My clients regularly ask me what I think about supplements.

Particularly, are they necessary?

Do they work?

Do I take them?

If so, which ones?

So I thought I would answer all of these questions at once. I will keep it succinct as possible, as one could dedicate an entire book to this subject.

Yes, I feel they are necessary and my clinical and personal results constantly reinforce that. We weren't designed to take supplements, meaning that through our evolutionary history (over the last million or so years as our digestive system etc. was evolving) we did not have access to supplements; and, in the ideal world, eating a balanced diet rich in fruits and vegetables, nuts and seeds, lean protein, some whole grains and plenty of pure water would sustain us perfectly. But we no longer live in the ideal world.

The food we eat has now changed dramatically. Instead of eating predominantly the foods (above) we were designed to, we now eat regularly eat what is cheap, fast and convenient. Many of these foods, which include saturated and trans fats, sugar and refined carbohydrates (white flour & rice, alcohol, soft drinks, juices etc.), take us so far from our homeostatic state of balance that it has been said that "in spite having more choices for food than we have had in any other phase of history, the average person in the 'developed' world suffers from chronic, sub-clinical malnourishment."

The quality of the food we eat, the water we drink and the air that we breathe has changed radically since the advent of the industrial revolution. Some of these changes include:

- Excessive farming of soils has led to these soils being deficient in minerals.
- The advent of NPK (nitrogen, potassium and phosphorous) fertilizers, which came about due to the surplus of these minerals after WWII from ammunition manufacturing companies, led to these soils becoming further deficient in minerals other than those above.
- The mineral deficient crops then required chemical pesticides and herbicides to offer resistance to pathogens that would otherwise previously have largely been provided by the plants themselves.
- Many of the fruits we eat are picked before they are ripe and are then ripened in cold storage.
 This results in these fruits being deficient in vital phytochemicals such as antioxidants, vitamins etc.
- Over 60,000 chemicals have been added to the food chain since WWII. Some of these include: preservatives, colourings, flavourings, artificial sweeteners, pharmaceutical medicines, growth promotants, cleaning products, air fresheners and conditioners, water purifiers, hormones, homogenisers, pasteurisers, deodorants, plastics, petrochemicals etc etc. The list goes on and on and on.

In addition, our lifestyle has changed dramatically also.

Instead of being exposed to the occasional acute stressor that we either fled from or conquered and then our stress levels returned to a lower base level, we are all exposed to constant low or mid level stressors that don't allow us to return to these lower base levels we were designed to predominantly function at. This creates a metabolic toll on our bodies.

Our lifestyle has also become far more sedentary. We now no longer exercise as a result of living. We now exercise as a past time, a social outlet or a way to keep ourselves healthy. We all know this creates a toll on our health.

So, we can see that we no longer live in a fashion or environment that is congruent with how we were designed to and which has removed us far from our homeostatic state of health or optimal living.

This is where supplements can come in. We clearly need help.

I don't use supplements as a replacement or substitute for good nutrition; i.e. fruits & vegetables, nuts & seeds etc. I use them instead as insurance to make sure I get the micronutrient and phytochemical content from my daily diet I may have otherwise have missed had I relied from modern food alone. And my clinical experience has corroborated my personal view.

I tend, however, to avoid supplements that are synthesized artificially from micronutrients (vitamins, minerals, antioxidants etc.) that are plentiful in most whole foods. These include most multivitamins and minerals.

Instead I use supplements that are extracted from whole foods or organisms. We were designed to consume and be fuelled by whole foods as nature created them, and our nutritional and technological knowledge is nowhere near enough to effectively simulate the synergistic value of micronutrients and phytochemicals contained in whole foods and organisms.

So my preferred supplemental protocols are as follows:

- Juice Plus a high potency whole food supplement derived from a multitude of whole fruits and vegetables that uses a patented freeze drying process for its extraction enabling most of the nutritional value of the food to be retained intact. Several independent studies on this supplement have shown that this supplement leads to significant raises in blood levels of many major vitamins, minerals, antioxidants and other phytcochemicals. To purchase at wholesale price (in 4 month lots but saving close to \$20 per month), ring NSA on 02 4965 3333 or refer to www.juiceplus.com.au and use AU001126 as the distributor number. It is not available retail. Take 2 fruit capsules in the morning (before breakfast) with a glass water, and 2 vegetable capsules in the evening (prior to dinner) with a glass of water.
- Siberian Red an extract from Siberian Fir (Abies siberica) needles which is an herbal adaptogen
 in that increases the body's ability to adapt to high workloads or levels of stress and reduces
 fatigue. Use 3ml in 1 litre of water per day. See www.pineneedleresearch.com (for further
 information) and www.pineneedleproducts.com (to purchase).

- Metapure EPA/DHA oil a high potency fish oil supplement that doesn't leave you with fish burps. The oil is far more potent than capsules. 1 teaspoon (5ml) daily with food or after food with water. Purchased from any naturopathic practitioner.
- Bioeffective B used in conjunction with sauna therapy. This is an oil based product derived
 from a variety of Russian pine conifer needle species that is applied topically to enhance the
 detoxifying and cleansing powers of sauna therapy. 2ml used topically on the torso or injured
 areas during sauna therapy (generally twice per week). Refer to www.pineneedleresearch.com
 (for information) and www.pineneedleproducts.com (to purchase).

Over winter to assist in prevention of colds and flus, and in times where I feel my liver needs support, I also use Bioeffective A capsules. Take 1-2 capsules twice daily. Further information and purchasing via www.pineneedleresearch.com and www.pineneedleproducts.com respectively.