

2011 *PLANETARY HEALTH/AMBER WAVES*

NUTRIENT GUIDE



**Food Composition Tables
for More Than 400 Natural
and Conventional Foods**

*with a Special Update on America's
Vanishing Nutrients*

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Introduction

The following tables list the nutritional composition of foods from around the world. They are based primarily on the latest data of the U.S. Department of Agriculture, Japan Ministry of Education, Culture, Sports, Science, and Technology, the National Food Institute of Denmark, Food Composition Tables for Foods in the Middle East, and other national and international sources, including data from trade associations and producers. Most of the material from the U.S. government and other agencies is now posted on the Internet and no longer available in printed form. (See below for web resources.)

Foods are listed in alphabetic order within the following food groups:

1. Whole Cereal Grains and Grain Products
2. Beans and Bean Products
3. Vegetables
4. Sea Vegetables
5. Starches
6. Sweeteners
7. Fat and Oils
8. Seasonings and Condiments
9. Fruit
10. Nuts
11. Seeds
12. Fish
13. Seafood
14. Beverages
15. Meat
16. Poultry
17. Dairy

Note that soy products are all listed together under Soybeans in the Beans group. Similarly, flour, flakes, and other forms of a food are often listed together. Unless otherwise indicated, all food values are based on 100 grams (about 3 1/2 ounces), edible portion, in

raw (i.e., uncooked) form. The variables included are: water or moisture content, calories, protein, lipid or fat content, carbohydrate, fiber, ash, calcium, iron, phosphorus, sodium, potassium, vitamin A, Vitamin B1 (thiamine), Vitamin B2 (riboflavin), Vitamin B3 (niacin), and Vitamin C. In the tables, please note that dashes denote information is unavailable. There are scores of other nutrients and components, such as individual amino acids, that are available in the web-based databases online.

The RDIs (Recommended Daily Intakes) for persons over 4 years old eating an average diet of 2000 calories per day are as follows:

Recommended Daily Intakes	
Calories	2000 (standard average)
Protein	50 grams
Lipids (fat)	65 grams
Carbohydrate	300 grams
Fiber	25 grams
Calcium	1000 mg
Iron	18 mg
Phosphorus	1000 mg
Sodium	2300 mg
Potassium	4700 mg
Vitamin A	3000 IU
Thiamin (Vitamin B1)	1.5 mg
Riboflavin (Vitamin B2)	1.7 mg
Niacin (Vitamin B3)	20 mg
Vitamin C	60 mg
Source: <i>U.S. Food and Drug Administration (FDA), 2010</i>	

In using these tables, keep in mind that there is a range of nutrients for any given food. Seed quality, climate, environment, planting and harvest season, weather, cultivation practices, storage, transportation, and other factors may affect the outcome. For example, an organic apple from traditional, open-pollinated seed grown in Vermont may be significantly different than one chemically grown from hybrid seed in Washington State. It will differ from one that originates in New Hampshire or Massachusetts, or one grown on a

neighboring farm, or even one grown on the same farm in a different season or year. The tables are based on averages from different regions, but practically speaking, especially for plant quality foods, they are often based on only a handful of specimens and, in some cases, even a single one.

Also keep in mind that national and international agencies do not distinguish between organic and conventionally grown food. Small independent studies suggest that organic food may contain up to 50 percent more nutrients than chemically grown food.

Further, it should be noted that the quality of modern food is rapidly declining as a result of using hybrid seeds (including both organic and nonorganic), the loss of topsoil, air and water pollution, global warming, and other forms of climate change. (See section on “Nutrient Loss” below.)

Nor do the tables take into account the Ki or life energy of food. This is a principal consideration in traditional and macrobiotic cuisine. Measuring the vitality of food is a highly subjective art and not one that lends itself to objective analysis. Cooking can also affect the nutrients we consume, and the overall balance of what we eat affects what we are able to absorb and utilize.

The limits of modern nutrition should also be kept in mind. Nutritional science is reductionist when it reduces everything to the interaction of macronutrients, vitamins and minerals, amino acids, and other material components. Like life itself, food is more than the sum of its parts. For this reason, the macrobiotic dietary approach does not involve the measurement of calories or nutrients when planning menus, preparing individual dishes, or going on a weight loss or healing diet.

Still, given these limitations, the Nutrient Guide provides a snapshot of hundreds of foods relative to each other. They are very useful for studying the qualities and characteristics of foods and how they compare with one another. There are many fascinating relationships to be discovered within these pages. Try to correlate the information in the charts with your own experience. You may be surprised to find that certain foods are higher in some nutrients and lower in others than you expected. And some of the healthiest foods are not especially high or low in any area but fall in the middle or more balanced range.

One particularly important category is Ash, which is the mineral residue when organic matter is burned. In the macrobiotic diet, mineral- and fiber-rich foods are extremely important. In the modern food pattern, they are typically low or as in the case of refined sugar nonexistent. Except for sodium chloride (table salt), many refined, polished, and other highly processed foods are very low in ash content. Ash—or the mineral content—of food may be a better barometer of a food’s overall nutritional value and potential vitality than calories, protein, or the ratio of sodium to potassium.

Nutrient Loss

Do you intuitively feel that food today is losing its energy, vitality, and sweetness? Apples, broccoli, carrots, and other common garden produce just don't taste as fresh and delicious as they once did. Depending on the item, their natural sweetness, tartness, crunchiness, and other characteristics may have worsened.

The latest analysis of the official U.S. Food Composition tables conducted by Planetary Health, Inc., the parent organization of Amberwaves, shows that the vitamin and mineral content of ordinary vegetables and fruits in the national food supply, continues to decline. In earlier studies in 1998, I reported that vitamin A, vitamin E, calcium, iron, and other nutrients in 12 randomly selected ordinary garden vegetables had declined on average 25 to 50% since 1975.¹

From this sampling, I tentatively concluded that vegetables were indeed losing their vitamin and mineral content. Whether this was a real trend, and uniform across the entire spectrum of items in the American food supply, I could not yet say. The apparent change could be methodological. For example, the differences in the figures published by the USDA in 1975 and those on its Internet site in the late 1990s could be the result of limited sampling, different classification methods, improved testing procedures, or other technical considerations.

To find out, I contacted the USDA Nutrient Data Laboratory in Beltsville, Maryland and talked with scientist David Haytowitz. He turned out to be not only in charge of collecting vegetable data, but also he was the site's web master and was familiar with the entire database of 5900 foods. I asked him whether he was aware that the nutrients in the American food supply appeared to be declining. He said this was the first time that he had heard of it.

Surprised, I asked whether the USDA was concerned with the quality of the food that Americans eat every day and taking steps to ensure that grains, vegetables, fruits, and other crops did not lose their nutritional value and vitality. He replied that the agency does not analyze data or monitor trends. It simply collects information and makes it available to researchers (such as myself) to draw their own conclusions! I felt like Charles Dickens, the author of *Hard Times*, *Bleak House*, and other novels, chronicling the myopia of officialdom in Victorian England to the increased poverty and squalor that accompanied the early industrial revolution.

On the subject of testing, I inquired whether the decline might be the result of new testing procedures over the last 25 years. We had a lengthy conversation and Dr. Haytowitz described how researchers currently used colorimetry, atomic absorption, inductive coupled plasma (ICP), and other sophisticated techniques to measure food composition. Would new methods such as these, I asked, result in such large changes or only small, precise ones? Dr. Haytowitz said that the new procedures probably would result in changes to the next several decimal points, but not result in alterations of this magnitude—25 to 50%.

Could the nutrient loss then be the result of environmental influences, especially the increased use of pesticides and chemicals on America's farms? On the contrary, he replied, farmers in the 1950s and 1960s probably used more chemical fertilizers, soil supplements, and other additives than they do now, artificially elevating nutrient levels compared to more recent samples from the 1980s and 1990s.

The food composition tables do not distinguish between food grown conventionally with chemical pesticides and fertilizers and organically grown food. I asked whether the USDA had ever tested the nutrients in organic food and compared them with chemically grown crops. Dr. Haytowitz replied that such experiments had never been conducted because the agency assumed that the nutrient content in organic and conventionally grown food is substantially equivalent. I asked on the basis of what scientific or nutritional studies had the U.S. government made this assumption. He had no answer and agreed that in the future such testing would make an interesting comparative study.

Our most recent analysis, described in this report, based on the U.S. government's current online nutritional database, shows that the nutrient content of common foods has continued to erode over the last decade.

What is the cause of this loss? Soil erosion, air and water pollution, a decline in seed quality, GMO contamination, global warming and other types of climate change immediately come to mind. There is a strong suspicion that the spread of fast food, microwave and electric cooking, food irradiation, the largely corporate takeover of organic farming, and other new agricultural and food processing and preparation methods and trends are fundamentally altering the composition of the foods we eat.

Another factor is aging—not of the food but of the observer! Food may taste differently today because we look back and romanticize the way things were in our youth. All of these factors may be contributing to the decline in personal and planetary health.

The Previous Studies

The original study of 12 garden vegetables selected at random from the U.S. Food Composition Tables sparked a national controversy. Since its publication in 1998, newspapers, magazines, and web sites across the country have picked up on the research. *Organic Gardening*, the nation's major organic publication, wrote an open letter to the U.S. Secretary of Agriculture demanding to know what his agency was doing to protect the American food supply. *Gardening Design*, *The Cleveland Plain Dealer*, *The National Vegetable Growers' Magazine*, *The London Times*, and other publications have also published articles about the

findings. The U.S. Secretary of Agriculture subsequently confirmed the loss of nutrients reported in my original study, but questioned whether it was the result of the environmental crisis, as generally concluded by supporters of organic farming and environmentalists. Rather, the USDA contended that natural environmental influences, as well as improved testing methods, may be responsible for the discrepancies. A subsequent study I did in 2001 of 12 common fruits showed a similar decline.

In 2004, the *Journal of the American College of Nutrition* in 2004 confirmed that there have been statistically reliable declines in six major nutrients (protein, calcium, phosphorus, iron, riboflavin, and ascorbic acid) in forty-three garden vegetables.² Comparing essentially the same data that was used in my initial study from the USDA, the researchers charted lower levels of key nutrients over the past half century but said they were uncertain as to the causes. In their view, the primary reason for the difference is the introduction of new strains that produce higher yields, growth rates, and pest resistance, but select for lower levels of nutrients. Unpredictable genetic variability among seeds was also cited as a factor, as well as substantially higher moisture content in produce today. Factoring this into the equation, they asserted, the actual percentage of vitamins and minerals in the dry matter of most crops remains the same. (The moisture content of the 24 vegetables and fruits in my study increased slightly in 17 instances—about 1 percent on average—declined in 6 cases, and remained the same in 1 case, and does not appear to have made any significant difference.) In brief, the researchers, associated with academic departments largely funded by agribusiness, took issue with my conclusion that there was “an alarming decline in food quality” and found no evidence that it could be due to a decrease in soil quality, water quality, air quality, or other environmental factors.

The Latest Nutritional Data

This winter, in updating the food classification tables for a new edition of *The Book of Macrobiotics* co-authored with Michio Kushi (Square One, 2011), I recalculated the nutritional values for the same 12 vegetables and 12 fruits. The results and net changes are listed in the following tables, along with earlier measurements from 1975 and 1997 or 2001 respectively.

