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My name is Dr Nick Kimber...

I have always enjoyed pushing the boundaries and exploring what's possible in life.

It's this drive that led me to completing not one but four degrees over 12 years, the highest being a PhD in the area of post-exercise muscle metabolism in well trained humans...I've got the science covered.

I have a real thirst for knowledge and enjoy sharing this with others even more.

In fact, after finishing my doctoral studies, it was the desire to share my knowledge and make a difference in other people's lives that compelled me to develop a unique way of eating called the NutriFit™ Program.

I lead from the front with healthy eating although my favourite food is cheesecake...it's my "5th food group".

I've worked with a range of individuals, however I specialise in helping male professionals who are highly successful in their chosen field move from a lack of motivation and consistency with their nutrition to having a more energised, productive and prolonged life.

Educating and empowering others to become the best version of themselves through optimal nutrition is immensely fulfilling and something I'm extremely confident about being able to achieve, but it wasn't always this way...

When I launched my nutrition consultancy company NutriFit™ over a decade ago, I was satisfied that almost everything we needed for optimal health was obtainable from food. Two exceptions I made to this rule were fish oil and whey protein based on scientific evidence and also personal experience (whey protein improved my recovery from weight training and cycling).

From this perspective, you could say I was a partial supplement advocate, although still very resistant to the need for any other type of supplementation...

That was until I discovered something which completely changed my mindset and my ability to create results for others...

My "ah-ha moment" that changed everything...

I discovered after many months of research and liaising with scientists from one of the world's leading health science companies that there is considerable evidence for nutritional supplementation.



And more importantly I realised for the first time that there are significant differences in manufacturing quality and that supplements are definitely not all created equal.

So I stopped using the low-quality fish oil I thought was great value and started using pharmaceutical grade supplements to make my own personal assessment. In the first few weeks I noticed a slight increase in energy and after a few months any initial symptoms of a cold such as a scratchy throat, runny nose or sneezing, didn't progress any further.

But in the longer term I have experienced some major breakthroughs...

Such as being able to sustain a hectic lifestyle with family, training, a full-time job and part-time business, all without collapsing in a crumbling heap as would typically happen.

And playing tennis again on my worn out, semi-arthritic knee joint that would have previously been swollen and painful for days after.

I now enjoy a life where I wake up every day feeling refreshed, experience very few health problems and have an abundance of energy. My family's health has also improved which means we can have more quality time together.

As you will discover in this eBook, even if you are eating healthy food, your nutrient intake may not be sufficient to protect you against the risk of many diseases and poor health.

There is no time like the present to break the cycle suboptimal nourishment and unleash the new and improved version of YOU.

And if you choose to finally master your nutrient intake with a high quality nutritional supplement, the best part is that you won't have to do this alone as you'll have my support every step of the way.

Enjoy this eBook.

Regards,



Dr Nick Kimber, PhD

What others have experienced...

The testimonials below are from those who have used a high-quality, pharmaceutical graded supplement that I personally use and recommend in addition to eating healthy food.

“I have been using a high-quality vitamin and mineral supplement CellSentials for the last 12 months. I have found that I have more energy and have had less sick days which has been wonderful given I have a rather hectic lifestyle managing three children, work and training.”

Holly Hearsey – Endurance runner

“I was a 23 year old woman, running a million dollar company, with a hugely promising career ahead of her. Sound glamorous? It wasn't. I worked long hours and was under immense mental/emotional stress, as well as financial burden. As a result, my health suffered—I experienced sleep deprivation, recurring bladder infections and panic attacks—something had to change.

But I was tired of putting antibiotics in my body. I wanted a healthy, safe alternative. So when my partner introduced me to a high-grade multi-vitamin, calcium magnesium, fish oil and probiotic I said, 'Yes'. What happened next I was not expecting.

One morning, 2 weeks after beginning my new regime, I woke up to a massive surprise. I'd slept a 8 full hours of unbroken sleep! To me, it was a miracle. I bounded off to work with energy I hadn't felt in a long time. But the benefits didn't stop. As the weeks passed my exercise endurance doubled and recovery was much fastest. 3 months on my new programme and the bladder infections ceased. Now, 2 years later I've not had a single recurrence.

