

Edible Weeds for Nutrition and Herbal Medicine

Guelph Organic Conference 2011

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Please read this part first:

- The following notes are taken from my talk at the Guelph Organic Conference 2011. They are not meant to replace the information discussed on the day, nor are they a complete replica of all the slides seen in the presentation.
- These notes represent just a portion of my ongoing study and research; thus the information found here is by definition not exhaustive. Every herb contains a multitude of constituents and qualities; only a few have been listed within these pages.
- You may notice that the data found below will often show a wide range for each nutrient. As plants in their whole form are not standardized, these findings reflect variations in weather (sun, water, temperature), soil conditions, season, environmental communities, stress, soil mineral status, etc.
- On designing this talk, there were six criteria that had to be met by any herb discussed. It had to be simple to use as food as well as herbal medicine, be freely available in most Canadian urban and country gardens and be easily identifiable and safe. The herbs here represented were chosen specifically because they fulfilled all of the above criteria.
- I have spent much time in gathering information, testing recipes, compiling tables and seeking to understand these plants. You are welcome to read this data but please do not copy it for commercial use without my written permission. I appreciate your understanding in this matter.
- **WARNING:** the information found on these tables was culled from a number of sources and, as such, represents the work done by previous authors (as seen in the Resources section below). Whilst every effort was made to communicate this data accurately, errors will be made. Please do not rely on this information or re-iterate it without doing original research to confirm.

Vitamins	RDA: F /day	RDA: M /day	Optimum (Haas)	SOME SOURCES	USES (brief)
Vitamin A	2310 iu	3000 iu	10,000 iu	Liver, fish liver oil, egg yolks, milk products, yellow-orange vegetables and fruit; green leafy veg	Eyesight, tissue healing, bone/teeth growth, skin health, immune health
Vitamin C	75 mg	90 mg	3000 mg	Citrus fruits, red peppers, rosehips, broccoli, acerola cherries, cabbage, dark leafy greens, tomatoes	Immune health, adrenal health, inflammation, tissue health, nervous system, antioxidant
Vitamin D	600 iu	600 iu	600 iu	Fish liver oil, egg yolks, oily fish, butter, fortified foods, sunshine	Bone/teeth health, regulates calcium metabolism
Vitamin E	15 mg	15 mg	600 iu (441 mg)	Seed/nut oils, raw peas, asparagus, kale, spinach, cucumber, liver, egg yolk, milk products (fat)	Cardiovascular health, tissue health, reproductive system health, antioxidant
Vitamin K	90 mcg	120 mcg	200 mcg	Leafy greens, alfalfa, kelp, molasses, liver, fish liver oils, egg yolks, dairy	Blood clotting
Thiamine (B1)	1.1 mg	1.2 mg	50 mg	Wheat bran/germ, whole wheat, brown rice, brewer's yeast, molasses, nuts, legumes, avocado, spinach, cauliflower, pork	Nervous system health, stress, aids digestion
Riboflavin (B2)	1.1 mg	1.3 mg	50 mg	Brewer's yeast, oily fish, organ meats, shellfish, milk products, eggs, legumes	Stress, skin health, digestive health, visual problems

Vitamins	RDA: F /day	RDA: M /day	Optimum (Haas)	SOME SOURCES	USES (brief)
Niacin (B3)	14 mg	16 mg	100 mg	Organ meats, fish, yeast, poultry, whole grains, legumes, avocados, figs, prunes, peanuts, dates	Nervous disorders, skin health, digestive health, blood sugar regulation, circulation
Vitamin B6	1.3-1.5 mg	1.3-1.7 mg	100 mg	Organ meats, whole grains, fish, poultry, legumes, walnuts, prunes, bananas, potatoes, cauliflower, cabbage	Stress, PMS, menstrual pain, nervous system health, skin disorders, immune health
Folate	400 mcg	400 mcg	1000 mcg	Green leafy vegetables, organ meats, legumes, brewer's yeast, wheat germ, berries	Stress, nervous & skin disorders, folic acid anaemia, digestive health
Vitamin B12	2.4 mcg	2.4 mcg	500 mcg	Organ meats, oily fish, shellfish, egg yolks, dairy	Nervous system health, pernicious anaemia, skin health
Pantothenic Acid (B5)	5 mg	5 mg	100 mg	Organ meats, fish, cheese, chicken, egg yolks, whole grains, legumes, potatoes, avocados, cauliflower, brewer's yeast	Stress (supports adrenal glands), nervous system health, digestive disorders
Biotin	30 mcg	30 mcg	500 mcg	Liver, egg yolks, brewer's yeast, milk products, nuts	Regulate blood sugar & fat metabolism, skin health
Choline	425 mg	550 mg	1000 mg	Soya lecithin, wheat germ, brewer's yeast, fish, organ meats, egg yolks	Nervous system health, fat metabolism, atherosclerosis

