

# Return To the Garden !

How to grow healthy crops

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# Some Questions

- Is it possible Not to need any vitamin and mineral supplementation?
- Some studies have shown that the more fruits and vegetables people eat , the more cancer they get!
- This is mainly due to chemical fertilizers causing an excess of free (unbound) Phosphates in the plant (Use of triple super phosphates)
- Therefore if you are not sure rather steam the veggies !
  
- The average Apple in 1940 contained 500 ppm Calcium-Today 20-30 ppm (25 apples keeps the doctor away!)
  
- Calcium deficient food is toxic!
- Excess free Phosphates is toxic!

# Photosynthesis

- All the green you see
- The end product is Sugar
- Made from the air! Sunlight, CO<sub>2</sub>, Water
- Chloroplast expands as Sunlight hits the leave in the presence of Iron
- Draws in colloidal Phosphate to act as catalyst
- Phosphate/mineral/sugar complex
- This is why you were made to like sweet!
- IN nature it is bound to minerals !The higher the sugar content , the higher the mineral content of the plant!
- We can measure this using a refractometer!



ATC





## Refractive Index of Crop Juices -- Calibrated In % Sucrose Or °Brix

	Poor	Average	Good	Excellent
<b>FRUITS</b>				
Apples	6	10	14	18
Avocados	4	6	8	10
Bananas	8	10	12	14
Blueberries	8	12	14	18
Cantaloupe	8	12	14	16
Casaba	8	10	12	14
Cherries	6	8	14	16
Coconut	8	10	12	14
Grapes	8	12	16	20
Grapefruit	6	10	14	18
Honeydew	8	10	12	14
Kumquat	4	6	8	10
Lemons	4	6	8	12
Limes	4	6	10	12
Mangos	4	6	10	14
Oranges	6	10	16	20
Papayas	6	10	18	22
Peaches	6	10	14	18
Pears	6	10	12	14
Pineapple	12	14	20	22
Raisins	60	70	75	80
Raspberries	6	8	12	14
Strawberries	6	8	12	14
Tomatoes	4	6	8	12
Watermelons	8	12	14	16
<b>GRASSES</b>				
Alfalfa	4	8	16	22
Grains	6	10	14	18
Sorghum	6	10	22	30

Within a given species of plant, the crop with the higher refractive index will have a higher sugar content, higher mineral content, higher protein content and a greater specific gravity or density. This adds up to a sweeter tasting, more minerally nutritious food with lower nitrate and water content, lower freezing point, and better storage attributes.

	Poor	Average	Good	Excellent
<b>VEGETABLES</b>				
Asparagus	2	4	6	8
Beets	6	8	10	12
Bell Peppers	4	6	8	12
Broccoli	6	8	10	12
Cabbage	6	8	10	12
Carrots	4	6	12	18
Cauliflower	4	6	8	10
Celery	4	6	10	12
Corn Stalks	4	8	14	20
Corn (Young)	6	10	18	24
Cow Peas	4	6	10	12
Cucumbers	4	6	8	12
Endives	4	6	8	10
English Peas	8	10	12	14
Escarole	4	6	8	10
Field Peas	4	6	10	12
Garlic, Cured	28	32	36	40
Green Beans	4	6	8	10
Hot Peppers	4	6	8	10
Kale	8	10	12	16
Kohlrabi	6	8	10	12
Lettuce	4	6	8	10
Onions	4	6	8	10
Parsley	4	6	8	10
Peanuts	4	6	8	10
Potatoes	3	5	7	8
Potatoes, Sweet	6	8	10	14
Romaine	4	6	8	10
Rutabagas	4	6	10	12
Squash	6	8	12	14
Sweet Corn	6	10	18	24
Turnips	4	6	8	10

# When the Brix get really high a few interesting things are reported

The produce does not spoil but rather dehydrate

The plant develops a natural resistance to insects and disease (Waxy layer etcetera)

