

Yang Ying food

Why?

Our modern diet has an excess of energy, fats, sugars and carbohydrates yet is short of critical nutrients such as minerals, trace elements and vitamins. Advances in agriculture, the green revolution and market forces are producing a surplus of food rich in energy but lacking in essential minerals, vitamins and phytochemicals.

Our diets are low in minerals nutrients and vitamins. We need extra calcium, magnesium, zinc, iron, copper, iodine, selenium together with omega 3 and vitamins B6, B12, D, E and F to our diet.



research shows that our bodies have a highly developed system of neurochemicals, chemical signals which sense these deficiencies and create a 'hungry beast' within us making us crave more food – we feel hungry and eat yet more of the same energy rich food – the results obesity, diabetes, heart deceases, strokes etc.

No worries – we can just pop a few pills. Dead wrong - that is just repeating the mistakes that caused the problem in the first place, mistaking the complexity of our bodies and thinking we can prop up our dietary deficiencies with a few simple chemicals.

Animals and plants have been co-evolving over millions of years developing a highly sophisticated synergy based on complex chemicals. In the early stages plants developed synergistic relations with soil biology, exchanging energy from photosynthesis for nutrients. They had few enemies and learned to create toxic chemicals to protect themselves from their main predator – insects. Later they developed synergistic relations with grazing animals, the plants particularly exchanging energy but receiving nutrients and soil disturbances to help seeding propagation. Later specialist plants, what we now call fruit and vegetables, developed synergistic relations with smaller animals and early humans.

It may not be obvious why certain plants should evolve to be eaten by us but we both win. The plants evolved to supply us with a wide range of beneficial foods which evolved to taste good so we would eat them. In return we spread there seeds and provided them with nutrients. Vegetables in particular are natural laxatives with a large bulk of fibrous material which absorb toxic wastes from our bodies which we excrete near the plants for their food and which may contain seeds which pass through our bodies unharmed.

It is no accident that people who eat a lot of vegetables are normally thinner, more fit and live longer.

Our bodies have evolved to eat plants which provide both a wide range of complex chemicals, the phytochemicals, (beneficial chemical produced by plants) and fibres which play a crucial role in human health. These phytochemicals are highly complex; over a thousand different chemicals have been identified in a tomato. Every type of vegetable provides us with a different mix of beneficial phytochemicals which are way beyond the capacity of manmade chemicals.

We need to improve our diet by eating fresh plants grown in mineral rich soils with active soil biology to release these minerals.

Ying Yang food system – the technology?

The Ying Yang Food system was developed to make fresh nutrient rich food with all the needed phytochemicals available to anyone concerned about their health.



We (the Ying Yang team) are continuously looking for plant varieties which can provide us with these critical phytochemicals. These are grown in soil which has been enriched with the needed minerals in a wicking bed - essentially a closed container which maintains a steady moisture level for the soil biology to thrive. The search for plants varieties, minerals sources and soil biology is ongoing so the plants can optimize their output of these critical phytochemicals.

Minerals are brought in from outside, but these are insoluble rocks so are not directly available to plants but can be converted into soluble chemicals by fungi, bacteria and worms. But this soil biology needs to be fed which can be done by recycling food waste. This provides nutrient rich soil in which selected edible plants can be grown which when eaten fresh will provide us with the needed minerals and nutrients

Ying Yang food growing and distribution system

This is more than a method of growing food; it provides an ethical way of distributing healthy food.

To understand how this works it is best to look at the conventional food distribution system where a farmer grows the crops which may be bought by a supermarket chain, or a commodity trader who sells to a food processor who in turns sells to a retail outlet who sells to the final customer.

The weaknesses of this current system are the farmer has no financial incentive to add the required minerals to the soil and the customer has no assurance that the food contains the minerals and vitamins. The table shows the elements needed by plants and the extra elements we need for our health.

The Ying Yang system solves both these intrinsic difficulties by bringing the grower and customer together. There is an association of people who believe in the importance of healthy food. Naturally they expect to receive payment for their services but there is no large intermediate company just seeking profits. They are trained and skilled in how to grow healthy food and can help both growers and customers. We call them coaches.

This is how it works. The customer contacts a coach who has a list of plants types and their health benefits. If she (or he) wishes she may visit the growers to see the farms and talk about which plants may suit her needs best. She chooses which plants she wants and places an order (typically through the coach) and makes a first payment.

When the customer places an order the grower is under contract to grow the plants following the methods agreed with the coach and the customer. The coach has a responsibility to ensure the grower follows the agreed methods.

The coach will arrange for the soil to be tested at an independent laboratory and based on the results will supply the grower with the required minerals and nutrients and provide the customer with an independent certificate confirming the soil nutrient levels so the customer has an assurance of quality.

One beauty of the Ying Yang Food system is that the plants are grown in removable baskets which sit in the soil, not directly in the soil, so the customer receives living growing plants in the basket. It is not like a supermarket where the plant has already been harvested. The fruit or leaves can be harvested and eaten while totally fresh. We recommend the chop and chew method, where some leaves are taken from the living plant and consumed. The plant will regrow new leaves giving a continuous supply of fresh food.



Another advantage of the basket system is the customer can take delivery of the basket and plants at any time during the growing process. This can be at the end of the growing cycle when the plants are ready for eating so there is virtually no work for the customer. Or it could be when the plants are seedlings so the customer grows the plants herself or even the customer can just receive soil and seeds and look after the entire growing process.

This is entirely up to the customer (maybe with advice from the coach) and will depend on the space, time and skills available to the customer. Naturally this is reflected in the price.

Some customers may find that they get a much higher quality food at less cost than buying from a supermarket if they undertake the growing themselves (which is fun anyway) or they may prefer to leave the growing entirely to professionals and pay a little more.

Widely reported deficits in a modern diet

The table below shows the minerals that plants need to grow well, the primary and secondary elements and the elements that we as humans need to be healthy. Some minerals such as iron and zinc are needed by plants but in small quantities. We need these in large amounts. Others like selenium and iodine are not needed by plants but are essential for our health. Selenium is needed for our DNA to reproduce accurately while iodine is essential for brain function. Over the years of continuous farming these trace elements have become denuded from the soil.

Bio-essential trace elements are critical to life. These include iron, cobalt, selenium, copper, zinc, molybdenum, vanadium and cadmium. The elements are linked into the chemical structure of the cells and become a natural nutrient for survival. Cobalt is a central atom in the structure of vitamin B12, whereas zinc is essential for growth, magnesium guards against heart disease, Type 2 diabetes and prostate cancer.

Elements needed by plants	
Elements available from the air or water	carbon, oxygen, hydrogen
Primary elements from the soil	N, P, K
Secondary elements	Ca, Mg, S
Trace elements	Mn, Fe, B, Zn, Cu, Mo, Cl, Co
Widely reported dietary deficits	
Elements needed by plants but we may need higher doses	Ca, Mg, Zn, Fe, Cu
Essential extra elements needed for health	Selenium, Iodine, Vanadium, Chromium
Vitamins humans are generally short of	Omega 3, B12, B6, E, K