Minerals	RDA: F /day	RDA: M /day	Optimum (Haas)	SOME SOURCES	USES (brief)
Calcium	1000-1200 mg	1000 mg	1200 mg	Some green leafy veg, legumes, milk products, broccoli, nuts, seeds, molasses, sardines	Bone/teeth health, muscle cramps, cardiovascular health
Chromium	20-25 mcg	30-35 mcg	500 mcg	Brewer's yeast, whole grains, meat, chicken, shellfish, black pepper	Blood sugar balance, cholesterol balance
Copper	900mcg	900 mcg	3000 mcg	Whole grains, nuts, organ meats, shellfish, legumes, dark leafy greens, cocoa	Tissue repair, bone & nervous system health, general body function
Silicon	20 mg	20 mg	50 mg	Whole grains, onions, dark greens, cucumbers, strawberries	Bone/hair/skin/nail health, tissue repair
Iodine	150 mcg	150 mcg	200 mcg	Fish, shellfish, onions, sea vegetables, spinach, lettuce, green peppers	Thyroid function, skin/hair/nails health
Iron	8-18 mg	8 mg	18 mg	Meat, organ meats, fish, shellfish, egg yolks, whole grains, legumes, kelp, brewer's yeast, molasses, leafy greens, dried fruit	Iron deficiency anaemia, muscle health, haemoglobin formation
Magnesium	310-320 mg	400-420 mg	750 mg	Dark green veg, legumes, nuts, seeds, whole grains, dried apricots	Cardiovascular health, muscle spasms, kidney stones, nervous system health, bone health

Minerals	RDA: F /day	RDA: M /day	Optimum (Haas)	SOME SOURCES	USES (brief)
Manganese	1.8 mg	2.3 mg	10 mg	Whole grains, nuts, seeds, legumes, leafy greens	Thyroid function, nervous system health, general body health
Molybdenum	45 mcg	45 mcg	200 mcg	Whole grains, legumes, dark leafy greens, cauliflower	General body health, aids in iron and copper function
Phosphorous	700 mg	700 mg	800-1200 mg	Meat, poultry, fish, milk products, eggs, whole grains, nuts, seeds	Bone/teeth health, tissue repair/growth, general body function
Selenium	55 mcg	55 mcg	200 mcg	Whole grains, brewer's yeast, shellfish, fish, organ meats, garlic, onions, dark leafy greens	Cardiovascular health, immune system health, antioxidant
Zinc	8 mg	11 mg	45 mg	Oysters, fish, meat, nuts, poultry, whole grains, pumpkin seeds	Immune health, wound healing, skin health, reproductive health
Potassium	4.7 g	4.7 g	1000 mg	Green leafy veg, potatoes, tomatoes, whole grains, seeds, nuts, citrus, fish, bananas, meat	Cardiovascular & nervous system health; with sodium, regulates acid-base balance and water balance
Sodium	1.3 g	1.3-1.5 g	1.0-4.0 g	Seafood, poultry, beef, sea vegetables, tamari, celery, carrots, beets, artichokes	Water & acid-base balance
Chloride	2.0 g	2.0-2.3 g	2-5 g	Salt, seaweeds, celery, lettuce, olives, tomatoes	With sodium, maintains body acid-base balance & regulates body fluids