1. Broccoli—Nutritional Changes 1975-2010
(per 100 grams raw edible portion)

	1975	1997	2010	Change 1975-1997	Change 1997-2010	Change 1975-2010
Calcium	103 mg	48 mg	47 mg	Down 53.4%	Down 2.1%	Down 54.4%
Iron	1.1 mg	0.88 mg	0.73 mg	Down 20%	Down 17.0%	Down 33.6%
Vitamin A	2500 IU	1542 IU	623 IU	Down 38.3%	Down 59.6%	Down 75.1%
Vitamin C	113 mg	93.2 mg	89.2 mg	Down 17.5%	Down 4.3%	Down 21.1%
Thiamin	0.10 mg	0.07 mg	0.07 mg	Down 35%	No change	Down 35%
Riboflavin	0.23 mg	0.12 mg	0.12 mg	Down 47.8%	No change	Down 47.8%
Niacin	0.9 mg	0.64 mg	0.64 mg	Down 28.9%	No change	Down 28.9%

Source: *Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)*

2. Change in Calcium Levels in Vegetables 1975-2010
(mg/100 grams raw edible portion)

	1975	1997	2010	Change 1975-1997	Change 1997-2010	Change 1975-2010
Broccoli	103 mg	48 mg	47 mg	Down 53.4%	Down 2.1%	Down 54.4%
Cabbage	49 mg	47 mg	40 mg	Down 4.1%	Down 14.9%	Down 18.4%
Carrots	37 mg	27 mg	33 mg	Down 27%	Up 22.0%	Down 10.8%
Cauliflower	25 mg	22 mg	22 mg	Down 12%	No change	Down 12%
Collard greens	203 mg	145 mg	145 mg	Down 28.6%	No change	Down 28.6%
Daikon	35 mg	27 mg	27 mg	Down 22.9%	No change	Down 22.9%
Kale	179 mg	135 mg	135 mg	Down 24.6%	No change	Down 24.6%
Mustard greens	83 mg	103 mg	103 mg	Down 43.7%	No change	Down 43.7%
Onions	27 mg	20 mg	23 mg	Down 25.9%	No change	Down 25.9%
Parsley	203 mg	138 mg	138 mg	Down 32%	No change	Down 32%
Turnip greens	246 mg	190 mg	190 mg	Down 22.8%	No change	Down 22.8%
Watercress	151 mg	120 mg	120 mg	Down 20.5%	No change	Down 20.5%
Net Change				Down 26.5%	Up 0.1%	Down 26.4%

Source: *Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)*

3. Change in Iron Levels in Vegetables 1975-2010
(per 100 grams raw edible portion)

	1975	1997	2010	Change 1975-1997	Change 1997-2010	Change 1975-2010
Broccoli	1.1 mg	0.88 mg	0.73 mg	Down 20%	Down 17%	Down 33.6%
Cabbage	0.4 mg	0.59 mg	0.47 mg	Up 47.5%	Down 20.3%	Up 17.5%
Carrots	0.7 mg	0.50 mg	0.30 mg	Down 28.6%	Down 40%	Down 42.9%
Cauliflower	1.1 mg	0.44 mg	0.42 mg	Down 60%	No change	Down 61.8%
Collard greens	1.0 mg	0.19 mg	0.19 mg	Down 81%	Down 4.5%	Down 81%
Daikon	0.6 mg	0.40 mg	0.40 mg	Down 33.3%	No change	Down 33.3%
Kale	2.2 mg	1.70 mg	1.70 mg	Down 22.7%	No change	Down 22.7%
Mustard greens	3.0 mg	1.46 mg	1.46 mg	Down 51.3%	No change	Down 51.3%
Onions	0.5 mg	0.22 mg	0.21 mg	Down 56%	Down 1.5%	Down 58%
Parsley	6.2 mg	6.20 mg	6.20 mg	No change	No change	No change
Turnip greens	1.8 mg	1.10 mg	1.10 mg	Down 38.9%	No change	Down 38.9%
Watercress	1.7 mg	0.20 mg	0.20 mg	Down 88.2%	No change	Down 88.2%
Net Change				Down 36.1%	Down 8.1%	Down 44.2%

Source: Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)

4. Change in Vitamin A Levels in Vegetables 1975-2010
(per 100 grams raw edible portion)

	1975	1997	2010	Change 1975-1997	Change 1997-2010	Change 1975-2010
Broccoli	2500 IU	1543 IU	623 IU	Down 38.3%	Down 59.6%	Down 75.1%
Cabbage	130 IU	133 IU	98 IU	Up 2.3%	Down 26.3%	Down 24.6%
Carrots	11,000 IU	28,129 IU	16,706 IU	Up 155.7%	Down 59.4%	Up 51.9%
Cauliflower	60 IU	19 IU	0	Down 68.3%	Down 100%	Down 100%
Collard greens	6500 IU	3824 IU	6668 IU	Down 41.2%	Up 74.4%	Up 2.6%

Daikon	10 IU	0	0	Down 100%	No change	Down 100%
Kale	8900 IU	8900 IU	15376 IU	No change	Up 72.8%	Up 72.8%
Mustard greens	7000 IU	5300 IU	10500 IU	Down 24.3%	Up 98%	Up 50%
Onions	40 IU	0	2 IU	Down 100%	Down 95%	Down 95%
Parsley	8500 IU	5200 IU	8425 IU	Down 38.8%	Up 62%	Down 8.8%
Turnip greens	7600 IU	7600 IU	11587 IU	No change	Up 52.5%	Up 52.5%
Watercress	4900 IU	4700 IU	3191 IU	Down 4.1%	Down 32.1%	Down 34.5%
Net Change				Down 21.4%	Up 4%	Down 17.4%
Source: <i>Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)</i>						

5. Change in Vitamin C Levels in Vegetables 1975-2010 (per 100 grams raw edible portion)						
	1975	1997	2010	Change 1975-1997	Change 1997-2010	Change 1975-2010
Broccoli	113 mg	93.2 mg	89.2 mg	Down 17.5%	Down 4.3%	Down 21.1%
Cabbage	47 mg	32.2 mg	36.6 mg	Down 31.9%	Up 13.7%	Down 22.1%
Carrots	8 mg	9.3 mg	5.9 mg	Up 16.3%	Down 36.6%	Down 26.3%
Cauliflower	78 mg	46.4 mg	48.2 mg	Down 40.5%	Up 3.8%	Down 38.2
Collard greens	92 mg	35.3 mg	35.3 mg	Down 61.6%	No change	Down 61.6%
Daikon	32 mg	22 mg	22.0 mg	Down 31.3%	No change	Down 31.3%
Kale	125 mg	120 mg	120 mg	Down 4%	No change	Down 4%
Mustard greens	97 mg	70 mg	70 mg	Down 27.8%	No change	Down 27.8%
Onions	10 mg	6.4 mg	7.4 mg	Down 36%	Up 15.6%	Down 26%
Parsley	172 mg	133 mg	133 mg	Down 22.7%	No change	Down 22.7%
Turnip greens	139 mg	60 mg	60 mg	Down 56.8%	No change	Down 56.8%
Watercress	79 mg	43 mg	43 mg	Down 45.6%	No change	Down 45.6%
Net Change				Down 29.9%	Down 3.1%	Down 32%
Source: <i>Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)</i>						

6. Change in Calcium Levels in Fruits 1975-2010

(per 100 grams raw edible portion)

	1975	2001	2010	Change 1975-2001	Change 2001-2010	Change 1975-2010
Apples	7 mg	7 mg	6 mg	No change	Down 14.3%	Down 14.3%
Apricots	17 mg	14 mg	13 mg	Down 17.7%	Down 7.1%	Down 23.5%
Bananas	8 mg	6 mg	5 mg	Down 25%	Down 16.7%	Down 37.5%
Cherries	22 mg	15 mg	12 mg	Down 31.8%	Down 20%	Down 45.5%
Grapefruits	16 mg	12 mg	12 mg	Down 25%	No change	Down 25%
Lemons	61 mg	26 mg	26 mg	Down 57.4%	No change	Down 57.4%
Oranges	41 mg	40 mg	43 mg	Down 2.4%	Up 7.5%	Up 4.9%
Peaches	9 mg	5 mg	6 mg	Down 44.4%	Up 20%	Down 33.3%
Pineapples	17 mg	7 mg	18.9 mg	Down 58.8%	Up 170%	Up 11.2%
Strawberry	21 mg	14 mg	16 mg	Down 33.3%	Up 14.3%	Down 23.8%
Tangerines	40 mg	14 mg	37 mg	Down 65%	Up 164.3%	Down 7.5%
Watermelon	7 mg	8 mg	7 mg	Up 14.3%	Down 12.5%	No change
Net Change				Down 28.9%	Up 9.8%	Down 19.1%

Source: Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)

7. Change in Iron Levels in Fruits 1975-2010

(per 100 grams raw edible portion)

	1975	2001	2010	Change 1975-2001	Change 2001-2010	Change 1975-2010
Apples	0.3 mg	0.18 mg	0.12 mg	Down 40%	Down 33.3%	Down 60%
Apricots	0.5 mg	0.54 mg	0.39 mg	Up 8%	Down 27.7%	Down 22%
Bananas	0.7 mg	0.31 mg	0.26 mg	Down 55.7%	Down 16.1%	Down 62.9%
Cherries	0.4 mg	0.39 mg	0.20 mg	Down 2.5%	Down 48.7%	Down 50%
Grapefruits	0.4 mg	0.06 mg	0.06 mg	Down 85%	No change	Down 85%
Lemons	0.7 mg	0.6 mg	0.60 mg	Down 14.3%	No change	Down 14.3%
Oranges	0.4 mg	0.10 mg	0.10 mg	Down 75%	No change	Down 75%
Peaches	0.5 mg	0.11 mg	0.25 mg	Down 78%	Up 127%	Down 50%
Pineapples	0.5 mg	0.37 mg	0.29 mg	Down 26%	Down 21.6%	Down 42%
Strawberry	1.0 mg	0.38 mg	0.41 mg	Down 62%	Up 7.9%	Down 59%

Tangerines	0.4 mg	0.1 mg	0.15 mg	Down 75%	Up 50%	Down 62.5%
Watermelon	0.5 mg	0.17 mg	0.24 mg	Down 66%	Up 41.3%	Down 48%
Net Change				Down 47.6%	Down 5%	Down 52.6%
Source: <i>Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)</i>						

8. Change in Vitamin A Levels in Fruits 1975-2010
(per 100 grams raw edible portion)

	1975	2001	2010	Change 1975-2001	Change 2001-2010	Change 1975-2010
Apples	90 IU	53 IU	54 IU	Down 41.1%	Up 1.9%	Down 40%
Apricots	2700 IU	2612IU	1926 IU	Down 3.3%	Down 26.3%	Down 28.7%
Bananas	190 IU	81 IU	147 IU	Down 57.4%	Up 81.2%	Down 22.6%
Cherries	110 IU	214 IU	75 IU	UP 94.6%	Down 65%	Down 31.8%
Grapefruits	80 IU	10 IU	33 IU	Down 87.5%	Up 230%	Down 58.8%
Lemons	30 IU	29 IU	22 IU	Downs 3.3%	Down 24.1%	Down 26.7%
Oranges	200 IU	205 IU	403 IU	Up 2.5%	Up 96.6%	Up 101.5%
Peaches	1330 IU	535 IU	326 IU	Down 59.8%	Down 39%	Down 75.5%
Pineapples	70 IU	23 IU	58 IU	Down 55%	Up 152%	Down 17.1%
Strawberry	60 IU	27 IU	12 IU	Down 67.1%	Down 55.6%	Down 80%
Tangerines	420 IU	920 IU	681 IU	Up 119%	Down 26%	Up 62.1%
Watermelon	590 IU	366 IU	569 IU	Down 38%	Up 55.5%	Down 3.6%
Net Change				Down 16.4%	Down 2%	Down 18.4%
Source: <i>Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)</i>						

9. Change in Vitamin C Levels in Fruits 1975-2010
(per 100 grams raw edible portion)

	1975	2001	2010	Change 1975-2001	Change 2001-2010	Change 1975-2010
Apples	4 mg	5.7 mg	4.6 mg	Up 42.5%	Down 19.3%	Up 15%
Apricots	10 mg	10 mg	10.0 mg	No change	No change	No change
Bananas	10 mg	9.1 mg	8.7 mg	Down 9%	Down 4.4%	Down 13%
Cherries	10 mg	7 mg	10.0 mg	Down 30%	Up 42.9%	No change
Grapefruits	38 mg	33.3 mg	34.4 mg	Down 12.4%	Up 3.3%	Down 9.5%