Dietary supplementation transformed my health. For me it's now an essential part of choosing a healthy lifestyle. I'm grateful that someone took the time to share a simple secret that has put me back in charge of my health. I recommend it to everyone.”

Lilia Tawara – author and entrepreneur

“I noticed fantastic health benefits within two weeks of using the Essentials. I found I had more energy, less sugar cravings, and my immune system was in great shape. I hardly ever get sick these days, and if I do it is very short lived.”

Nicole Elwood – Mum of three and endurance runner

I have found that with the regular using of the HealthPak, my all day energy levels are very stable. I do notice if I have missed taking them for a couple of days and now make sure I always have a sachet in my bag for sport and everyday handbag.

These Healthpaks coupled with my improved food consumption have given me benefits that I can recognize in my busy sport filled life. I feel that they have boosted my vitamin and mineral intake and their usage has not overly affected my serious food intolerances that are related to natural occurring chemicals in fruit and vegetables.

Being able to have them delivered to my door is also another added benefit as I always have them on hand. I have now been using them for over a year and also take the Chocolate Nutrimeal formulated powder.

I have recommended this product range to friends and family and team mates.

Jo-anne George – Netballer

Introduction

In my capacity as a nutrition professional, a question that I am often asked is the following...

“Isn’t eating healthy food that is full of all the nutrients we need enough?”

But when we’re asking this question there seems to be a default setting that has already given us the answer...“surely we can obtain everything we need for optimal health from good food”.

Does this sound familiar?

Before I show you how to adjust this default setting to a different answer that may dramatically alter your health, energy and vitality, let me clarify one very important point...

It is essential to follow a robust eating plan such as the NutriFit™ Program I’ve personally developed that emphasises eating whole, unprocessed food with an abundance of nutrient rich fruit and vegetables together with lean, complete protein at every meal.

Consider also the very important strategy of drinking energy-free fluids whenever possible such as water and green tea to reduce sugar intake. One exception to this rule would be energy containing fluids that are protein dense such protein shakes or nutrient dense such as green smoothies.

Now back to adjusting the prevailing mindset that healthy food provides everything we need. On face value, it makes perfect sense...just focus on food and everything will be taken care of. The major problem with this approach however is that very few of us have been educated about what nutrient levels our body really needs for optimal health in the modern world.

To start understanding more about whether eating healthy food is enough, here are some questions to consider:

- Are you regularly consuming fresh fish abundant in omega 3 fatty acids such as salmon and if so, is the salmon wild or farmed?
- Are you eating at least 10+ serves of fruit and vegetables every day to receive a sufficient intake of vitamins, minerals, phytochemicals and fibre for optimal health. And if so, are these foods certified organic?
- What is the quality of the soil like that your fruit and vegetables are sourced from and at what stage of ripeness were they harvested?
- What environment pollutants were you exposed to today?
- What levels of mental and physical stress were you exposed to today and have been experiencing over the last 6 – 12 months?

When thinking about these questions, it quickly becomes clear that most people fall short of consuming sufficient nutrient rich food on a daily basis to cope with the stresses of modern living, leading to a sub-optimal nutritional status.

In fact, according to results from the most recent 2015/2016 New Zealand Health Survey for adults, only 66% of women and 59% of men have the minimum 3 serves of vegetables and only 62% of women and 49% of men have the minimum 2 serves of fruit each day. With such low intakes of vegetables and fruit that offer significant protection against poor health, it is not surprising that New Zealand has high rates of major diseases like heart disease, stroke, diabetes, osteoporosis and some cancers.

To make matters worse, if we do follow the current Ministry of Health 5+ a day guidelines (3 serves of vegetables and 2 serves of fruit), the nutrient intake is unlikely to provide sufficient protection for reducing the risk of premature mortality from degenerative disease. For example, a recent study from the UK has highlighted that at least 10 serves of fruits and vegetables are needed for lowering disease risk (**need reference here**).