Vitamins	<i>BURDOCK root/ 100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	<i>7500 iu</i>	2310 iu	3000 iu	10,000 iu
Vitamin C	3.0-15.1 mg	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E	0.38 mg	15 mg	15 mg	600 iu (441 mg)
Vitamin K	1.6 mcg	90 mcg	120 mcg	200 mcg
Thiamine (B1)	<i>0.01-1.1 mg</i>	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	0.03-0.34 mg	1.1 mg	1.3 mg	50 mg
Niacin (B3)	0.3-1.5 mg	14 mg	16 mg	100 mg
Vitamin B6	0.24 mg	1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate	23 mcg	400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)	0.321 mg	5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline	11.7 mg	425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>41-851 mg</i>	1000-1200 mg	1000 mg	1200 mg
Chromium	<i>20-200 mcg</i>	20-25 mcg	30-35 mcg	500 mcg
Copper	7.7-290 mcg	900mcg	900 mcg	3000 mcg
Silicon	<i>22.5 mg</i>	20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	<i>0.8-14.7 mg</i>	8-18 mg	8 mg	18 mg
Magnesium	<i>38-537 mg</i>	310-320 mg	400-420 mg	750 mg
Manganese	<i>0.232-6.0 mg</i>	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	<i>51-437 mg</i>	700 mg	700 mg	800-1200 mg
Selenium	0.7-14 mcg	55 mcg	55 mcg	200 mcg
Zinc	0.33-3.9 mg	8 mg	11 mg	45 mg
Potassium	<i>308-1680 mg</i>	4.7 g	4.7 g	1000 mg
Sodium	5-152 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

Vitamins	<i>CHICK WEED /100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	<i>7229iu</i>	2310 iu	3000 iu	10,000 iu
Vitamin C	<i>6.9-550 mg</i>	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E		15 mg	15 mg	600 iu (441 mg)
Vitamin K		90 mcg	120 mcg	200 mcg
Thiamine (B1)	0.02-0.21 mg	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	0.13-0.14 mg	1.1 mg	1.3 mg	50 mg
Niacin (B3)	4.7 mg	14 mg	16 mg	100 mg
Vitamin B6		1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate		400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)		5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline		425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>1210 mg</i>	1000-1200mg	1000 mg	1200 mg
Chromium	<i>11-110 mcg</i>	20-25 mcg	30-35 mcg	500 mcg
Copper		900mcg	900 mcg	3000 mcg
Silicon	<i>0.57-15.7 mg</i>	20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	<i>25.3-253 mg</i>	8-18 mg	8 mg	18 mg
Magnesium	<i>529 mg</i>	310-320 mg	400-420 mg	750 mg
Manganese	<i>0.53-15.3 mg</i>	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	<i>448 mg</i>	700 mg	700 mg	800-1200 mg
Selenium	4.3 mcg	55 mcg	55 mcg	200 mcg
Zinc	0.52-5.2 mg	8 mg	11 mg	45 mg
Potassium	<i>840-1840 mg</i>	4.7 g	4.7 g	1000 mg
Sodium	147 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

Vitamins	<i>DANDELION leaf/ 100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	<i>10161-14000 iu</i>	2310 iu	3000 iu	10,000 iu
Vitamin C	<i>35-243 mg</i>	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E	3.44 mg	15 mg	15 mg	600 iu (441 mg)
Vitamin K	<i>778.4 mcg</i>	90 mcg	120 mcg	200 mcg
Thiamine (B1)	<i>0.19-1.3 mg</i>	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	<i>0.1-1.8 mg</i>	1.1 mg	1.3 mg	50 mg
Niacin (B3)	0.806 mg	14 mg	16 mg	100 mg
Vitamin B6	0.251 mg	1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate	27 mcg	400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)	0.084 mg	5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline	35.3 mg	425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>187-1300 mg</i>	1000-1200mg	1000 mg	1200 mg
Chromium	<i>110-500 mcg</i>	20-25 mcg	30-35 mcg	500 mcg
Copper	17.1-120 mcg	900mcg	900 mcg	3000 mcg
Silicon		20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	<i>3.1-500 mg</i>	8-18 mg	8 mg	18 mg
Magnesium	<i>36-250 mg</i>	310-320 mg	400-420mg	750 mg
Manganese	<i>0.342-13 mg</i>	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	<i>59.1-458.3 mg</i>	700 mg	700 mg	800-1200 mg
Selenium	0.5 mcg	55 mcg	55 mcg	200 mcg
Zinc	<i>0.41-6 mg</i>	8 mg	11 mg	45 mg
Potassium	<i>397-2756.9 mg</i>	4.7 g	4.7 g	1000 mg
Sodium	76-527.8 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

ROASTED DANDELION ROOT CHAI

HOW TO ROAST: harvest 2 year old roots in Autumn and clean thoroughly. Preheat oven to 250°F. Chop roots into ½ inch pieces and place on an ungreased pan in the oven for 2 – 4 hours; turn the roots frequently until they are chocolate brown in colour. Store in an air-tight container and grind just before use.