Lemons	77 mg	53 mg	53 mg	Down 31.2%	No change	Down 31.2%
Oranges	50 mg	53.2 mg	45 mg	Up 6.4%	Down 15%	Down 10%
Peaches	7 mg	6.6 mg	6.6 mg	Down 5.7%	No change	Down 5.7%
Pineapples	17 mg	15.4 mg	25 mg	Down 9.4%	Up 64.9%	Up 47%
Strawberry	59 mg	56.7 mg	58.9 mg	Down 3.9%	Up 3.9%	No change
Tangerines	31 mg	30.8 mg	26.7 mg	Down 7%	Down 13.3%	Down 13.8%
Watermelon	7 mg	9.6 mg	8.1 mg	Up 37.1%	Down 15.6%	Up 15.7%
Net Change				Down 1.9%	Up 1.4%	Down 0.5%

Source: *Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)*

10. Change in Phosphorus Levels in Fruits 1975-2010 (per 100 grams raw edible portion)						
	1975	2001	2010	Change 1975-2001	Change 2001-2010	Change 1975-2010
Apples	10 mg	7 mg	11 mg	Down 30%	Up 57.1%	Up 10%
Apricots	23 mg	19 mg	23 mg	Down 17.4%	Up 21.1%	No change
Bananas	42 mg	20 mg	22 mg	Down 52.4%	Up 10%	Down 47.6%
Cherries	19 mg	19 mg	11 mg	No change	Down 42%	Down 42%
Grapefruits	16 mg	8 mg	8 mg	Down 50%	No change	Down 50%
Lemons	15 mg	16 mg	16 mg	Up 6.7%	No change	Up 6.7%
Oranges	20 mg	14 mg	12 mg	Down 30%	Down 14.3%	Down 40%
Peaches	19 mg	12 mg	20 mg	Down 36.8%	Up 66.7%	Up 5.3%
Pineapples	8 mg	7 mg	13.9 mg	Down 12.5%	Up 88.6%	Up 73.8%
Strawberry	21 mg	19 mg	24 mg	Down 9.5%	Up 26.3%	Up 14.3%
Tangerines	18 mg	10 mg	20 mg	Down 44.4%	Up 100%	Up 11.1%
Watermelon	10 mg	9 mg	11 mg	Down 10%	Up 22.2%	Up 10.0%
Net Change				Down 23.9%	Up 17.1%	Down 4%

Source: *Planetary Health, Inc., 2011 (based on USDA National Nutrient Database)*

This sampling suggests that the nutrients in the American food supply are continuing to decline, though at a slower rate than previously. Broccoli, the vegetable, originally selected as the signature food for the study, has continued to wilt. Its calcium content dropped 2.1% in the last thirteen years, iron fell another 17%, vitamin A plunged 59.6%, and vitamin C dropped 4.7%. There was no

change in B vitamins, suggesting that the data have not been updated during this period. Altogether, over the last 35 years, broccoli has lost 54.4% of its calcium, 33.6% of its iron, 75.1% of its vitamin A, 21.1% of its vitamin C, 35% of its thiamin, 47.8% of its riboflavin, and 28.9% of its niacin. In sum, you would have to eat twice as much broccoli today to get the same nutrients as a generation ago!

Iron levels in the test market basket of 12 vegetables dropped 44.2% on average since 1975. Calcium declined 26.4%, vitamin A is down 17.4%, and vitamin C is off 32%. Among fruits, calcium is down 19.1%, iron has plummeted a whopping 52.6%, vitamin A is down 18.4%, vitamin C is down 0.5%, and phosphorus is down 4%. Among the 108 individual measurements, 82 declined, 20 rose, and 6 remained the same. The loss may be even greater, because the reported vitamin and mineral content of two-thirds of the vegetables have not been updated in over a decade and in some cases for 35 years. Monitoring the quality of the nation's produce is clearly not a priority of the USDA. In contrast to the small and irregular number of studies of plant-quality foods, there are hundreds of nutritional studies of meat, poultry, and dairy products.

The steepest declines are in iron quality—a measure of the strength, vitality, and overall yang quality of garden produce. The greatest gains are in vitamin A, which increased 4% since the last survey. Collard greens lost half of their iron between 1975 and 1997 but since then have made up their loss. The vitamin A in carrots is up 51.9% since 1975, though they lost nearly 60% since 1997. The A in kale is up by three-quarters, and that in mustard greens and turnip greens has doubled. The increased popularity of green leafy vegetables in recent years may have led to the cultivation of more nutritious strains. Or perhaps more samples were included in the recent data. Vitamin C levels have not appreciably changed over the last decade, though overall they are substantially down from a generation ago.

We have not done a comparable survey of grains, beans, and other food groups. Spot checks suggest that there is a decline in selected nutrients, but that it is not as sharp as with vegetables and fruits. In the future, we hope to extend our analysis.

Implications

The findings of our survey suggest:

- The health of the American people may be declining because of a sharp loss of food quality. Fruits and vegetables are high in vitamins, minerals, antioxidants, flavinoids, phytoestrogens, and other compounds that are protective against heart disease, certain cancers, arthritis, diabetes, women's health problems, childhood ailments, and other disorders

- The worldwide environmental crisis—including increased use of chemical pesticides and fertilizers, the introduction of genetically engineered food, increased air and water pollution, rising soil infertility, loss of seed vitality, global warming, thinning of the ozone layer, and other factors—appears to be the primary cause of the nutrient decline. Other causes include the increasing use of high-yielding hybrid seeds that multiply yields, give stronger colors, better taste, and more uniformity of food but provide less vitality and nutrients
- It appears that a significant portion of the nutritional data used by government agencies, medical associations, restaurants, and other institutions is still based on data collected in 1975 or earlier. The U.S. dietary guidelines that accompany the Food Guide Pyramid and the Recommended Daily Intakes (RDI's) for essential nutrients are the basis for tens of millions of meals served daily in public schools, hospitals, prisons, the military, nursing homes, and other institutions. In the 1990s, the USDA stopped publishing nutritional data in printed form and switched to an online database. While this allowed for convenient access and continuous updating, it was relatively difficult for individuals and organizations to obtain a comparative range of foods. It appears that the USDA's classic 1975 *Handbook #8*, which is still available inexpensively from commercial publishers, remains the de facto standard in many quarters, though its data is long obsolete
- Similarly, the labels on many U.S. foods appear to be based on out-of-date printed food composition tables, creating a distorted profile of the nutritional value of many common foods
- Since the U.S. is the world's largest exporter of food, the decline in its food quality has global consequences. Not only America's health, but also planetary health is at risk. Several independent studies in Europe indicate a comparable decline in nutritional content, especially among vegetables and fruits

For whatever reason—environmental, genetic, or simply the fact that it is grown from seed with inferior nutritional traits—today's food in the United States is 25 to 50 percent lower in nutrients than it was a half century ago. This decline does not appear to be reflected in current government or medical guidelines, cookbooks, popular health and diet books, and menu plans. They continue to rely on obsolete, misleading figures from decades ago that are significantly higher than the food that people are actually consuming today.

A related issue is whether organic food contains higher levels of nutrients than conventionally grown food. With the introduction of the USDA organic certification program in 2002, there was a widespread expectation that such studies would finally be undertaken. Yet they have not because of strong opposition by conventional growers. Independent studies have shown what organic consumers intuitively know, namely, that organically grown food is substantially higher in vitamins and minerals than chemically grown food. For example, the second annual State of Science Review reported that cancer-fighting antioxidant levels are, on average, 30 percent higher in organic produce vs. conventionally grown fruits and vegetables.³ The cause for this, the scientists concluded, is that

antioxidant chemicals are created within a plant grown organically or in the wild when the plant triggers internal defense mechanisms. However, these beneficial mechanisms are rarely triggered in plants that are raised with synthetic fertilizers and pesticides. A dozen other studies have come to similar conclusions.

By all indications, the decline in the modern way of eating begins in the soil, the air, the water, and other aspects of the environment. The U.S. government is doing virtually nothing to address this issue, nor is agribusiness, the food industry, the medical profession, or academia. Yet there is no more important issue than food quality, food safety, and the relation of diet and health. It is time to recognize that the threats that vanishing nutrients pose to homeland security and world peace are as real as those we face from international terrorism, global warming, and nuclear war or accident. The sooner we address this issue with a sustainable, natural and organically-based agriculture and food policy, the sooner we will reclaim our health and vitality.

Further Research

There were several dozen healthful foods for which nutritional data are not available. These include several varieties of squash (buttercup, delicata, etc.), Far Eastern vinegars (brown rice, sweet brown rice, and umeboshi), several sea vegetables, konnyaku (a gelatinous Asian food), and schizandra berry (the Chinese “5 energies” fruit). There also are many foods from Africa, the Middle East, Latin America, and other regions that were not included in this compendium or for which nutritional data is not available. A blank section has been left at the end of the list for you to add foods that may have been overlooked or new ones that become available in the future.

In the United States, as in other countries, official food classification tables like this are used to make meal plans for schools, hospitals, nursing homes, and other institutions. Short-grain brown rice, sea salt, and many other essential foods are not included in the U.S. database. The USDA will post the nutritional values of individual foods contributed by individuals, producers, and suppliers so long as they are tested by an independent laboratory. The average cost of testing a single food is about \$2500. Please encourage organic and natural foods companies to sponsor these tests so their products can be entered into the database, either generically or by brand name.

These tables are not a substitute for your own knowledge, experience, and developing your own intuition. But they are part of a broad approach to personal and planetary health and ideally are maintained as comprehensively and up to date as possible.

Web Resources

U.S. Nutrient Database for Standard Reference, Release 23
<http://www.nal.usda.gov/fnic/foodcomp/search/>

Japan Food Composition Tables
http://database.food.sugiyama-u.ac.jp/index_asia.php