Insects leave-They go and attack next door where they can find some low brix veggies

The produce taste a whole lot better

Both the quantity and the quality of the harvest increases greatly

People who eat this produce becomes more resistant to disease and live a whole lot longer

- Various degenerative diseases just disappear-  
the nutritional deficiency is corrected
- A Farmer with high Brix grazing that have  
followed the RBTI principles for years reports  
tremendous bone density in his cattle-bones  
start looking like ivory
- Dairy farmers found that cows eating high Brix  
alfalfa hay (20 as opposed to 7) need only one  
fifth of the usual grain supplement to produce  
the same amount of milk



# How do I do this in my Garden?

- Principles of a back yard garden differs to some extent from larger scale agriculture
- We like to use raised Beds
- One six meter plank can be made into a one by two meter raised bed
- We use weed cloth in between covered with gravel
- Install a micro sprinkler system
- Best time is to start in the fall as you can layer your nutrients and let it mature over the winter



- By using good quality compost and vermi compost we do not get weed problems
- You can layer your bed as follows:
- S
- Some old cardboard boxes at the bottom to discourage weeds followed by a layer of finely ground alfalfa and comfrey leaves if you have
- Next fill the bed to about three quarters with the compost blend
- Now comes the important part as phosphate tends to rise and calcium tends to sink in the soil out of reach of the plant roots:

- Apply a layer of Soft Rock Phosphate (Langfos) first-about two kg for a bed this size
- On top of that add four kg of Calcitic lime (Magnesium content less than 5 % and 80% 200 mesh ideal)
- Follow this with the same amount of bone meal and add one kg Kelp and one Kg Ground Flax seeds as well as some fish meal
- Finally cover with 2-3 cm of good quality compost and water with Molasses water

- Wait two weeks before planting anything as the elements reacting can suppress germination
- Once you have the minerals in there you need to get Bacterial action going to make these minerals available for the plant
- The bacteria will help make ammonia that will help regulate the temperature of the soil
- We do this by making and applying compost tea on a weekly basis



# Compost tea

- You need a strong air pump ,a suitable container ,some good quality compost and some molasses
- The secret is simply to keep the germs aerobic
- We bubble the pure water for about an hour
- The we add the “Teabag” with compost and some molasses
- The more molasses and the hotter the weather the stronger your pump needs to be to keep the system aerobic
- We use a testing device called “The Nose” to see if the germs stay aerobic
- An aerobic germs smell “Off” and aerobic smell sweet and “Earthy”



You keep bubbling the tea for 24 hours and then apply all over the garden

You may stretch your tea if needed by diluting up to one in four with non chlorinated water

To get rid of chlorine in your water just bubble for about an hour



- Plant your veggies in three groups
- Leafy greens
- Flowers and fruits
- Root Crops

They each have different needs



# Leafy greens

- Leafy greens needs anionic soil There needs to be plenty of calcium available and the Phosphorus to potassium ratio needs to be high Four to one
- By keeping the line of resistance in the soil anionic Nitrogen which is an isotope will remain in its Nitrate form and your veggies will grow well without bolting to seed

# Fruits and flowers

- This group needs to be switched from anionic to cationic before day 50 post germination
- You can do this with a simple foliar spray
- Mix 5 ml Ammonia (Jeyes Fluid) into 5 liters of water
- Add 5 ml Phosphoric acid , 20 ml liquid fish (Sea grow) and 20 ml Vinegar
- Also add 50 grams of sugar or molasses
- Spray the plants twice between day 45 and day 50
- You will get an abundance of flowers and fruits

- Tests that can be done for best results include:
- Moisture : keep around 50%
- Conductivity of the soil in ERGS-keeping the energy release up by using side dressings can assure a tremendous harvest
- Type and amount of nitrate (Depending on what crop you grow)
- Comprehensive soil testing is only done with very weak acids like what the plant roots make (La Motte testing kit)-plants don't have bottles of hydrochloric acid!