CHAI:

- 1 cup roasted and lightly ground Dandelion root
- 2 T dried Ginger root (small pieces)
- 10 Cinnamon sticks, crushed
- 1 T whole Cloves
- ½ cup dried Fennel seeds
- 2 T dried, decorticated Cardamom seeds

Add 1 t. herb mix to each cup of water. Bring to a boil, simmer for 5 minutes then let steep for 10 minutes. Add honey and milk to taste.

VITAMINS	BURDOCK root/ 100g	DANDELION root/100g	POTATO (raw)/100g	CARROT (raw)/100g
Vitamin A	<i>7500 iu</i>	<i>14000 iu</i>	8 iu	<i>16706 iu</i>
Vitamin C	3.0-15.1 mg	<i>37.6 mg</i>	19.7 mg	5.9 mg
Vitamin D				
Vitamin E	0.38 mg		0.01 mg	<i>0.66 mg</i>
Vitamin K	1.6 mcg		1.6 mcg	<i>13.2 mcg</i>
Thiamine (B1)	0.01- <i>1.1 mg</i>	Trace	0.071 mg	0.066 mg
Riboflavin (B2)	0.03-0.34 mg	0.21 mg	0.034 mg	0.058 mg
Niacin (B3)	0.3-1.5 mg	<i>3.31 mg</i>	1.066 mg	0.983 mg
Vitamin B6	0.24 mg		0.203 mg	0.138 mg
Folate	23 mcg		18 mcg	19 mcg
Vitamin B12				
Pantothenic Acid (B5)	0.321 mg		0.281 mg	0.273 mg
Biotin				
Choline	11.7 mg		11 mg	8.8 mg
MINERALS				
Calcium	<i>41-851 mg</i>	<i>614 mg</i>	9 mg	33 mg
Chromium	<i>20-200 mcg</i>	<i>9-90 mcg</i>		
Copper	<i>7.7-290 mcg</i>		11.6 mcg	4.5 mcg
Silicon	<i>22.5 mg</i>	0.47-4.7 mg		
Iodine				
Iron	<i>0.8-14.7 mg</i>	<i>96 mg</i>	0.52 mg	0.30 mg
Magnesium	<i>38-537 mg</i>	157 mg	21 mg	12 mg
Manganese	<i>0.232-6.0 mg</i>	<i>6.8 mg</i>	0.145 mg	0.143 mg
Molybdenum				
Phosphorous	<i>51-437 mg</i>	<i>310-362 mg</i>	62 mg	35 mg
Selenium	<i>0.7-14 mcg</i>	<i>0.5-8.6 mcg</i>	0.3 mcg	0.1 mcg
Zinc	0.33-3.9 mg	<i>0.13-6 mg</i>	0.29 mg	0.24 mg
Potassium	<i>308-1680 mg</i>	<i>1200-7500 mg</i>	407 mg	320 mg
Sodium	5-152 mg	113 mg	16 mg	69 mg
Chloride				

Vitamins	<i>PLANTAIN seed/ 100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	Trace	2310 iu	3000 iu	10,000 iu
Vitamin C	Trace	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E		15 mg	15 mg	600 iu (441 mg)
Vitamin K		90 mcg	120 mcg	200 mcg
Thiamine (B1)	Trace	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	Trace	1.1 mg	1.3 mg	50 mg
Niacin (B3)	6.5 mg	14 mg	16 mg	100 mg
Vitamin B6		1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate		400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)		5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline		425 mg	550 mg	1000 mg
Minerals				
Calcium	2340 mg	1000-1200mg	1000 mg	1200 mg
Chromium	12 mcg	20-25 mcg	30-35 mcg	500 mcg
Copper		900mcg	900 mcg	3000 mcg
Silicon	0.82 mg	20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	1.8 mg	8-18 mg	8 mg	18 mg
Magnesium	106 mg	310-320 mg	400-420 mg	750 mg
Manganese	0.16 mg	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	60 mg	700 mg	700 mg	800-1200 mg
Selenium	10 mcg	55 mcg	55 mcg	200 mcg
Zinc	0.25 mg	8 mg	11 mg	45 mg
Potassium	800 mg	4.7 g	4.7 g	1000 mg
Sodium	60 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