National Food Institute of Denmark
<http://www.foodcomp.dk>

Amberwaves
<http://www.amberwaves.org>

Food	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
1. WHOLE CEREAL GRAINS & GRAIN PRODUCTS																	
Amaranth	11.9	371	13,6	7.0	65.3	6.7	2.9	159	7.6	557	4	508	2	0.12	0.2	0.92	4.2
Barley																	
Whole	14.0	335	10.0	1.9	71.7	5.2	2.4	40	4.5	320	4	-	0	-	-	-	0
Pearled	10.1	352	9.9	1.2	77.7	15.6	1.1	29	2.5	221	9	280	22	0.19	0.11	4.60	0
Buckwheat																	
Groats	9.75	343	13.3	3.4	71.5	10.0	2.1	18	2.2	347	1	460	0	0.10	0.43	7.02	0
Flour	12.6	335	6.6	2.0	76.1	1.9	0.9	6	2.1	190	-	200	-	0.45	0.11	2.17	0
Bulgur	9.0	342	12.3	1.3	75.9	18.3	1.5	35	2.5	300	17	410	9	0.23	0.12	5.11	0
Corn																	
Whole	10.37	365	9.4	4.7	74.3	7.3	1.2	7	2.7	210	35	287	0	0.39	0.20	3.63	214
Popcorn	2.8	500	9.0	28.1	57.2	10.0	2.9	10	2.8	250	884	225	11	0.13	0.14	1.55	0.3
Cornmeal	10.3	362	8.1	3.6	76.9	7.3	1.1	6	3.5	241	35	287	0	0.39	0.20	3.63	214
Flour, blue	10.83	364	8.8	5.1	73.9	8.4	1.4	5	1.7	263	5	381	0	0.16	0.23	2.60	0
Couscous	8.56	376	12.7	0.6	77.4	5.0	0.6	24	1.1	170	10	166	0	0.16	0.08	3.49	0
Fu	60.0	163	12.7	0.2	26.2	0.5	0.3	13	1.3	60	7	30	0	.08	0.03	0.50	0
Hato mugi	13.0	380	13.3	1.3	72.2	0.6	0.2	6	0.4	20	1	85	0	0.02	0.05	0.6	0
Kamut	11.0	337	14.7	2.2	70.4	9.1	1.8	24	4.4	386	6	446	10	0.59	0.18	6.35	0
Millet																	
Yellow	8.7	378	11.0	4.2	72.9	8.5	3.3	8	3.0	285	5	195	0	0.42	0.29	4.72	0
Glutinous	14.0	366	10.6	1.7	72.1	1.7	0.6	9	2.1	160	2	170	0	0.15	0.05	2.0	0
Flour	10.7	373	10,8	4.3	73.1	3.5	1.2	14	3.9	285	4	224	0	0.41	0.07	6.02	0
Noodles																	
Soba	6.7	338	14.4	0.7	74.6	-	3.4	35	2.7	254	792	252	0	0.48	0.13	3.21	0
Somen	9.2	356	11.4	0.8	74.1	4.3	4.5	23	1.3	80	1840	164	0	0.10	0.03	0.88	0
Udon	30.5	270	6.1	0.6	56.8	1.2	3.0	18	0.3	49	1000	90	0	0.09	0.08	0.60	0
Ramen	4.9	436	10.5	15.6	63.4	2.3	5.6	29.	4.0	220	2036	179	12	1.03	0.26	4.09	0.3
Rice	11.9	364	3.4	0.6	83.2	1.6	0.9	18	0.7	153	182	30	0	0.03	0.02	0.22	0
Spaghetti	7.3	348	14.6	1.4	75.0		1.6	40	3.6	258	8	215	0	0.49	0.14	5.13	0
Oats	8.2	389	16.9	6.9	66.3	10.6	1.7	54	4.7	523	2	429	0	0.76	0.14	0.96	0
Oatmeal	10.0	380	13.7	5.7	69.1	9.4	1.5	47	3.9	370	3	280	0	0.20	0.08	1.10	0
Quinoa	13.3	368	14.1	6.1	64.2	7.0	2.4	47	4.6	457	5	563	0	0.36	0.32	1.52	0
Rice																	
Brown	12.4	362	7.5	2.7	76.2	3.4	1.3	33	1.8	264	4	268	0	0.41	0.04	4.30	0
White	11.6	365	7.1	0.7	80.0	1.3	0.6	28	0.8	115	5	115	0	0.07	0.05	1.60	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
GRAINS	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Flour	12.0	363	7.2	2.8	76.5	4.6	1.5	11	2.0	337	8	289	0	0.44	0.08	6.34	0
Koji	33.0	295	5.8	1.7	59.2	1.4	0.3	5	0.3	83	3	61	0	0.11	0.13	1.5	0
Mochi	44.5	235	4.2	0.8	50.3	0.8	0.2	7	0.2	78	2	66	0	0.05	0.02	0.50	0
Sweet	11.1	377	7.0	1.6	79.9	0.9	0.4	14	0.7	59	2	33	0	0.06	0.02	0.60	0
Wild	7.8	357	14.7	1.1	74.9	6.2	1.5	21	2.0	433	7	427	19	0.12	0.26	6.73	0
Rye	10.6	338	10.3	1.6	75.9	15.1	1.6	24	2.6	332	2	510	11	0.32	0.25	4.27	0
Flour	10.8	325	15.9	2.2	68.6	23.8	2.5	37	5.0	499	2	717	11	0.32	0.25	4.27	0
Sorghum	9.2	339	11.3	3.3	74.6	6.3	1.6	28	4.4	287	6	350	0	0.24	0.14	2.93	0
Teff	8.8	367	13.3	2.4	73.1	8.0	2.4	180	7.6	429	12	427	9	0.39	0.27	3.36	0
Wheat																	
Bran	8.2	216	16.2	5.3	24.9	40.2	5.4	74.7	19.0	1055	28	1340	-	0.89	0.36	3.5	0
Hard red spring	12.7	329	15.4	1.9	68.0	12.2	1.9	25	3.6	332	2	340	9	0.50	0.11	5.71	0
Hard red winter	13.1	327	12.6	1.5	71.2	12.2	1.6	29	3.2	288	2	363	9	0.38	0.12	5.46	0
Whole wheat flour	10.7	340	13.2	2.5	72.0	10.7	1.6	34	3.6	357	2	363	9	0.50	0.17	4.96	0
White flour	11.9	364	10.3	1.0	76.3	2.7	0.5	15	4.6	108	2	107	2	0.79	0.49	5.90	0
Seitan	76.0	464	20.0	2.0	1.8	0.4	0.2	14	1.8	54	36	8	0	0.02	0.01	1.2	0
Semolina	11.6	360	9.2	1.2	75.0	2.7	0.3	16.7	0.6	68.1	1.4	117	-	0.21	0.05	1.83	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
2. BEANS & BEAN PRODUCTS																	
Azuki	13.4	329	19.9	0.5	62.9	12.7	3.3	66	5.0	381	5	1254	17	0.46	0.22	2.63	0
Black bean	11.0	341	21.6	1.4	62.3	15.2	3.6	123	5.0	352	5	1483	0	0.90	0.19	1.96	0
Chickpea																	
Beans	11.5	364	19.3	6.0	60.6	17.4	2.5	105	6.2	366	24	875	0	0.48	0.21	1.54	4
Flour	10.3	387	22.4	6.7	57.8	10.8	2.8	45	4.9	318	64	846	41	0.49	0.11	1.76	0
Falafel	34.6	333	13.3	17.8	31.8	-	2.4	54	3.4	192	294	585	13	0.15	0.17	1.04	1.6
Hummus	64.9	177	4.9	8.6	16.1	4.0	1.6	49	16	110	242	173	-	0.1	0.1	0.4	7.9
Kidney	11.8	333	23.6	0.8	60.1	24.9	3.8	143	8.2	407	24	1406	0	0.53	0.22	2.1	1

<i>Food</i>	<i>Water</i>	<i>Energy</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbs</i>	<i>Fiber</i>	<i>Ash</i>	<i>CA</i>	<i>Iron</i>	<i>Phos</i>	<i>NA</i>	<i>K</i>	<i>Vita A</i>	<i>Vita B1</i>	<i>Vita B2</i>	<i>Niacin</i>	<i>Vita C</i>
BEANS	%	Calories	Grams	<i>Grams</i>	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Lentils																	
Green	10.4	353	25.8	1.1	60.1	30.5	2.7	56	7.5	451	6	955	39	0.87	0.21	2.6	4.4
Red	11.8	345	25.0	2.2	59.2	10.8	1.9	41	7.6	294	7	578	58	0.51	0.11	1.50	1.7
Lima	10.2	338	21.5	0.7	63.4	19.0	4.3	81	7.5	385	18	1724	0	0.51	0.20	1.53	0
Mung	9.1	347	23.9	1.2	62.6	16.3	3.3	132	6.7	367	15	1246	114	0.62	0.23	2.3	0
Navy	12.1	337	22.3	1.5	60.8	24.4	3.3	147	5.5	407	5	1185	0	0.78	0.16	2.19	0
Peas																	
Black-eyed	12.0	336	23.5	1.3	60.0	10.6	3.2	110	8.3	424	16	1112	50	0.85	0.23	2.08	1.5
Split	11.3	341	24.6	1.2	60.4	25.5	2.7	55	4.4	366	15	981	149	0.73	0.22	2.89	0
Pinto	11.3	347	21.4	1.2	62.6	15.5	3.5	113	5.1	411	12	1393	0	0.71	0.21	1.17	6.3
Soybeans	8.5	446	36.5	19.9	30.2	9.3	4.9	277	15.7	704	2	1797	22	0.87	0.87	1.62	6.0
Kinako	5.0	437	35.5	23.4	31.0	16.9	5.1	250	9.2	520	1	1300	0	0.76	0.26	1.8	0
Miso	43.0	199	11.7	6.0	26.5	5.4	12.8	57	2.5	159	3728	210	87	0.10	0.23	0.91	0
Barley																	
Hatcho	44.9	217	17.2	10.5	14.5	-	12.9	150	6.8	250	4300	930	0	0.04	0.12	1.2	-
Red	50	215	13.5	5.8	19.1	1.9	14.8	115	4.0	190	4600	-	0	0.03	0.10	1.5	0
White	57	155	12.3	1.4	27.5	1.3	4.9	31	1.3	138	3200	-	0	0.03	0.10	1.5	0
Yellow	45.7	186	13.1	5.5	21.1	-	14.6	130	4.3	200	5100	440	0	0.03	0.10	1.5	-
Rice, sweet	42.6	217	9.7	3.0	37.9	-	23.5	80	3.4	130	2400	340	0	0.05	0.10	1.5	-
Natto	55.0	212	17.7	5.4	14.4	5.4		217	8.6	174	7	729	0	0.16	0.19	0	13.0
Soy flour	5.2	436	34.5	20.7	35.2	9.6	4.5	206	6.4	494	13	2515	120	0.58	1.16	4.32	0
Soymilk	88.1	54	3.3	1.8	6.3	0.6	0.7	25	0.6	52	51	118	3	0.06	0.07	0.51	0
Tempeh	59.7	193	18.5	10.8	9.4	-	1.6	111	2.7	266	9	412	0	0.08	0.36	2.64	0
Tofu																	
Fresh	71.1	146	12.7	10.0	4.4	0.6	1.8	345	2.8	231	2	146	0	0.04	0.08	0.64	0.3
Dried	10.4	436	53.4	26.4	7.2	0.2	2.6	590	59.4	710	18	-	0	0.05	0.04	0.6	0
Fermented	70.0	116	8.2	8.0	5.2	-	8.7	46	2.0	73	2873	75	0	0.16	0.10	0.38	0.2
Okara	81.6	77	3.2	1.7	12.5	-	0.9	80	1.3	60	9	213	0	0.02	0.02	0.10	0
Yoghurt	77.5	94	3.5	1.8	16.0	0.2	1.2	118	1.1	38	35	47	33	0.06	0.02	0.24	2.5
Yuba	6.5	231	21.3	13.7	4.1	0.8	1.3	90	3.6	250	290	290	-	-0.17	0.09	0.3	0
Turtle	11	339	21.3	0.9	63.3	24.9	3.6	160	8.7	440	9	1500	0	0.90	0.19	1.96	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Nia-cin	Vita C
	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
3. VEGETABLES																	
Alfalfa	92.8	23	4.0	0.7	2.1	1.9	0.4	32	1.0	70	6	79	155	0.08	0.13	0.48	8.2
Arugula	91.7	25	2.6	0.7	3.7	1.6	1.4	160	1.5	52	27	369	2373	0.04	0.09	0.31	15.0
Asparagus	93.2	20	2.2	0.1	3.9	2.1	0.6	24	2.1	52	2	202	756	0.14	0.14	0.98	5.6
Bamboo Shoots	91	27	2.6	0.3	5.2	2.2	0.9	13	0.5	59	4	533	20	0.15	0.07	0.6	4.0
Beets	87.6	43	1.6	0.2	9.6	2.8	1.1	16	0.8	40	78	325	33	0.03	0.04	0.33	4.9
Beet greens	91.2	22	2.2	0.1	4.3	3.7	2.3	117	2.6	41	226	762	6326	0.10	0.22	0.4	30.0
Bitter gourd	94.4	71	1.0	0.1	3.0	2.6	0.6	14	0.4	31	1	260	-0.05	0.07	0.30	76	
Broad Beans	11.0	341	26.1	1.5	58.3	25.0	3.1	103	6.7	421	13	1062	53	0.56	0.33	2.83	1.4
Broccoli	89.3	34	2.8	0.4	6.6	2.6	0.9	47	0.7	66	33	316	623	0.07	0.12	0.64	89.2
Broccoli raab	92.6	22	3.2	0.5	2.9	2.7	0.9	108	2.1	73	33	196	2622	0.16	0.13	1.22	20.2
Brussels Sprouts	86	43	3.9	0.3	9.0	3.8	1.4	42	1.4	69	25	389	754	0.14	0.09	0.75	85
Burdock	80.1	72	1.5	0.2	17.3	3.3	0.9	4	0.8	51	5	308	0	0.01	0.03	0.30	3.0
Cabbage																	
Chinese	95.3	13	1.5	0.2	2.2	1.0	0.8	105	0.8	37	65	252	4468	0.04	0.07	0.50	45
Red	90.4	31	1.4	0.6	7.4	2.1	0.6	45	0.8	30	27	243	1116	0.06	0.07	0.42	57
White	92.2	25	1.3	0.1	5.8	2.5	0.6	40	0.5	26	18	170	98	0.06	0.04	0.23	36.6
Savoy	91	27	2.0	0.1	6.1	3.1	0.8	35	0.4	42	28	230	1000	0.07	0.03	0.30	31
Carrots	88.3	41	0.9	0.2	9.6	2.8	1.0	33	0.3	35	69	320	16706	0.07	0.06	0.98	5.9
Cauliflower	92.1	25	1.9	0.3	5.0	2.0	0.8	22	0.4	44	30	299	0	0.05	0.06	0.51	48.2
Celeriac	88.7	42	1.8	0.3	4.3	3.9	1.0	41.5	0.8	74	20	442	-	0.05	0.14	1.25	11
Celery	95.4	16	0.7	0.2	3.0	1.6	0.8	40	0.2	24	80	260	449	0.02	0.06	0.32	3.1
Collard Greens	90.6	30	2.5	0.4	5.6	3.6	0.9	145	0.2	10	20	169	6668	0.05	0.13	0.74	35.3
Cucumber	95.2	15	0.7	0.1	3.6	0.5	0.4	16	0.3	24	2	147	105	0.03	0.03	0.10	2.8
Daikon																	
Greens	30.6	25	2.2	0.1	5.2	4.0	1.6	260	3.1	52	48	400	-	-0.03	0.16	0.80	53
Root	94.6	18	0.6	0.1	4.1	1.6	0.6	27	0.4	23	21	227	0	0.02	0.02	0.20	22.0
Takuan	83.5	33	2.8	0.2	7.0	4.4	6.5	150	2.7	43	2300	450	-	0.07	0.14	0.50	30
Dandelion Greens	85.6	45	2.7	0.7	9.2	3.5	1.8	187	3.1	66	76	397	10161	0.19	0.26	0.81	35.0
Dill	86.0	43	3.5	1.1	4.9	2.1	2.5	202	5.5	51.9	27	647	-	0.19	-0.43	3.5	70
Eggplant	92.4	24	1.0	0.2	5.7	3.4	0.7	9	0.2	25	2	230	27	0.04	0.04	0.65	2.2
Endive	93.4	17	1.3	0.2	3.4	3.1	1.4	52	0.8	28	22	314	2167	0.08	0.08	0.40	6.5

