

## CLARIFICATIONS AND EXAMPLES

### General Aids for Planning Your Diet

— **60-65% of the area — “Carbon-and-Calorie Crops” — High-CARBON-producing AND significant-calorie-producing (weight-efficient [see below]) crops**

Grains: Wheat, Cereal Rye, Oats, Barley, Triticale, Corn, Sorghum, Amaranth, Quinoa, etc.  
 Fava Beans (grown to maturity for dry bean and dry biomass production)  
 Sunflowers (sunflower seeds very high in fat; maximum to avoid copper toxicity = 0.62 lb / day)  
 Filberts  
 Raisins

— **30% of the area — “High-Calorie Root Crops” — Area- and weight-efficient crops for calories**

Crops for this category need to be both area- and weight-efficient. As defined **for this worksheet**, a crop is considered to be “area-efficient” if the annual area needed for total calories is 16 beds (1600 sq ft) or less, assuming **GROW BIOINTENSIVE intermediate** yields; it is considered to be “**weight-efficient**” if the daily weight of food to be eaten for total calories is 9 pounds or less.\*

<b>Potatoes</b> (12.2 / 6.7) Maximum to avoid potassium toxicity = 2.5 lb / day	
<b>Jerusalem Artichoke</b> (12.3 / 7.0)**	<b>Garlic</b> (10.8 / 3.6)**
<b>Leeks</b> (6.6 / 8.7)	<b>Parsnips</b> (10.8 / 7.1)
<b>Sweet Potatoes</b> (11.2 / 5.0)	<b>Salsify</b> (11.8 / 6.5)

AREA in 100-sq-ft beds / WEIGHT in lb: e.g., it takes **12.2** beds of **potatoes** to produce the 2,400 calories per day needed by an average person—who would have to eat **6.7** lb of potatoes per day.

\*\* Jerusalem artichoke and some varieties of hard-neck garlic may produce significant amounts of dry biomass.

The crops below are **weight-efficient**, but **require more area** to grow and produce **relatively little biomass**. Therefore, they should be included in the 10% “Vegetable Crops” category.

Peanuts (34.1 / 0.9) Very high in fat	Soybeans (58.0 / 3.8)
Beans (except Fava Beans) (56.8 / 4.7)	Burdock (17.8 / 7.3) (assuming Carrot yield)
Cassava (20.1 / 3.3) May produce modest amount of carbon	

The following crops can be **area-efficient if yields are high enough**, but the **daily weight of food exceeds the guidelines**, so they should be included in the 10% “Vegetable Crops” category.

Onions, Regular (12.7 / 14.0)	Turnips + Tops (8.8 / 19.4)	Rutabaga (13.4 / 14.7)
(assuming 2 crops are possible OR yield is two times intermediate)		

**NOTE:** For diet diversity, you may choose crops that are **less** weight-efficient (e.g. regular onions, 14.0 lb per day); in which case, you need to have a significant amount of food from crops that are **more** weight-efficient (e.g. filberts (0.8 lb per day) and/or increase your design area.

ROOT CROPS THAT ARE NOT GOOD CHOICES *FOR THIS CATEGORY*:

Carrots (30.0 / 12.3) Beets / Mangels (roots only) (40.8 / 12.3) Radishes (48.1 / 26.4)

— **5-10% of the area — “Vegetable Crops”**

**Low-calorie-producing, low-carbon-producing miscellaneous vegetables for vitamins and minerals**

\* In the book *One Circle* by Duhon, an “area-efficient” crop can provide total calories with 700 sq ft or less (550 sq ft for a woman, 850 sq ft for a man), and a “weight-efficient” crop can provide total calories in 6 pounds or less for a man or 5.5 pounds or less for a woman.