Vitamins	PURSLANE / 100g	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	<i>1320 iu</i>	2310 iu	3000 iu	10,000 iu
Vitamin C	<i>10.5-700 mg</i>	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E		15 mg	15 mg	600 iu (441 mg)
Vitamin K		90 mcg	120 mcg	200 mcg
Thiamine (B1)	<i>0.047-1.0 mg</i>	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	<i>0.112-2.3 mg</i>	1.1 mg	1.3 mg	50 mg
Niacin (B3)	<i>0.480-7.9 mg</i>	14 mg	16 mg	100 mg
Vitamin B6	0.073 mg	1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate	12 mcg	400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)	0.036 mg	5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline	12.8 mg	425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>65-2080 mg</i>	1000-1200mg	1000 mg	1200 mg
Chromium		20-25 mcg	30-35 mcg	500 mcg
Copper	11.3-190 mcg	900mcg	900 mcg	3000 mcg
Silicon		20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	<i>0.8-46.7- mg</i>	8-18 mg	8 mg	18 mg
Magnesium	<i>67-1870 mg</i>	310-320 mg	400-420 mg	750 mg
Manganese	0.303 mg	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	<i>32-774 mg</i>	700 mg	700 mg	800-1200 mg
Selenium	0.9 mcg	55 mcg	55 mcg	200 mcg
Zinc	<i>0.17-6.0 mg</i>	8 mg	11 mg	45 mg
Potassium	<i>488-8120 mg</i>	4.7 g	4.7 g	1000 mg
Sodium	<i>44-740 mg</i>	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

VITAMINS	CHICK WEED /100g	DANDELION leaf/100g	PURSLANE /100g	LETTUCE /100g	SPINACH /100g
Vitamin A	7229 iu	10161-14000 iu	1320 iu	502 iu	9377 iu
Vitamin C	6.9-550 mg	35-243 mg	10.5-700 mg	2.8 mg	28.1 mg
Vitamin D					
Vitamin E		3.44 mg		0.18 mg	2.03 mg
Vitamin K		778.4 mcg		24.1 mcg	482.9mcg
Thiamine (B1)	0.02-0.21 mg	0.19-1.3 mg	0.047-1.0 mg	0.041 mg	0.078 mg
Riboflavin (B2)	0.13-0.14 mg	0.1-1.8 mg	0.11-2.3mg	0.025 mg	0.189 mg
Niacin (B3)	4.7 mg	0.806 mg	0.48-7.9mg	0.123 mg	0.724 mg
Vitamin B6		0.251 mg	0.073 mg	0.042 mg	0.195 mg
Folate		27 mcg	12 mcg	29 mcg	194 mcg
Vitamin B12					
Pantothenic Acid (B5)		0.084 mg	0.036 mg	0.091 mg	0.065 mg
Biotin					
Choline		35.3 mg	12.8 mg	6.7 mg	19.3 mg
MINERALS					
Calcium	1210 mg	187-1300 mg	65-2080mg	18 mg	99 mg
Chromium	11-110mcg	110-500mcg			
Copper		17.1-120 mcg	11.3-190 mcg	2.5 mcg	13 mcg
Silicon	0.57-15.7mg				
Iodine					
Iron	25.3-253 mg	3.1-500 mg	0.8-46.7 mg	0.41 mg	2.71 mg
Magnesium	529 mg	36-250 mg	67-1870mg	7 mg	79 mg
Manganese	0.53-15.3mg	0.342-13 mg	0.303 mg	0.125 mg	0.897 mg
Molybdenum					
Phosphorous	448 mg	59-458.3 mg	32-774 mg	20 mg	49 mg
Selenium	0.043 mcg	0.5 mcg	0.9 mcg	0.1 mcg	1.0 mcg
Zinc	0.52-5.2 mg	0.41-6 mg	0.17-6 mg	0.15 mg	0.53 mg
Potassium	840-1840 mg	397-2756.9 mg	488-8120 mg	141 mg	558 mg
Sodium	147 mg	76-527.8 mg	44-740 mg	10 mg	79 mg
Chloride					