<i>Food</i>	<i>Water</i>	<i>Energy</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbs</i>	<i>Fiber</i>	<i>Ash</i>	<i>CA</i>	<i>Iron</i>	<i>Phos</i>	<i>NA</i>	<i>K</i>	<i>Vita A</i>	<i>Vita B1</i>	<i>Vita B2</i>	<i>Nia-cin</i>	<i>Vita C</i>
VEGETABLES	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Fennel	90.2	31	1.2	0.2	7.3	3.1	1.1	49	0.7	50	52	414	134	0.01	0.03	0.64	12.0
Garlic	58.6	149	6.4	0.5	33.1	2.1	1.5	181	1.7	153	17	40	9	0.20	0.11	0.70	31.2
Gingerroot	78.9	80	1.8	0.8	17.8	2.0	0.8	16	0.6	34	13	415	0	0.03	0.03	0.75	5.0
Grape leaves	73.3	93	5.6	2.1	17.3	11.0	1.7	363	2.6	91	9	272	27521	0.04	0.35	2.4	11.1
Green beans	90.3	31	1.8	0.2	7.0	2.7	0.7	37	1.0	38	6	211	690	0.08	0.10	0.73	12.2
Horseradish	88.2	37	2.1	0.2	8.5	3.2	1.0	30	0.4	50	42	461	74	0.05	0.07	0.62	141
Jerusalem artichoke	82.1	-	2.1	0.6	11.5	2.6	1.2	28.0	0.6	72.3	3	561	-	0.07	0.06	1.53	6
Kale	84.5	50	3.3	0.7	10.0	2.0	1.5	135	1.7	56	43	447	15376	0.11	0.13	1.00	120
Kampyo	19.8	281	7.1	0.2	67.9	30.1	5.0	250	2.9	140	3	1800	-	0	0.04	2.7	0
Kohlrabi	91.0	27	1.7	0.1	6.2	3.6	1.0	24	0.4	46	20	350	36	0.05	0.02	0.40	62.0
Leeks	83.0	61	1.5	0.3	14.2	1.8	1.1	59	2.1	35	20	180	1667	0.06	0.03	0.40	12.0
Lentil sprouts	67.3	106	9.0	0.6	22.1	-	1.0	25	3.2	173	11	322	45	0.23	0.13	1.13	16.5
Lettuce																	
Butterhead	95.6	13	1.4	0.2	2.2	1.1	0.6	35	1.2	33	5	238	3312	0.06	0.06	0.36	3.7
Green leaf	94.5	15	1.4	0.2	2.9	1.3	0.6	36	0.9	29	28	194	7405	0.07	0.08	0.38	9.2
Iceberg	95.6	14	0.9	0.1	3.0	1.2	0.4	18	0.4	20	10	141	502	0.04	0.03	0.12	2.8
Romaine	94.6	17	1.2	0.3	3.3	2.1	0.6	33	1.0	30	8	247	8710	0.07	0.07	0.31	4.0
Lotus root	79.1	74	2.6	0.1	17.2	4.9	1.0	45	1.2	100	40	556	0	0.16	0.22	0.40	44.0
Mushrooms																	
Chanterelle	89.9	38	1.5	0.5	6.9	3.8	1.3	15	3.5	57	9	506	0	0.02	0.22	4.09	0
Crimini	92.1	22	2.5	0.1	4.3	0.6	1.0	18	0.4	120	6	448	0	0.10	0.49	3.8	0
Enoki	88.3	37	2.7	0.3	7.8	2.7	0.9	0	1.2	105	3	359	0	0.23	0.20	7.03	0
Maitake	90.4	31	1.9	0.2	7.0	2.7	0.5	1	0.3	74	1	204	0	0.15	0.24	6.6	0
Morel	89.6	31	3.1	0.6	5.1	2.8	1.6	43	12.2	194	21	411	0	0.07	0.21	2.25	0
Oyster	89.2	33	3.3	0.4	6.1	2.3	1.0	3	1.3	120	18	420	0	0.13	0.25	4.96	0
Portabella	92.8	22	2.1	0.4	3.9	1.3	0.9	3	0.3	108	9	364	0	0.06	0.13	4.49	0
Shiitake	89.7	34	2.2	0.5	68	2.5	0.7	2	0.4	112	9	304	0	0.02	0.22	3.9	0
Shiitake dry	9.5	296	9.6	1.0	75.4	11.5	4.6	11	1.7	294	13	1534	0	0.30	1.27	14.1	3.5
White	92.5	22	3.1	0.3	3.3	1.0	0.9	3	0.5	86	5	318	0	0.08	0.40	3.60	2.1
Mustard greens	90.8	26	2.7	0.2	4.9	3.3	1.4	103	1.5	43	25	354	10500	0.08	0.11	0.80	70
Okra	90.2	31	2.0	0.1	7.0	3.2	0.7	81	0.8	63	8	303	375	0.2	0.06	1.0	21.1
Onions	89.1	40	1.1	0.1	9.3	1.7	0.4	23	0.2	29	4	146	2	0.05	0.03	0.12	7.4
Parsley	87.7	36	3.0	0.8	6.3	3.3	2.2	138	6.2	58	56	554	8425	0.09	0.10	1.3	133
Parsley root	83.0	232	2.3	0.6	8.0	4.3	1.8	48.5	1.2	71.1	17	562	-	0.10	0.08	2.37	41

<i>Food</i>	<i>Water</i>	<i>Energy</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbs</i>	<i>Fiber</i>	<i>Ash</i>	<i>CA</i>	<i>Iron</i>	<i>Phos</i>	<i>NA</i>	<i>K</i>	<i>Vita A</i>	<i>Vita B1</i>	<i>Vita B2</i>	<i>Nia-cin</i>	<i>Vita C</i>
VEGETABLES	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Parsnips	79.5	75	1.2	0.3	18.0	4.9	1.0	36	0.6	71	10	375	0	0.09	0.05	0.70	17
Peas																	
Edible pods	88.9	42	2.8	0.2	7.6	2.6	0.6	43	2.1	53	4	200	1087	0.15	0.08	0.60	60.0
Green	78.9	81	5.4	0.4	14.5	5.1	14.5	25	1.5	108	5	244	765	0.27	0.13	2.09	40.0
Peppers																	
Green	93.4	20	0.9	0.2	4.6	1.7	0.4	10	0.3	20	3	175	370	0.06	0.03	0.48	80.4
Red	92.2	31	1.0	0.3	6.0	2.1	0.5	7	0.4	26	4	211	3131	0.05	0.09	0.98	127
Hot chili	88.0	40	1.9	0.4	8.81	1.5	0.9	14	1.0	43	9	322	952	0.07	0.09	1.24	144
Jalapeno	91.2	29	0.9	0.4	6.5	2.8	0.5	12	0.3	26	3	248	1078	0.04	0.07	1.28	119
Pumpkin	91.6	26	1.0	0.1	6.5	0.5	0.8	21	0.8	44	1	340	7384	0.05	0.11	0.60	9.0
Radish, red	95.3	16	0.7	0.1	3.4	1.6	0.6	25	0.3	20	39	233	7	0.01	0.04	0.25	14.8
Rutabaga	89.7	36	1.2	0.2	8.1	2.5	0.8	47	0.5	58	20	337	2	0.09	0.04	0.70	25.0
Salsify	77.0	83	3.3	0.2	18.6	3.3	0.9	60	0.7	75	20	380	0	0.08	0.22	0.50	8.0
Scallion	89.8	32	1.8	0.2	7.3	2.6	0.8	72	1.5	37	16	276	997	0.06	0.08	0.53	18.8
Soybean sprouts	86.3	240	6.2	1.4	4.5	0.8	0.8	67	2.1	164	30	36	-	0.34	0.12	2.4	15.3
Spinach	91.4	23	2.9	0.4	3.6	2.2	1.7	99	2.7	49	79	558	9377	0.08	0.19	0.72	28.1
Squash																	
Acorn	87.8	40	0.8	0.1	10.4	1.5	0.9	33	0.7	36	3	347	367	0.14	0.01	0.70	11.0
Butternut	86.4	45	1.0	0.1	11.7	2.0	0.8	48	0.7	33	4	352	10630	0.10	0.02	1.2	21.0
Hubbard	88.0	40	2.0	0.5	8.7	-	0.8	14	0.4	21	7	320	1367	0.07	0.04	0.50	11.0
Hokkaido	76.2	381	1.9	0.3	20.6	3.5	1.0	15	0.5	43	1	450	-	0.07	0.09	1.50	43
Spaghetti	91.6	31	0.6	0.6	6.9	-	0.3	23	0.3	12	17	108	50	0.04	0.02	0.95	2.1
Summer	94.6	16	1.2	0.2	3.4	1.1	0.6	15	0.4	38	2	262	200	0.05	0.14	0.49	17.0
Swiss chard	92.7	19	1.8	0.2	3.7	1.6	1.6	51	1.8	46	213	379	6116	0.04	0.09	0.40	30.0
Tomato																	
Fresh	94.5	18	0.9	0.2	3.9	1.2	0.5	10	0.3	24	5	237	833	0.04	0.02	0.59	13.7
Sun-dried	14.6	258	14.1	3.0	55.8	12.3	12.6	356	9.1	356	2095	3427	874	0.53	0.49	9.05	39.2
Turnips	91.9	28	0.9	0.1	6.4	1.8	0.7	30	0.3	27	67	191	0	0.04	0.03	0.40	21.0
Turnip greens	89.7	32	1.5	0.3	7.1	3.2	1.4	190	1.1	42	40	296	11587	0.07	0.10	0.60	60.0
Watercress	94.1	11	2.3	0.1	1.3	0.5	1.2	120	0.2	60	41	330	3191	0.09	0.12	0.20	43
Yellow or wax beans	90.3	31	1.8	0.1	7.1	3.4	0.7	37	1.0	38	6	209	108	0.08	0.11	0.75	16.3
Zucchini	94.8	17	1.2	0.3	3.1	1.0	0.6	16	0.4	38	8	261	200	0.05	0.09	0.45	17.9

