

Chart 04 - Carbohydrate Crops in: Comparison of Potential Staple Crops

Carb Productivity	Yield	%	Adjusted	Protein	Fat	Carbs	Fiber	Time	Protein	Fat	Carbs	Calories	Protein	Fat	Carbs	Calories
Crop type	kg/ha-crop		kg/ha-crop	percent	percent	percent	percent	mo/crop	kg/ha-yr	kg/ha-yr	kg/ha-yr	kcal/m ² -yr	kg/ha-crop	kg/ha-crop	kg/ha-crop	kcal/m ² -crop
Rice (Nerica) high	7941	0.75	5956	10.70%	0.66%	79.95%	1.30%	3	2549	157	18737	8,377	637	39	4684	2094
Sugar beet	53148	0.145	7706	0.00%	0.00%	100.00%	0.00%	6	0	0	15413	5,965	0	0	7706	2982
Tomato green	80279	0.95	76265	1.20%	0.20%	5.10%	1.10%	2.5	4393	732	14643	8,014	915	153	3051	1670
Chufa (tigernut) high	14000	0.80	11200	5.00%	30.00%	47.00%	4.30%	4	1680	10080	14347	15,113	560	3360	4782	5038
Rice (paddy) high	7941	0.75	5956	7.13%	0.66%	79.95%	1.30%	4	1274	118	14053	6,036	425	39	4684	2012
Daikon high	139000	1.00	139000	0.60%	0.10%	4.10%	1.60%	3	3336	556	13900	7,162	834	139	3475	1790
Sugar beet	53148	0.90	47833	1.61%	0.17%	17.30%	2.80%	6	1540	163	13872	6,108	770	81	6936	3054
Maize (corn) high	10339	0.80	8271	6.93%	3.86%	76.85%	7.30%	5	1376	766	13806	6,553	573	319	5753	2730
Maize QPM high	10339	0.80	8271	6.93%	3.86%	76.85%	7.30%	5	1376	766	13806	6,553	573	319	5753	2730
Pumpkin seed+flesh	100000	0.72	72200				0.00%	4	4095	3447	12911	9,628	1365	1149	4304	3210
Pumpkin flesh high	100000	0.70	70000	1.00%	0.10%	6.50%	0.50%	4	2100	210	12600	5,875	700	70	4200	1958
Yams high	40000	0.86	34400	1.53%	0.17%	27.88%	4.10%	8	789	88	12270	5,132	526	58	8180	3421
Onions	56071	0.90	50464	1.10%	0.10%	9.34%	1.70%	4	1665	151	11566	5,254	555	50	3855	1751
Chufa (tigernut) med	11000	0.80	8800	5.00%	30.00%	47.00%	4.30%	4	1320	7920	11273	11,875	440	2640	3758	3958
Leeks	41471	0.80	33177	1.50%	0.30%	14.15%	1.80%	5	1194	239	9834	4,479	498	100	4097	1866
Potato	28000	0.75	21000	2.02%	0.09%	17.47%	2.20%	4	1273	57	9620	4,266	424	19	3207	1422
Jerusalem artichoke	20000	1.00	20000	2.00%	0.01%	17.44%	1.60%	4	1200	6	9504	4,148	400	2	3168	1383
Rutabagas	44000	0.85	37400	1.08%	0.20%	8.62%	2.30%	3	1616	299	9455	4,549	404	75	2364	1137
Carrots high	56000	0.80	44800	0.93%	0.24%	9.58%	2.80%	4	1250	323	9112	4,295	417	108	3037	1432
Achira	23000	0.80	18400	0.50%	0.00%	21.90%	6.00%	4	276	0	8777	3,503	92	0	2926	1168
Parsnips	25000	0.85	21250	1.20%	0.30%	17.99%	4.90%	4	765	191	8345	3,695	255	64	2782	1232
Tomato	80279	0.95	76265	0.88%	0.20%	3.89%	1.20%	3	2685	610	8206	4,754	671	153	2052	1189
Sugar cane	69866	0.116	8104	0.00%	0.00%	100.00%	0.00%	12	0	0	8104	3,136	0	0	8104	3136
Sorghum grain	4355	0.85	3702	11.30%	3.30%	74.63%	6.30%	4	1255	366	7588	3,746	418	122	2529	1249
Duckweed high	30000	1.00	30000	35.00%	5.00%	34.00%	10.95%	12	10500	1500	6915	8,066	10500	1500	6915	8066
Sweet potatoes	22850	0.72	16452	1.57%	0.05%	20.12%	3.00%	5	620	20	6760	2,873	258	8	2817	1197
Enset	9500	1.00	9500	4.42%	0.24%	76.34%	7.14%	12	420	23	6574	2,727	420	23	6574	2727
Turnip roots	39333	0.89	35006	0.90%	0.10%	6.43%	1.80%	3	1260	140	6483	3,120	315	35	1621	780
Kale high	40000	1.00	40000	3.30%	0.70%	10.01%	2.00%	6	2640	560	6408	3,997	1320	280	3204	1998
Mushroom	300000	0.90	270000	2.18%	0.34%	3.26%	1.00%	12	5886	918	6102	5,451	5886	918	6102	5451
Cassava short season	12359	0.90	11123	1.36%	0.28%	38.06%	1.80%	8	227	47	6050	2,470	151	31	4033	1647

The above Chart lists the top crops for production of carbohydrates per hectare per year: kg/ha-year.

High, med, low indicate different crop yields.

QPM is Quality Protein Maize.

Pumpkin seed+flesh combines carbs from the flesh and the seeds.

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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.