Vitamins	<i>RED CLOVER flower/ 100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	<i>2008 iu</i>	2310 iu	3000 iu	10,000 iu
Vitamin C	<i>296.6 mg</i>	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E		15 mg	15 mg	600 iu (441 iu)
Vitamin K		90 mcg	120 mcg	200 mcg
Thiamine (B1)	0.42 mg	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	0.33 mg	1.1 mg	1.3 mg	50 mg
Niacin (B3)	<i>12.5 mg</i>	14 mg	16 mg	100 mg
Vitamin B6		1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate		400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)		5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline		425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>1310 mg</i>	1000-1200 mg	1000 mg	1200 mg
Chromium	<i>32-320 mcg</i>	20-25 mcg	30-35 mcg	500 mcg
Copper		900mcg	900 mcg	3000 mcg
Silicon	0.12-1.2 mg	20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	0.035 mg	8-18 mg	8 mg	18 mg
Magnesium	<i>349 mg</i>	310-320 mg	400-420 mg	750 mg
Manganese	<i>0.59-5.9 mg</i>	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	<i>322 mg</i>	700 mg	700 mg	800-1200 mg
Selenium	<i>8-77 mcg</i>	55 mcg	55 mcg	200 mcg
Zinc	Trace	8 mg	11 mg	45 mg
Potassium	<i>2000 mg</i>	4.7 g	4.7 g	1000 mg
Sodium	16 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

Vitamins	<i>SELFHEAL Flower/ 100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A		2310 iu	3000 iu	10,000 iu
Vitamin C		75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E		15 mg	15 mg	600 iu (441 mg)
Vitamin K		90 mcg	120 mcg	200 mcg
Thiamine (B1)		1.1 mg	1.2 mg	50 mg
Riboflavin (B2)		1.1 mg	1.3 mg	50 mg
Niacin (B3)		14 mg	16 mg	100 mg
Vitamin B6		1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate		400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)		5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline		425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>1450 mg</i>	1000-1200mg	1000 mg	1200 mg
Chromium		20-25 mcg	30-35 mcg	500 mcg
Copper	80 mcg	900 mcg	900 mcg	3000 mcg
Silicon		20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	<i>64 mg</i>	8-18 mg	8 mg	18 mg
Magnesium	<i>456 mg</i>	310-320 mg	400-420 mg	750 mg
Manganese	<i>9.6 mg</i>	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous		700 mg	700 mg	800-1200 mg
Selenium		55 mcg	55 mcg	200 mcg
Zinc	2.5 mg	8 mg	11 mg	45 mg
Potassium	1190 mg	4.7 g	4.7 g	1000 mg
Sodium	15.5 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

Vitamins	<i>NETTLE leaf/ 100g</i>	RDA: F /day	RDA: M /day	Optimum (Haas)
Vitamin A	<i>15700 iu</i>	2310 iu	3000 iu	10,000 iu
Vitamin C	<i>83 mg</i>	75 mg	90 mg	3000 mg
Vitamin D		600 iu	600 iu	600 iu
Vitamin E		15 mg	15 mg	600 iu (441 mg)
Vitamin K		90 mcg	120 mcg	200 mcg
Thiamine (B1)	0.08-0.54 mg	1.1 mg	1.2 mg	50 mg
Riboflavin (B2)	<i>0.4-1.5 mg</i>	1.1 mg	1.3 mg	50 mg
Niacin (B3)	5.20 mg	14 mg	16 mg	100 mg
Vitamin B6		1.3-1.5 mg	1.3-1.7 mg	100 mg
Folate		400 mcg	400 mcg	1000 mcg
Vitamin B12		2.4 mcg	2.4 mcg	500 mcg
Pantothenic Acid (B5)		5 mg	5 mg	100 mg
Biotin		30 mcg	30 mcg	500 mcg
Choline		425 mg	550 mg	1000 mg
Minerals				
Calcium	<i>594-3300 mg</i>	1000-1200 mg	1000 mg	1200 mg
Chromium	<i>1.8-100 mcg</i>	20-25 mcg	30-35 mcg	500 mcg
Copper	<i>20-150 mcg</i>	900mcg	900 mcg	3000 mcg
Silicon	<i>1.03-650 mg</i>	20 mg	20 mg	50 mg
Iodine		150 mcg	150 mcg	200 mcg
Iron	<i>4.2-41.8 mg</i>	8-18 mg	8 mg	18 mg
Magnesium	<i>86-860 mg</i>	310-320 mg	400-420 mg	750 mg
Manganese	<i>0.78-17.2 mg</i>	1.8 mg	2.3 mg	10 mg
Molybdenum		45 mcg	45 mcg	200 mcg
Phosphorous	<i>92-680 mg</i>	700 mg	700 mg	800-1200 mg
Selenium	<i>22 mcg</i>	55 mcg	55 mcg	200 mcg
Zinc	<i>0.47-9.5 mg</i>	8 mg	11 mg	45 mg
Potassium	<i>670-3722 mg</i>	4.7 g	4.7 g	1000 mg
Sodium	4.9-140 mg	1.3 g	1.3-1.5 g	1.0-4.0 g
Chloride		2.0 g	2.0-2.3 g	2-5 g