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Nia--cin	Vita C
	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
4. SEA VEGETABLES																	
Agar agar	91.3	26	0.5	0.03	6.8	0.5	1.4	54	1.9	5	9	226	0	0.01	0.02	0.06	0
Arame	16.7	140	12.4	0.7	56.2	48.0	14.0	790	3.5	250	2300	3200	-	0.10	0.26	2.3	0
Dulse	16.6	-	-	3.0	-	0.7	3.7	567	6.3	22	-	-	-	-	-	-	-
Hiziki	13.6	139	10.6	1.3	56.2	43.3	18.3	1400	55.0	100	1400	4400	-	0.36	1.10	2.9	0
Irish moss	81.3	49	1.5	0.2	12.3	1.3	4.7	72	8.9	157	67	63	118	0.02	0.47	0.59	3.0
Kelp	81.6	43	1.7	0.6	9.6	1.3	6.6	168	2.9	42	233	89	116	0.05	0.15	0.47	3.0
Kombu	10.0	140	3.3	1.5	53.5	36.8	21.7	430	3.0	320	3000	5200	-	0.19	0.41	2.1	20
Nori	85.0	35	5.8	0.3	5.1	0.3	3.8	70	1.8	58	48	356	5202	0.10	0.45	1.47	39.0
Sea Palm	-	257	~10-11	-	57.1	~10-11	-	1142	15.4	-	2099	-	-	-	-	-	17.1
Spirulina	90.7	26	5.9	0.4	2.4	-	0.6	12	2.8	11	98	127	56	0.22	0.34	1.20	0.9
Wakame	80.0	45	3.0	0.6	9.1	0.5	7.2	150	2.2	80	872	50	360	0.06	0.23	1.6	3.0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
5. STARCHES																	
Arrowroot	11.4	357	0.3	0.1	88.2	3.4	0.1	40	0.3	5	2	11	0	0	0	0	0
Cassava	59.7	263	1.1	0.3	38.1	1.8	0.6	16	0.3	127	14	271	-	0.09	0.05	1.17	206
Cornstarch	8.3	381	0.3	0.1	91.3	0.9	0.1	2	0.5	13	9	3	0	0	0	0	0
Jinenjo	68.8	121	2.8	0.7	26.7	2.0	1.0	10	0.8	31	6	550	-	0.11	0.04	-	15
Kuzu																	
Dried	13.6	-	13.3	2.2	321	31.4	7.4	-	-	-	-	-	-	-	-	-	-
Powder	16.5	336	0.2	0.1	83.1	0	0.1	17	2.0	10	2	-	0	0	0	0	0
Potato																	
White	79.3	77	2.0	0.1	17.5	2.2	1.1	12	0.8	57	6	421	2	0.08	0.03	1.05	19.7
Sweet	77.3	86	1.6	0.1	20.1	3.0	1.0	30	0.6	47	55	337	14187	0.08	0.06	0.56	2.4
Taro	81.4	67	1.3	0.1	16.3	-	0.8	26	0.4	34	13	418		0.10	0.02	0.48	2.6
Yam	69.6	118	1.5	0.2	27.9	4.1	0.8	17	0.5	55	9	816	138	0.11	0.03	0.55	17.1

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
6. SWEETENERS																	
Agave	81.8	68	0.5	0.2	16.2	6.6	1.3	417	1.8	7	14	127	37	0.03	0.04	0.16	4.0
Barley malt	3.2	367	6.0	Tr	89.2	Tr	1.6	48	8.7	294	80	230	-	0.36	0.45	9.8	-
Carob, flour	3.6	222	4.6	0.7	88.9	39.8	2.3	348	2.9	79	35	827	14	0.05	0.46	1.90	0.2
Chocolate, dark	1.4	598	7.8	42.6	45.9	10.9	2.3	73	11.9	308	20	715	39	0.03	0.08	1.05	0
Fructose	23.9	279	0	0	76.1	0.1	0	1	0.1	0	2	0	0	0	0.2	0	0
Honey	17.1	304	0.3	0	82.4	0.2	0.2	6	0.4	4	4	52	0	0	0.04	0.12	0.5
Maple syrup	8.0	354	0.1	0.2	90.9	0	0.8	90	1.6	3	11	274	0	0.01	0.01	0.04	0
Molasses	21.9	290	0	0.1	74.7	0	3.3	205	4.7	31	37	1464	0	0.04	0.00	0.93	0
Rice syrup	17.0	321	0	0	83.0	0	0	2	0.1	1	1	-	0	0	0	0	0
Stevia	4	100	0	0	46	0	0	0	0	0	0	0	0	0	0	0	0
Sugar																	
Brown	1.3	380	0.1	0	98.1	0	0.45	83	0.7	4	28	133	0	0	0	0.11	0
White	0.02	387	0	0	99.9	0	0.01	1	0.05	0	1	2	0	0	0.02	0	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
7. OIL & FAT																	
Balance Spread	59.9	337	0	36.4	2.0	0	1.7	3	0	1	580	32	5161	0	0	0	0
Butter	42.1	509	3.3	55.1	0	0	1.0	48	1.1	34	450	71	1698	0.01	0.07	0.02	0
Canola oil	0	884	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Coconut oil	0	862	0	100	0	0	0	0	0.04	0	0	0	0	0	0	0	0
Corn oil	0	884	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Flaxseed oil	0	884	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Lard	0	902	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Margarine	16.5	717	0.2	80.7	0.7	0	1.9	3	0.1	5	2	18	3577	0.01	0.04	0.02	0.2
Olive oil	0	884	0	100	0	0	0	1	0.6	0	2	1	0	0	0	0	0
Palm oil	0	884	0	100	0	0	0	0	0.05	0	0	0	0	0	0	0	0
Safflower	0	884	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Sesame oil	0	884	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0
Soy oil	0	884	0	100	0	0	0	0	0.1	0	0	0	0	0	0	0	0
Sunflower	0	884	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
8. SEASONINGS & CONDIMENTS																	
Catsup	69.2	97	1.7	0.3	25.2	0.3	3.7	18	0.5	33	1114	382	933	0.01	0.13	1.43	15.1
Curry powder	9.5	-	12.7	13.8	33.2	25.2	5.6	478	29.6	349	52	1543	-	0.25	0.28	3.47	11.4
Mayonsaise	21.7	688	0	77.8	0.3	0	0.4	7	0.2	25	486	14	0	0.01	0.06	0.01	0
Soy Mayo	56.3	322	6.0	31.8	3.1	1.1	2.9	53	0.3	49	773	66	43	0.05	0.04	0.09	0
Mirin	47.0	241	0.3	Tr	43.2	0	Tr	2	0	7	3	7	-	Tr	0	Tr	0
Mustard	82.7	67	4.4	4.0	3.6	3.3	3.6	58	1.5	106	113 5	138	71	0.34	0.03	0.52	1.5
Pepper																	
Black	12.5	251	10.4	3.3	64.0	25.3	4.5	443	9.7	158	20	1329	547	0.11	0.18	1.14	0
Red	8.1	318	12.0	17.3	56.6	27.2	6.0	148	7.8	293	30	2014	41610	0.33	0.92	8.70	76.4
White	11.4	296	10.4	2.1	68.6	26.2	1.6	265	14.3	176	5	73	0	0.02	0.13	0.21	21.0
Salt																	
Sea	4.0	0	0	0	0	0	96.0	51	3.0	1.2	3380 0	56	0	0	0	0	0
Rock	0.2	0	0	0	0	0	99.8	230	0.3	0	3870 0	0	0	0	0	0	0
Table	0.2	0	0	0	0	0	99.8	24	0.3	0	3875 8	8	0	0	0	0	0
Shoyu																	
Regular	70.8	53	6.3	0.04	7.6	0.8	15.3	19	1.9	125	5637	217	0	0.03	0.17	2.20	0
Low sodium	71.1	53	5.2	0.1	8.5	0.8	15.2	17	2.0	110	3333	180	0	0.05	0.13	3.36	0
Tamari	66.0	60	10.5	0.1	5.6	0.8	17.8	20	2.4	130	5586	212	0	0.06	0.15	4.00	0
Tekka	40.0	249	9.0	5.2	42.8	2.0	3.0	150	60	250	-	-	0	0.10	0.15	1.5	0
Umeboshi	65.1	138	0.9	0.2	10.5	3.6	23.3	65	1.0	21	3700	440	-	0.02	0.01	0.4	0
Vinegar																	
Apple cider	93.8	21	0	0	0.9	0	0.2	7	0.2	8	5	73	0	0	0	0	0
Balsamiic	76.5	88	0.5	0	17.0	0	0.4	27	0.7	19	23	112	0	-	-	-	0
Red wine	94.5	19	0.04	0	0.3	0	0.2	6	0.5	8	8	39	0	-	-	-	0.5
Wasabi	69.1	109	4.8	0.6	23.5	7.8	1.9	128	1.0	568	17	568	35	0.03	0.11	0.74	41.9

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Nia-cin	Vita C
	%	Calorie	Grams	Grms	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
9. FRUITS																	
Acai, freeze-dried	3.4	533.9	8.1	325	52.2	44.2	3.8	260	4.4	-	30.4	-	1002	-	-	-	0.1
Apple	85.6	52	0.3	0.2	13.8	2.4	0.2	6	0.1	11	1	107	54	0.02	0.03	0.09	4.6
Apricot	86.4	48	1.4	0.4	11.1	2.0	0.8	13	0.4	23	1	259	1926	0.03	0.04	0.60	10.0
Avocado	72.3	167	2.0	15.4	8.6	6.8	1.7	13	0.6	54	8	507	147	0.08	0.14	1.91	8.8
Banana	74.9	89	1.1	0.3	22.8	2.6	0.8	5	0.3	22	1	358	64	0.03	0.07	0.67	8.7
Blackberry	88.2	43	1.4	0.5	9.6	5.3	0.4	29	0.6	22	1	162	214	0.02	0.03	0.65	21.0
Blueberry	84.2	57	0.7	0.3	14.5	2.4	0.2	6	0.3	12	1	77	54	0.04	0.04	0.42	9.7
Cantaloupe	90.2	34	0.8	0.2	8.2	0.9	0.7	9	0.2	15	16	267	3382	0.04	0.02	0.73	36.7
Casaba	91.9	28	1.1	0.1	6.6	0.9	0.4	11	0.3	5	9	182	0	0.02	0.03	0.23	21.8
Cherry	91.4	32	0.4	0.3	7.7	1.1	0.2	12	0.2	11	7	146	75	0.02	0.06	0.40	10
Cranberry	87.1	46	0.4	0.1	12.2	4.6	0.2	8	0.3	13	2	85	60	0.01	0.02	0.10	13.3
Currant	84.0	56	1.4	0.2	13.8	4.3	0.7	33	1.0	44	1	275	42	0.04	0.05	0.10	41.0
Date	21.3	277	1.8	0.2	75.0	6.7	1.7	64	0.9	62	1	696	149	0.05	0.06	1.61	0
Elderberry	79.8	-	0.7	0.5	11.4	7.0	0.6	47.4	0.9	55.8	8	32.1	-	0.07	0.06	1.92	29.0
Fig	79.1	74	0.8	0.3	19.2	2.9	0.7	35	0.4	14	1	232	142	0.06	0.05	0.40	2.0
Goji berry	-	112	10.6	-	21.0	7.7	-	112	8.4	-	-	-	-	0.15	-	-	18.4
Gooseberry	87.9	61	0.9	0.6	6.9	3.2	0.4	26.5	0.4	23.6	2	176	-	0.01	0.03	0.40	33
Grapefruit	90.9	32	0.6	0.1	8.1	1.1	0.3	12	0.1	8	0	139	33	0.04	0.02	0.28	34.4
Grape	84.3	57	0.8	0.5	13.9	3.9	0.5	37	0.3	24	1	203	67	0.05	0.3	0.03	4
Guava	80.8	68	2.6	1.0	14.3	5.4	1.4	18	0.3	40	2	417	624	0.07	0.04	1.08	228
Honeydew	89.8	36	0.5	0.1	9.1	0.8	0.4	6	0.2	11	16	228	50	0.04	0.01	0.16	18.0
Kiwi	83.2	60	1.2	0.6	14.2	2.0	0.8	20	0.3	29	3	316	72	0.02	0.05	0.28	105
Kumquat	80.9	71	1.9	0.9	15.9	6.5	0.5	62	0.9	19	10	186	290	0.04	0.09	0.43	43.9
Lemon	89.0	29	1.1	0.3	9.3	2.8	0.3	26	0.6	16	2	138	22	0.04	0.02	0.10	53.0
Lime	88.3	30	0.7	0.2	10.5	2.8	0.3	33	0.6	18	2	102	50	0.03	0.02	0.20	29.1
Lingonberry	86.3	0	0.8	1.2	7.2	3.7	0.3	20	0.4	14	2	89	-	-0.05	0.04	0.63	11
Lychee	81.8	66	0.8	0.4	16.5	1.3	0.4	5	0.3	31	1	171	-	0.01	0.07	0.72	71.5
Mango	83.5	60	0.8	0.4	15.0	1.6	0.4	11	0.2	14	1	168	1082	0.03	0.04	0.67	36.4
Nectarine	87.6	44	1.1	0.3	10.6	1.7	0.5	6	0.3	26	0	201	332	0.02	0.03	1.13	5.4
Olive	80.0	115	0.8	10.7	6.3	3.2	2.2	88	3.3	3	735	8	403	0.00	0	0.04	0.9
Orange	87.1	46	0.7	0.2	11.5	2.4	0.4	43	0.1	12	0	169	225	0.10	0.04	0.4	45.0
Papaya	88.1	43	0.5	0.3	10.8	1.7	0.4	20	0.3	10	8	182	950	0.02	0.03	0.36	60.9
Peach	88.9	39	0.9	0.3	9.5	1.5	0.4	6	0.3	20	0	190	326	0.02	0.03	0.81	6.6

