.1	44	.4	115	42	10
59. Cabbage, Chinese compact, head type, won dok		14	1.2	42	.6	145	24	3
60. Cassava, fresh roots		145	1.2	33	.7	0	36	25
61. Cauliflower, untrimmed		11	1.1	10	.4	25	30	61
62. Celery		13	.7	29	.2	180	7	25
63. Corn, sweet, with husk		25	1.3	1	.3	145	4	64
64. Cucumber		14	.9	24	1.0	240	10	5
65. Egg plant		20	1.0	10	.6	10	4	19
66. Garlic, cloves, raw		121	5.5	26	1.3	0	13	12
67. Ginger root, fresh		46	1.8	21	2.0	10	4	7
68. Leek, bulb and lower leaf portion		27	1.1	27	.6	20	9	48
69. Lettuce, Iceberg		10	.7	15	.4	245	4	26
70. Luffa, sponge gourd		15	.4	11	.4	35	5	29
71. Mushrooms, fresh		23	2.2	5	.6	0	2	19
72. Okra		28	1.9	72	.5	405	24	22
73. Onion, mature bulb		35	1.4	3	.5	35	9	7
74. Pea pod, young		37	2.8	46	1.0	385	33	0
75. Pepper, sweet		18	1.0	7	.6	345	105	18
76. Pigeon pea, immatured seeds		117	7.2	42	1.6	140	39	0
77. Potatoes, Irish		62	1.7	7	.5	0	16	19
78. Radish, oriental		15	.7	27	.5	10	25	22
79. Soybean, immatured pods		79	7.4	44	2.2	340	15	43
80. Tares, tuber		65	1.3	18	.7	15	3	34
81. Wax gourd		9	.3	13	.3	0	9	31
82. Water melon		12	.2	3	.2	270	3	54
83. Winged bean (cooked)		38	5.3	61	1.1	90	10	0
84. Zucchini, summer squash		14	1.0	23	.3	260	16	18

\*Some varieties, with yellow flesh, are high in vitamin A value.

- References: 1. USDA Agriculture Handbook No. 8, 1963  
 2. Food Composition Table for Use in East Asia, FAO, 1972  
 3. Chinese Food Composition Table, 1976  
 4. USDA Agriculture Handbook No. 8, Revised, 1984

- Remarks: 1. The use of I.U. (international Unit) to express vitamin A value is for the convenience of users. The conversion rate is 1 I.U. = 0.3 mcg R.E.(retinol equivalent). 0.6 mcg beta-carotene = 1.2 mcg other carotenoids with vitamin A activity.  
 2. This table is prepared for the reference in food/crop selection of gardeners and homemakers in East and Southeast Asia and the Pacific, emphasizing vitamin A value of different vegetables.  
 3. Nutrition classification of vegetables basing only on their vitamin A value is sometimes unfair. For instance, sweet pepper, high in ascorbic acid, and immature soybean and pigeon pea seeds, high in protein, are dropped in the third category. If other criteria were used, different pictures will appear.  
 4. Suggestions and corrections are appreciated.

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 500 University Avenue, #918, Honolulu, Hawaii  
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