VITAMINS	<i>NETTLE leaf/ 100g</i>	<i>KALE (raw)/100g</i>	<i>SWISS CHARD (raw)/100g</i>
Vitamin A	<i>15700 iu</i>	<i>15376 iu</i>	6116 iu
Vitamin C	<i>83 mg</i>	<i>120 mg</i>	30 mg
Vitamin D			
Vitamin E			1.89 mg
Vitamin K		817 mcg	830 mcg
Thiamine (B1)	<i>0.08-0.54 mg</i>	0.11 mg	0.04 mg
Riboflavin (B2)	<i>0.4-1.5 mg</i>	0.13 mg	0.09 mg
Niacin (B3)	<i>5.2 mg</i>	1 mg	0.40 mg
Vitamin B6			0.099 mg
Folate		29 mcg	14 mcg
Vitamin B12			
Pantothenic Acid (B5)		0.091 mg	0.172 mg
Biotin			
Choline			18 mg
MINERALS			
Calcium	<i>594-3300 mg</i>	135 mg	51 mg
Chromium	1.8-100 mcg		
Copper	<i>20-150 mcg</i>	29 mcg	17.9 mcg
Silicon	1.03-650 mg		
Iodine			
Iron	<i>4.2-41.8 mg</i>	1.7 mg	1.80 mg
Magnesium	<i>86-860 mg</i>	34 mg	81 mg
Manganese	<i>0.78-17.2 mg</i>	0.774 mg	0.366 mg
Molybdenum			
Phosphorous	<i>92-680 mg</i>	56 mg	46 mg
Selenium	<i>22 mcg</i>	0.9 mcg	0.9 mcg
Zinc	<i>0.47-9.5 mg</i>	0.44 mg	0.36 mg
Potassium	<i>670-3722 mg</i>	447 mg	379 mg
Sodium	4.9-140 mg	43 mg	213 mg
Chloride			

PRESERVING HERBS:

- **LEAVES:** harvest in Spring and do not wash before drying so as to avoid mould. Collect bunches of 8-10 stems of herbs and hang in a well-ventilated, warm, dark room until they are completely dry. Remove leaves from stems and store in a ziplock bag, being sure to label and date the bag.
- **ROOTS, BERRIES, BARK:** harvest in Autumn. Place in a single layer on a mesh screen in a well-ventilated, dark, warm room ensuring the air circulates freely around the herb. Leave until completely dry and store in a ziplock bag; label and date the bag before storage.
- **FLOWERS:** harvest in Spring and Summer. Dry on screens as listed for roots section above.
- **INFUSED OILS:** wilt the herb for 24 hours to reduce water content. Fill a glass jar with the herb and cover with cold pressed extra virgin olive oil; seal with jar lid. Set in a warm place for one month. Strain through cheesecloth and then through an unbleached coffee filter. Be sure no sludge remains at the bottom of the jar as your infused oil may spoil. Label and date jar and store in a cool, dark place.
- **FRESH HERBS** may also be chopped and frozen with water into ice cube trays.