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Nia-cin	Vita C
	%	Calorie	Grams	Grms	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
FRUITS																	
Pear	83.7	58	0.4	0.1	15.5	3.1	0.3	9	0.2	11	1	119	23	0.02	0.03	0.16	4.2
Persimmon	64.4	127	0.8	0.4	33.5	-	0.9	27	2.5	26	1	310	-	-	-	-	66.0
Pineapple	85.7	50	0.5	0.4	11.6	1.4	0.4	18.9	0.2	13.9	4	174	-	0.8	0.02	0.02	25
Plum	87.2	46	0.7	0.3	11.4	1.4	0.4	6	0.2	16	0	157	345	0.03	0.03	0.42	9.5
Prickly pear	87.6	41	0.7	0.5	6	3.6	1.6	56	0.3	24	5	220	-	0.01	0.06	0.46	14.0
Quince	83.8	57	0.4	0.1	15.3	1.9	0.4	11	0.7	17	4	197	40	0.02	0.03	0.20	15.0
Raisin	16.6	296	2.5	0.5	78.5	6.8	1.9	28	2.6	75	28	825	0	0.11	0.18	1.11	5.4
Raspberry	85.7	52	1.2	0.7	11.9	6.5	0.5	25	0.7	29	1	151	33	0.03	0.04	0.60	26.2
Rhubarb	93.6	21	0.9	0.2	4.5	1.8	0.8	86	0.2	14	4	288	102	0.02	0.03	0.30	8.0
Rose hips	83.4	162	0.6	0.5	8.6	6.1	0.9	184	0.2	35.0	24	410	-	-0.06	0.07	0.50	840
Strawberry	91.0	32	0.7	0.3	7.7	2.0	0.4	16	0.4	24	1	153	12	0.02	0.02	0.39	58.9
Tangerine	85.2	53	0.8	0.3	13.3	1.8	0.4	37	0.2	20	2	166	681	0.06	0.04	0.38	26.7
Watermelon	91.5	30	0.6	0.2	7.6	0.4	0.3	7	0.2	11	1	112	569	0.03	0.02	0.18	8.1

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
10. NUTS																	
Acorn	27.9	387	6.2	23.9	40.8	-	1.4	41	.8	79	0	539	39	0.11	0.12	1.8	0
Almond	4.7	575	21.2	49.2	21.7	12.2	3.0	264	3.7	484	1	705	1	0.21	1.01	3.39	0
Brazil	3.5	656	14.3	66.4	12.3	7.5	3.5	160	2.4	725	3	659	0	0.62	0.04	0.30	0.7
Cashew	5.2	553	18.2	43.9	30.2	3.3	2.5	37	6.7	593	12	660	0	0.42	0.06	1.06	0.5
Chestnut																	
Fresh	52	196	1.6	1.3	44.2	-	1.0	19	0.9	38	2	484	26	0.14	0.02	1.10	40.2
Dried	9.5	374	6.4	4.5	77.3	11.7	2.4	67	2.4	175	37	986	0	0.30	0.36	0.85	15.0
Coconut	47.0	354	3.3	33.5	15.2	9.0	1.0	14	2.4	113	20	356	0	0.07	0.2	0.54	3.3
Hazelnut	5.3	628	15.0	60.8	16.7	9.7	2.3	114	4.7	290	0	680	20	0.64	0.11	1.80	6.3
Macadamia	1.4	718	7.9	75.8	13.8	8.6	1.1	85	3.7	188	5	368	0	1.20	0.16	2.47	1.2
Peanut																	
Peanut	6.5	567	25.8	49.2	16.1	8.5	2.3	92	4.6	376	18	705	0	0.64	0.14	12.07	0
Butter	1.1	589	24.1	50.0	21.6	8.0	3.3	45	1.9	319	17	745	0	0.11	0.11	13.70	0
Pecan	3.5	691	9.1	71.8	13.9	9.6	1.5	70	2.5	277	0	410	56	0.66	0.13	1.17	1.1
Pine	2.3	673	13.7	68.4	13.1	3.7	2.6	16	5.5	575	2	597	29	0.36	0.23	4.39	0.8
Pistachio	3.9	562	20.3	45.4	27.5	10.3	2.9	105	3.9	490	1	1025	415	0.87	0.16	1.30	5.6
Walnut	4.1	654	15.2	65.2	13.7	6.7	1.8	98	2.9	346	2	441	20	0.34	0.15	1.15	1.3

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
11. SEEDS																	
Chia, dried	4.9	490	15.6	30.8	43.9	37.7	4.9	631	-	948	19	160	-	-	-	-	-
Flaxseed	7.0	534	18.3	42.2	28.9	27.3	3.7	255	5.7	642	30	813	0	1.64	0.16	3.08	0.6
Lotus	77.0	89	4.1	0.5	17.3	-	1.1	44	1.0	168	1	367	13	0.17	0.04	0.43	0
Poppy	5.6	525	18.0	41.6	28.1	19.5	6.4	1438	9.8	870	26	719	0	0.85	0.10	0.90	1.0
Pumpkin	5.2	559	30.2	49.1	10.7	6.0	4.8	46	8.8	1233	7	809	16	0.27	0.15	4.99	1.9
Sesame	4.7	573	17.7	49.7	23.5	11.8	4.5	975	14.6	629	11	468	9	0.79	0.25	4.52	0
Butter	1.6	586	18.1	50.9	24.1	5.5	5.4	960	19.2	659	12	582	50	0.24	0.20	6.7	0
Tahini	3.1	595	17.0	53.7	21.2	9.3	5.0	426	9.0	732	115	414	67	1.22	0.47	5.5	0
Sunflower	4.7	584	20.8	51.5	20.0	8.6	3.0	78	5.3	660	9	645	50	1.48	0.36	8.34	1.4
Butter	0.6	617	17.3	55.2	23.2	5.7	3.6	64	4.1	576	3	576	52	0.05	0.16	6.75	2.7
Watermelon	5.1	557	28.3	47.4	15.3	-	3.9	54	7.3	755	99	648	0	0.19	0.15	3.6	-
12. FISH																	
Bass, striped	78.3	97	18.4	2	0	0	1.1	10	0.3	194	68	256	154	0.11	0.12	1.60	0
Bluefish	70.9	124	20.0	4.2	0	0	1.0	7	0.5	227	60	372	398	0.06	0.08	5.94	0
Bonito	67.6	168	24.0	7.3	0	0	1.4	-	-	-	-	-	-	-	-	-	-
Carp	76.3	127	17.8	5.6	0	0	1.5	41	1.2	415	49	333	30	0.12	0.06	1.64	1.6
Catfish	80.4	95	16.4	2.8	0	0	1.0	14	0.3	209	43	358	50	0.21	0.07	1.91	0.7
Cod	81.2	82	17.8	0.7	0	0	1.2	16	0.4	203	54	413	40	0.08	0.07	2.06	1
Eel	68.3	184	18.4	11.7	0	0	1.4	20	0.5	216	51	272	3477	0.15	0.04	3.5	1.8
Flounder	84.6	70	12.4	1.9	0	0	1.2	21	0.2	252	296	160	33	0.02	0.02	1.04	0
Haddock	83.4	74	16.3	0.5	0	0	1.3	11	0.2	227	213	286	57	0.02	0.06	3.36	0
Halibut	80.3	91	18.6	1.3	0	0	1.3	7	0.2	236	68	435	67	0.05	0.03	6.51	0
Herring	72.1	158	18.0	9.0	0	0	1.5	57	1.1	236	90	327	93	0.09	0.23	3.22	0.7
Iriko	-	327	68.2	4.0	0	0	14.4	2062	20.3	1377	885	1154	-	0.04	0.20	14.2	-
Mackerel	63.6	205	18.6	13.9	0	0	1.4	12	1.6	217	90	314	167	0.18	0.31	9.08	0.4
Mullet	77.0	117	19.4	3.8	0	0	1.2	41	1.0	221	12	10	123	0.09	0.08	5.2	1.2
Perch	79.1	91	19.4	0.9	0	0	1.2	80	0.9	200	62	269	30	0.07	0.10	1.52	1.7
Salmon	75.5	127	20.5	4.4	0	0	1.5	7	0.4	261	75	366	117	0.08	0.11	8.00	0
Sardine	59.6	208	24.6	11.5	0	0	3.4	382	2.9	490	505	397	108	0.08	0.23	5.25	0
Smelt	78.8	97	17.6	2.4	0	0	1.4	60	0.9	230	60	290	50	0.01	0.12	1.45	0
Snapper	76.9	100	20.5	1.3	0	0	1.3	32	0.2	198	64	417	106	0.05	0.00	0.28	1.6
Sole	84.6	70	12.4	1.9	0	0	1.2	21	0.2	252	296	160	33	0.02	0.02	1.04	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
FISH	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Swordfish	73.4	144	19.7	6.7	0	0	1.4	5	0.4	255	81	418	120	0.08	0.05	7.76	0
Tilapia	78.1	96	20.1	1.7	0	0	0.9	10	0.6	170	52	302	0	0.04	0.06	3.90	0
Trout	71.2	119	20.5	3.5	0	0	1.3	67	0.7	271	31	48	62	0.12	0.10	5.38	2.4
Tuna	74.0	109	24.4	0.5	0	0	1.6	4	0.8	278	45	441	60	0.12	0.12	18.5	0
Whitefish	72.3	134	19.1	5.9	0	0	1.1	26	0.4	317	51	317	120	0.14	0.12	3.00	0
13. SEAFOOD																	
Abalone	74.6	105	17.1	0.8	6.0	0	1.6	31	3.2	190	301	250	7	0.19	0.10	1.50	2
Clam	79.0	86	14.7	1.0	3.6	0	1.8	39	1.6	198	601	46	300	0.02	0.04	0.35	0
Lobster	81.0	77	16.5	0.8	0	0	1.9	84	0.3	161	423	200	4	0.02	0.01	1.59	0
Mussel	80.6	86	11.9	2.2	3.7	0	1.6	26	4.0	197	286	320	160	0.16	0.21	1.60	8
Octopus	80.3	82	14.9	1.0	1.6	0	1.6	53	5.3	186	230	350	150	0.03	0.04	2.1	5
Oyster	89.0	51	5.7	1.7	2.7	0	0.8	59	4.6	97	85	156	44	0.02	0.09	0.93	0
Scallop	82.5	69	12.1	0.5	3.2	0	1.7	6	0.4	334	392	205	3	0.01	0.02	0.70	0
Shrimp	83.0	71	13.6	1.0	0.9	0	1.9	54	0.2	244	566	113	180	0.02	0.02	1.78	0
Squid	78.6	92	15.6	1.4	3.1	0	1.4	32	0.7	221	44	246	33	0.02	0.41	2.18	4.7