The irony about the world we live in today is that never before have we known so much about the food we eat and its effect on the body, however never before have we been so unhealthy...

A large amount of evidence suggests that nutritional deficiency is a major cause of today's diseases (heart attacks, strokes, cancer, osteoporosis, arthritis). With suboptimal nutrient status, our bodies are unable to adequately defend against the oxidative damage from toxins and free radicals in our modern polluted world which ultimately leads to inflammation, the origin of all disease.

So let's get under the hood of what's happening at a cellular level in our body to discover if healthy food really is enough...

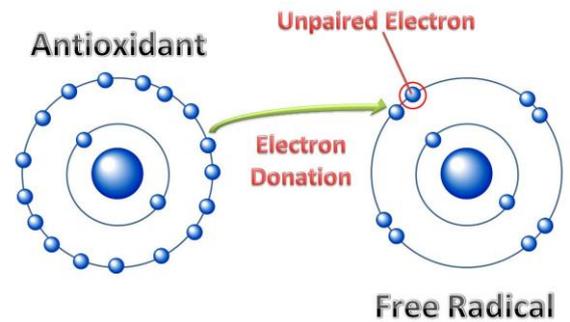
A war within our bodies



In our modern day world, not only are we challenged by a lack of nutrient dense food, the cells within our bodies are fighting to protect themselves from the effect of damaging particles known as **free radicals** and reactive oxygen species.

Free radicals are molecules with unpaired electrons. In their quest to find another electron, they are very reactive and cause damage to surrounding molecules.

Antioxidants are molecules that scavenge and neutralise free radicals by donating an electron, rendering them harmless (as shown in the diagram to the right).



Excessive production of free radicals relative to the cells antioxidant capacity leads to **oxidative stress** which creates a prolonged inflammatory response and ultimately disease.

There are many sources of free radicals we are exposed to on a daily basis that exceed our defense mechanisms and thus become potentially harmful. **Food additives** increase free radical production along with many other examples that are outlined below.

Oxidative stress and free radical damage



When considering all the stresses that our cells are constantly exposed to, we need to consume a large amount of food **daily** for giving yourself the best chance of preventing oxidative stress and achieving an abundance of health.

However, even if you consider yourself to be at the very top of your nutrition game in terms of eating unprocessed, organic, whole foods every day, this may still not be enough.

So this leads to the next important question...

What is in our food?

Let's start by looking at how much food you need to eat for meeting basic nutrient requirements called Recommended Dietary Intakes (RDIs). In New Zealand and Australia, RDIs are calculated by experts to be the average daily amount of each nutrient that is enough to meet the needs of nearly all healthy people at a certain age and gender.

The table below provides a list of some important nutrients and amounts of commonly consumed foods to achieve RDIs for adult males and females.

Table 1: Nutrient Recommended Dietary Intakes for Adults

Nutrient (RDI)	Food	Amount Required
Vitamin C (45 mg)	Medium kiwifruit	1 kiwifruit
Vitamin B6 (1.5 mg)	Medium bananas	3.5 bananas
Vitamin D (10 µg)	Large eggs	8 eggs
Folate (400 µg)	Cooked spinach	1.5 cups
Vitamin B12 (2.4 µg)	Red meat	50 g
Zinc (11 mg)	Chicken	3 chicken breasts
Calcium (270 mg)	Yoghurt	6.7 pottles (150g each)
Magnesium (370 mg)	Cooked spinach	1.5 cups
Iodine (150 µg)	Baked cod	130 grams

For some nutrients, the amount of food required is very realistic for most adults to consume. However, achieving sufficient vitamin B6, D and zinc appears only possible for very high energy consumers.

Energy intake can vary markedly from as little as 8,000 kJ per day to twice that amount of 16,000 kJ per day depending on gender, weight and physical activity. If you're a low energy consumer, it's going to be extremely difficult to meet the RDIs, even if you eat healthy, whole, unprocessed food with the recommended 5+ serves of fruit and vegetables a day. And for those with high energy intakes, you're still going to struggle with meeting safe nutrient levels.

