

| Refined Sugar | Yield | % | Adjusted | Protein | Fat | Carbs | Sugars | Time | Protein | Fat | Sugars | Sugars | Notes |
|-----------------------|------------|-------|------------|---------|---------|---------|---------|---------|----------|----------|----------|------------|--|
| Crop type | kg/ha-crop | | kg/ha-crop | percent | percent | percent | percent | mo/crop | kg/ha-yr | kg/ha-yr | kg/ha-yr | kg/ha-crop | |
| Sugar beet | 53148 | 0.145 | 7706 | 0.00% | 0.00% | 100.00% | 100.00% | 6 | 0 | 0 | 15413 | 7706 | 14.5% extractable sugar; industry data. |
| Tomato green | 80279 | 0.95 | 76265 | 1.20% | 0.20% | 5.10% | 4.00% | 2.5 | 4393 | 732 | 14643 | 3051 | Theoretical, based on USDA SR25 data. |
| Daikon high | 139000 | 1.00 | 139000 | 0.60% | 0.10% | 4.10% | 2.50% | 3 | 3336 | 556 | 13900 | 3475 | High but attainable yield. |
| Pumpkin sugar | 100000 | 0.70 | 70000 | 1.00% | 0.10% | 8.50% | 4.00% | 3 | 2800 | 280 | 11200 | 2800 | Assumes higher than usual sugar content. |
| Sugar cane | 69866 | 0.116 | 8104 | 0.00% | 0.00% | 100.00% | 100.00% | 12 | 0 | 0 | 8104 | 8104 | 11.6% extractable sugar; industry data. |
| Tomato red | 80279 | 0.95 | 76265 | 0.88% | 0.20% | 3.89% | 2.63% | 3 | 2685 | 610 | 8023 | 2006 | Tomatoes, red, ripe, raw, year round average |
| Onions sweet | 56071 | 0.90 | 50464 | 1.10% | 0.10% | 9.34% | 5.02% | 4 | 1665 | 151 | 7600 | 2533 | Onions, sweet, raw; USDA SR25 data. |
| Carrots high | 56000 | 0.89 | 49840 | 0.93% | 0.24% | 9.58% | 4.74% | 4 | 1391 | 359 | 7087 | 2362 | Carrots, raw; USDA SR25 data. |
| Daikon med | 100000 | 0.79 | 79000 | 0.60% | 0.10% | 4.10% | 2.50% | 3.5 | 1625 | 271 | 6771 | 1975 | Assumes moderate yield. |
| Rutabagas | 44000 | 0.85 | 37400 | 1.20% | 0.20% | 8.62% | 4.46% | 3 | 1795 | 299 | 6672 | 1668 | Rutabagas, raw; USDA SR25 data. |
| Yacon | 54000 | 0.80 | 43200 | 0.37% | 0.02% | 10.60% | 8.80% | 7 | 274 | 15 | 6517 | 3802 | 8.80% sugar, not including oligosaccharides. |
| Jerusalem artichoke | 20000 | 1.00 | 20000 | 2.00% | 0.01% | 17.44% | 9.60% | 4 | 1200 | 6 | 5760 | 1920 | 70 to 90% of sugar is oligosaccharides. |
| Mushroom | 300000 | 0.90 | 270000 | 2.18% | 0.34% | 3.26% | 1.98% | 12 | 5886 | 918 | 5346 | 5346 | Too labor intensive to be a source of sugar. |
| Turnip roots | 39333 | 0.89 | 35006 | 0.90% | 0.10% | 6.43% | 3.80% | 3 | 1260 | 140 | 5321 | 1330 | Turnips, raw; USDA SR25 |
| Watermelon | 35200 | 0.52 | 18304 | 0.61% | 0.15% | 7.55% | 6.20% | 3 | 447 | 110 | 4539 | 1135 | Watermelon, raw; USDA SR25 |
| Sweet sorghum | 10000 | 0.75 | 7500 | 0.00% | 0.00% | 18.00% | 18.00% | 4 | 0 | 0 | 4050 | 1350 | Sweet sorghum is also a high quality grain. |
| Chufa (tigernut) high | 14000 | 0.80 | 11200 | 5.00% | 30.00% | 47.00% | 11.70% | 4 | 1680 | 10080 | 3931 | 1310 | Chufa is also the most productive source of fat. |
| Squash Hubbard | 21052 | 0.95 | 19999 | 2.00% | 0.50% | 8.70% | 3.95% | 3 | 1600 | 400 | 3160 | 790 | Squash is essentially the same as pumpkin. |
| Peas green | 11414 | 1.00 | 11414 | 5.42% | 0.40% | 14.45% | 5.67% | 2.5 | 2969 | 219 | 3106 | 647 | Peas provide sugar and high quality protein. |
| Leeks | 41471 | 0.80 | 33177 | 1.50% | 0.30% | 14.15% | 3.90% | 5 | 1194 | 239 | 3105 | 1294 | Leeks are cold hardy, and a complete protein. |
| Parsnips | 25000 | 0.85 | 21250 | 1.20% | 0.30% | 17.99% | 4.80% | 4 | 765 | 191 | 3060 | 1020 | Parsnips need further development. |
| Peppers green | 30719 | 1.00 | 30719 | 0.86% | 0.17% | 4.64% | 2.40% | 3 | 1057 | 209 | 2949 | 737 | Red peppers have more sugar, longer season. |
| Eggplant | 37000 | 0.81 | 29970 | 1.01% | 0.19% | 5.70% | 2.35% | 3 | 1211 | 228 | 2817 | 704 | Needs further development to be a staple crop. |
| Broccoflower | 21353 | 1.00 | 21353 | 2.95% | 0.30% | 6.09% | 3.03% | 3 | 2520 | 256 | 2588 | 647 | Possible source of sugar and complete protein. |
| Cabbage savoy high | 70000 | 0.80 | 56000 | 2.00% | 0.10% | 6.10% | 2.27% | 6 | 2240 | 112 | 2542 | 1271 | Savoy variety is good for protein and sugar. |
| Swiss chard | 60000 | 0.92 | 55200 | 1.80% | 0.20% | 3.74% | 1.10% | 3 | 3974 | 442 | 2429 | 607 | Oxalic acid content makes this a poor choice. |
| Maize sweet high | 17012 | 0.80 | 13610 | 3.27% | 1.96% | 18.70% | 6.26% | 5 | 1068 | 640 | 2045 | 852 | Sweet corn, not dent corn, for sugar content. |
| Achira | 23000 | 0.80 | 18400 | 0.50% | 0.00% | 21.90% | 3.50% | 4 | 276 | 0 | 1932 | 644 | Edible root with high starch content. |
| Sweet potatoes | 22850 | 0.72 | 16452 | 1.57% | 0.05% | 20.12% | 4.18% | 5 | 620 | 20 | 1650 | 688 | High beta-carotene content. |

The above Chart lists the top potential crops for production of refined sugar in kilograms of sugar per hectare per year: **kg/ha-year**. Refined sugar consists of mono- and di-saccharides only (e.g. glucose, fructose, sucrose). Oligosaccharides contain 3 to 10 saccharide units, and are generally indigestible to humans. High, med, low indicate different crop yields.
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For a full explanation of the above Chart, see the article, "Comparison of Potential Staple Crops" at: <http://www.gardeningplaces.com/articles/>
See also my blog, Hunger Math at: <http://hungermath.wordpress.com/>
and my book: **Hunger Math: world hunger by the numbers** by Ronald L. Conte Jr.