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
14. BEVERAGES																	
Amasake	-	50	1.1	0.3	10.4	0.3	0.4	6.1	1.1	93	1.9	76.8	0	0.13	0.03	1.9	0
Coffee																	
Beans, roasted & ground	5.5	-	14.6	15.4	50.2	19.8	4.0	120	4.1	160	74	2020	-	0.07	0.20	16.8	0
Black	99.4	1	0.1	0.02	0	0	0.4	2	0.0	3	2	49	0	0.01	0.08	0.19	0
Decaf	99.3	0	0.1	0	0	0	0.1	2	0.1	1	2	54	0	0	0	0.22	0
Grain, powder	8.0	360	6.0	2.5	78.4	23.3	5.1	58	4.6	580	83	2443	8	0.41	0.10	17.7	0
Cola	89.6	41	0	0	10.6	0	0.1	2	0.02	11	4	3	0	0	0	0	0
Juice																	
Apple	88.2	46	0.1	0.1	11.3	0.2	0.2	8	0.1	7	4	101	1	0.02	0.02	0.07	0.9
Apricot	86.6	48	0.6	0.04	12.3	1.6	0.4	12	0.3	20	4	165	1691	0.02	0.02	0.34	4.9

<i>Food</i>	<i>Water</i>	<i>Energy</i>	<i>Protein</i>	<i>Fat</i>	<i>Carbs</i>	<i>Fiber</i>	<i>Ash</i>	<i>CA</i>	<i>Iron</i>	<i>Phos</i>	<i>NA</i>	<i>K</i>	<i>Vita A</i>	<i>Vita B1</i>	<i>Vita B2</i>	<i>Nia-cin</i>	<i>Vita C</i>
BEVERAGES	%	Calories	Grams	Gr	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Carrot	88.9	40	1.0	0.2	9.3	0.8	0.8	24	0.5	42	29	292	19124	0.09	0.06	0.39	8.5
Celery	94.1	18	0.8	0.2	4	1.6	-	42	0.4	25	91	284	-	0.05	0.14	0.32	6.1
Cranberry	87.1	46	0.4	0.1	12.2	0.1	0.2	8	0.3	13	2	77	45	0.01	0.02	0.09	9.3
Grape	84.5	60	0.4	0.1	14.8	0.2	0.2	11	0.3	14	5	104	8	0.02	0.02	0.13	0.1
Grapefruit	90.2	39	0.5	0.1	9.2	-	0.2	9	0.2	15	1	162	440	0.04	0.02	0.2	38.0
Lemon	92.3	22	0.4	0.2	6.9	0.3	0.2	6	0.1	8	1	103	6	0.02	0.02	0.09	38.7
Orange	88.3	45	0.7	0.2	10.4	0.2	0.4	11	0.2	17	1	200	200	0.09	0.03	0.40	50.0
Passion fruit	85.6	51	0.4	0.1	13.6	0.2	0.3	4	0.2	13	6	278	717	0	0.13	0.46	29.8
Peach	87.5	44	0.6	0.03	11.6	1.3	0.3	6	0.3	17	4	128	381	0.01	0.02	0.58	3.6
Pear	86.5	50	0.3	0.1	12.9	1.6	0.2	9	0.3	12	4	96	6	0.01	0.01	0.20	1.6
Pomegranate	85.6	54	0.2	0.3	13.1	0.1	0.5	11	0.1	11	9	214	0	0.02	0.02	0.23	0.1
Prune	81.2	71	0.6	0.03	17.5	1.0	0.7	12	1.2	25	4	276	3	0.02	0.07	0.79	4.1
Tea																	
Bancha leaf	-	-	0	0	0	0	-	3.0	0.1	1.0	1	21	0	0	0.2	0.1	2
Kukicha	7.0	-	20.3	4.3	61.0	19.0	5.4	720	37	200	60	-	9000	0.08	0.89	9.0	130
Black	9.0	-	22.6	2.4	58.2	10.7	5.1	460	17.0	310	50	-	1300	0.09	0.56	10.0	0
Green	6.0	-	31.6	4.6	49.6	10.6	5.4	440	20.0	280	60	-	9000	0.35	1.40	4.0	280
Chamomile	99.7	1	0	0	0.2	0	0	2	0.1	0	1	9	20	0.01	0.01	0	0
Alcohol																	
Beer	92.0	43	0.5	0	3.6	0	0.2	4	0.02	14	4	27	0	0.01	0.03	0.51	0
Distilled	66.6	231	0	0	0	0	0	0	0.04	4	1	2	0	0.01	0.01	0.01	0
Sake	78.4	134	0.5	0	5.0	0	0	5	0.1	6	2	25	0	0	0	0	0
Wine																	
Red	86.5	85	0.1	0	2.6	0	0.3	8	0.5	23	4	127	2	0.01	0.03	0.22	0
White	86.7	82	0.1	0	2.6	0	0.2	9.	0.3	18	5	71	0	0.01	0.02	0.11	0
Non-alcoholic	98.2	6	0.5	0	1.1	0	0.2	9	0.4	15	7	88	0	0	0.02	0.1	0

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
15. MEAT																	
Beef																	
Hamburger	58.2	293	15.8	25.0	0	0	0.8	21	1.8	145	67	244	0	0.04	0.14	3.8	0
Steak	64.5	214	19.9	14.3	0	0	1.0	25	1.5	181	51	309	0	0.05	0.08	6.43	0
Lamb	22.5	665	6.7	70.7	0	0	0.4	19	1.0	73	31	82	0	0.06	0.16	6.37	0
Mutton	75.8	109	20.6	2.3	0	0	1.1	13	2.8	180	82	385	0	0.11	0.49	3.8	0
Pig																	
Bacon	40.2	458	11.6	45.0	0.7	0	2.5	6	0.5	186	833	208	37	0.28	0.11	3.83	0
Ham	62.5	245	17.4	18.9	0	0	0.9	5	0.9	199	47	315	7	0.74	0.20	4.57	0.7
Hot dog	56.2	304	15.1	26.5	0	0	2.3	9	1.1	135	636	248	75	0.28	0.12	4.70	0.7
Pork	40.2	458	11.6	45.0	0	0	2.5	6	0.5	188	833	208	0	0.28	0.11	3.83	0
Veal	72.8	144	19.4	6.8	0	0	1.0	15	0.8	203	82	315	0	0.08	0.27	7.5	0
16. POULTRY																	
Chicken	66.0	215	18.6	15.1	0	0	0.8	11	0.9	147	70	189	140	0.06	0.12	6.80	1.6
Duck	66.5	211	17.4	15.2	0	0	1.2	5	4.2	168	56	249	88	0.35	0.27	3.12	5.2
Eggs																	
Whole	76.2	143	12.6	9.5	0.7	0	1.1	56	1.8	198	142	138	540	0.04	0.46	0.08	0
Yolk	52.3	322	15.9	26.4	3.6	0	1.7	129	2.7	390	48	109	1442	0.18	0.53	0.02	0
White	87.6	52	10.9	0.2	0.7	0	0.6	7	0.1	15	166	163	0	0	0.44	0.11	0
Goose	49.7	371	15.9	33.6	0	0	0.9	12	2.5	234	73	308	55	0.09	0.25	3.61	4.2
Turkey	72.7	134	22.8	4.3	0	0	0.9	13	1.4	173	58	243	4	0.04	0.05	4.04	0
17. DAIRY																	
Cheese																	
Cheddar	36.8	403	24.9	33.1	1.3	0	3.9	721	0.7	512	621	98	1002	0.03	0.38	0.08	0
Cottage	79.8	96	11.1	4.3	3.4	0	1.4	83	0.1	159	364	104	140	0.03	0.16	0.10	0
Feta	55.2	264	14.2	21.3	4.1	0	5.2	493	0.7	337	1116	62	422	0.15	0.84	0.99	0
Mozzarella	50.0	300	22.2	22.4	2.2	0	3.3	505	0.4	354	627	76	676	0.03	0.28	0.10	0
Processed	43.2	326	19.6	24.6	7.3	0	5.4	574	0.8	754	1596	279	762	0.03	0.44	0.56	0
Swiss	37.1	380	26.9	27.8	5.4	0	2.8	791	0.2	567	192	77	830	0.06	0.30	0.09	0
Cocoa, hot	82.5	77	3.5	2.3	10.7	1.0	0.7	114	0.4	105	44	197	176	0.04	0.18	0.13	0.2
Cream																	
Coffee	73.8	195	2.7	19.3	3.7	0	0.6	96	0.1	80	40	122	656	0.03	0.15	0.06	0.8
Sour	78.1	138	3.5	10.6	7.1	0	0.7	141	0.1	71	71	212	328	0.04	0.12	0.07	0.9

<i>Food</i>	Water	Energy	Protein	Fat	Carbs	Fiber	Ash	CA	Iron	Phos	NA	K	Vita A	Vita B1	Vita B2	Niacin	Vita C
DAIRY	%	Calories	Grams	Grams	Grams	Grams	Grams	Mg.	Mg.	Mg	Mg.	Mg.	I.U.	Mg.	Mg.	Mg.	Mg.
Whipped	61.3	257	3.2	22.2	12.5	0	0.8	101	0.1	89	130	147	685	0.04	0.07	0.07	0
Ice cream	61	207	3.5	11	23.6	0.7	0.9	128	0.1	105	80	199	412	0.04	0.24	0.12	0.6
Milk																	
<i>Buttermilk</i>	90.1	40	3.3	0.9	4.8	0	0.9	116	0.1	89	105	151	47	0.03	0.15	0.06	1
<i>Condensed</i>	27.2	321	7.9	8.7	54.4	0	1.8	284	0.2	253	127	371	267	0.09	0.42	0.21	2.6
Goat	87.0	69	3.6	4.1	4.5	0	0.8	134	0.1	111	50	294	198	0.05	0.14	0.28	1.3
Human	87.5	70	1.0	4.4	6.9	0	0.2	32	0.03	14	17	51	212	0.14	0.04	0.18	5.0
Low-fat 2%	89.2	50	3.3	2.0	4.8	0	0.7	120	0.02	92	47	140	102	0.04	0.19	0.09	0.2
Whole	88.1	61	3.2	3.2	4.8	0	0.7	113	0.03	84	43	132	162	0.05	0.17	0.09	0
Sherbet	66.1	144	1.1	2.0	30.4	1.3	0.4	54	0.1	40	46	96	46	0.03	0.10	0.06	2.3
Yoghurt	87.9	61	3.5	3.3	4.7	0	0.7	121	0.1	95	46	155	99	0.03	0.14	0.08	0.5

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¹ Alex Jack, "Nutrition Under Siege," *One Peaceful World Journal*, Spring, 1998, pp. 1, 7, 8. Alex Jack, *America's Vanishing Nutrients*, Amberwaves, 2002.

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