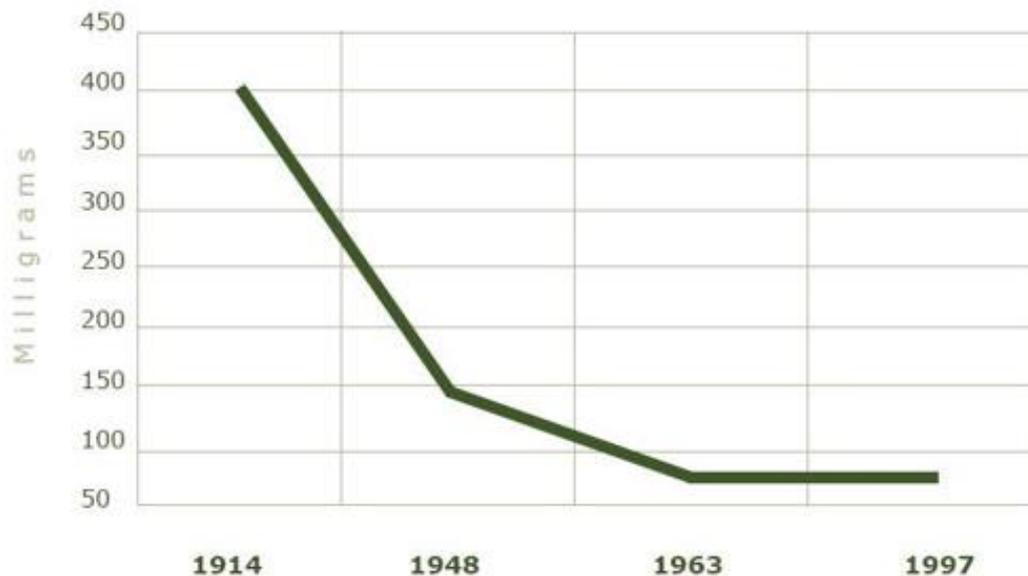
But it gets worse I'm afraid. Meeting RDIs doesn't mean you have an optimal nutrient intake at all. To have sufficient protection against the polluted environment we live in today, our stressful lives and premature disease, our bodies need additional nourishment above RDI levels.

The problem though is that we need such enormous quantities of healthy food to thrive in today's world.

So this leads us to the following important question in regards to what's in our food...

- Is the nutrient content of our fruits and vegetables the same as it was several decades ago?

In 1992, the United Nations RIO Earth Summit reported that intensive farming has significantly depleted our soil to the extent that mineral content has fallen 74% in Europe and 85% in the USA (Marler JB et al. 2006). As a consequence, there has been an inevitable loss of nutrient content in our crops. In addition to soil depletion, adverse agricultural practices designed to improve yield, appearance and other commercially desirable characteristics has contributed to the depletion of the nutritional value of our foods (Fan MS et al. 2008). For example, research published in the reputable *Journal of the American College of Nutrition* in 2004 reported a significant decline from 1950 to 1999 in the amount of protein, calcium, phosphorus, iron, riboflavin (vitamin B2) and vitamin C for 43 different vegetables and fruits in the United States (Davis DR et al. 2004). Similarly, vegetable crops grown between 1940 and 2002 in Great Britain show mineral losses ranging from 15% to 62% (Thomas D 2007) and detrimental changes in the natural ratio of minerals such as calcium and magnesium (Thomas DA 2003).



Source: Lindlahr, 1914; Hamaker, 1982; U.S. Department of Agriculture, 1963 and 1997

Figure 1: Average mineral content in selected vegetables, 1914 – 1997. Sums of averages of calcium, magnesium and iron in cabbage, lettuce, tomatoes and spinach.

The nutritional value of food is further eroded by food agencies such as the US Department of Agriculture that set standards limited to size, shape and colour without any consideration of nutrient content (Marler JB et al. 2006). Such agencies claim that adding the nutritional content of produce is not as important as appearance and yield. With this mindset, it is no wonder we need significantly more fruits and vegetables today to achieve the same nutrient intake as several decades ago.