USING HERBS:

- **INFUSED TEAS:** (for leaves, flowers): 1 teaspoon dried herb or 2 teaspoons fresh (chopped) to 1 cup of boiling water. Let steep (covered) for 10 minutes, strain.
- **DECOCTED TEAS:** (for roots, bark, seeds): 1 teaspoon dried herb to 1 cup water. Bring to a boil and simmer (covered) for 15 minutes, strain.
- **SALVES:** Take 1 cup of herb-infused oil with 30g of chopped beeswax and place in the top half of a double boiler, the bottom half of the double boiler already half filled with water. Slowly bring water to a boil, then simmer until beeswax has melted. Pour into clean 25 or 50g jars for use. Let cool, then label jars and store in a cool dark place. Makes 10 – 25g or 5 – 50g jars.

REFERENCES (Books):

- Bartram, Thomas. Encyclopedia of Herbal Medicine, 1st Edition. Domet: Grace Publishers, 1995.
- Brill, Steve. Identifying and Harvesting Edible and Medicinal Plants in Wild and Not So Wild Places. New York: Hearst Books, 1994
- Brill, Steve. The Wild Vegetarian Cookbook. Boston: The Harvard Common Press, 2002.
- Chevallier, Andrew. The Encyclopedia of Medicinal Plants. Montreal: The Reader's Digest Association (Canada), 1996.
- Dunne, Lanon J. Nutrition Almanac, 3rd Edition. USA: McGraw-Hill Publishing Company, 1990.
- Elias, Thomas S. and Dykeman, Peter A. Edible Wild Plants; A North American Field Guide. New York: Sterling Publishing Company Inc., 1982.
- Evans, William Charles. Trease and Evans' Pharmacognacy, 14th Edition. London: W.B. Saunders Company Ltd., 1996.
- Foster, Steven and Duke, James A. A Field Guide to Medicinal Plants: Eastern and Central North America. Boston: Houghton Mifflin Company, 1990.
- Gail, Peter. The Dandelion Celebration. Cleveland: Goosefoot Acres Press, 1990.
- Grieve, Mrs. M. A Modern Herbal. Surrey: Merchant Book Company Ltd., 1973.
- Haas, Elson M. M.D. Staying Healthy with Nutrition. Berkeley: celestial Arts Publishing, 1992.
- Hoffman, David. Medical Herbalism. Vermont: Healing Arts Press, 2003.
- Irving, Miles. The Forager Handbook. UK: Ebury Press, 2009.
- Kallas, John. Edible Wild Plants; Wild Foods from Dirt to Plate. Utah: Gibbs Smith, 2010.
- Pedersen, Mark. Nutritional Herbology. Indiana: Wendell W. Whitman Company, 1998.
- Pitchford. Paul. Healing with Whole Foods. Berkeley: North Atlantic Books, 1993.
- Tilford, Gregory L. From Earth to Herbalist. Montana: Mountain Press Publishing Company, 1998.

REFERENCES (articles):

- Davis, Brenda C. and Kris-Etherton, Penny M. Achieving Optimal Fatty Acid Status in Vegetarians: Current Knowledge and Practical Implications. Am J Clin Nutr 2003;78 (American Society for Clinical Nutrition)
- Rasool, Rafia et al. Phytochemical Screening of *Prunella vulgaris* L. – an Important Medicinal Plant of Kashmir. Pak. J. Pharm. Sci., Vol23, No. 4, October 2010, pp. 399-402. (Pakistan Journal of Pharmaceutical Sciences)
- Simopoulos, Artemis P. Omega-3 Fatty Acids and Antioxidants in Edible Wild Plants. Biol Res 37: 263-277, 2004. (Biological Research)

REFERENCES (internet):

- <http://www.ars-grin.gov/duke/>
- http://www.ars.usda.gov/main/site_main.htm?modecode=12-35-45-00
- www.eatweeds.co.uk
- www.foraging.com (resource lists)
- www.kerryhackett.ca
- <http://www.nal.usda.gov/fnic/foodcomp/search/>
- www.natureskills.com/edible_wild_plants.html
- <http://ods.od.nih.gov/factsheets/vitamina/>
- <http://www.pfaf.org>
- <http://plants.usda.gov/java/>
- www.richters.com
- www.sacredearth.com (see: Foraging Wild Edibles)
- www.wildfoodkitchen.com (still under construction)
- www.wildmanwildfood.com/pages/recipes.html
- www.wildmanstevebrill.com (see Wild Plant recipes)