Is supplementation a solution?

If you've reached your capacity to ingest sufficient nutrients from food (that is you simply can't eat any more), there are two primary options to consider. The first is having frequent green smoothies on a daily basis, however you still don't know the nutrient levels being ingested and whether you have covered all of your nutrient needs. For further information, click [here](#) for an article I've written on blending.

The second option and what I consider to be most effective is supplementation for a range of reasons that I'll cover in the remainder of this eBook.

Let's start with some background on supplementation...

Dietary supplementation has become increasingly popular in the general population over the last two decades, growing to a sales volume of more than \$30 billion in the United States during 2011 (Nutrition Business Journal Supplement Report 2012). In fact, over half of all American and New Zealand (NZ) adults use at least one dietary supplement. Multivitamin and minerals are the most commonly used supplement with approximately 40% of U.S. adult men and women reporting use during 2003–2006 (Gahche et al. 2011) and 19.8% of NZ adults (Parnell et al. 2006).

A primary driver for this dramatic increase in dietary supplementation is to prevent specific health issues and medical conditions such as cancer, cardiovascular disease, stroke, respiratory disease and diabetes (Sloan, 2007).

Interestingly, although multivitamins and minerals have the greatest overall market share, other major growth areas appear to be in sports nutrition and specialty product (omega-3 and probiotic) areas (Nutrition Business Journal Supplement Report 2012).

As discussed in another eBook I've written called 'Master Your Nutrition', most people today are confused about what to eat despite the abundance of food choices available. When it comes to dietary supplements, the situation is even more overwhelming with hundreds of products on the market and aggressive marketing by supplement companies who often using non-scientific and unsubstantiated claims.

The end result is a horrible mess of hype, misconceptions, myths and fallacies about what supplements to use.

If you have considered using supplements before, is this situation familiar?

If so, you're not alone as countless others share the same frustration that eventually leads them to making a poor supplement choice or choosing not to use a supplement at all.

Does choosing whether to supplement have to be **this** hard?

Definitely not. The first place to start is understanding what a dietary supplement is...



What is supplementation?

For the purpose of this eBook, the term 'supplementation' will be used to describe nutritional or dietary supplements. Using the term supplementation will not cover the categories of *drugs* and *ergogenic aids* which typically have more potent effects and are either illegal, have severe adverse effects or both.

To provide clarity, here is a definition from the US Food and Drug Administration (FDA) which is lengthy but the most widely used description.

A dietary supplement is a product taken by mouth that contains a "dietary ingredient" intended to supplement the diet. The "dietary ingredients" in these products may include: vitamins, minerals, herbs or other botanicals, amino acids, and substances such as enzymes, organ tissues, glandulars, and metabolites. Dietary supplements can also be extracts or concentrates, and may be found in many forms such as tablets, capsules, softgels, gelcaps, liquids, or powders.

Ideally you're now more informed and not more confused about the term 'supplementation'. The next aspect to consider is the scientific evidence...



Scientific evidence for supplementation

Considering the risks and benefits is an important step to take before using a dietary supplement. One of the ways to be most informed when completing a risk-benefit supplement profile is to have awareness of the appropriate scientific literature to obtain clarity on the following two questions:

1. Scientific effectiveness – does it do what the manufacturer or others claim it does?
2. Is it safe to use – are there any dangerous side effects to be aware of?

Reviewing scientific literature can be a daunting task, particularly for those that are not familiar with the differences between good science and misleading publications. To avoid confusion, it is best to seek the advice of an expert in the field or use independent resources such as the NutriSearch Comparative Guide to Nutritional Supplements or peer-reviewed scientific literature. Obtaining information from more than one source can be effective also, much like seeking a second opinion for a medical diagnosis to increase your confidence of a valid result.

Reading the information below provides some scientific merit of effectiveness for selected nutritional supplements (multivitamins and fish oil), however a comprehensive review of all relevant evidence is outside the scope of this eBook.

Let's take a look now at some key scientific studies that make a strong case for confirming the use of nutritional supplementation as a recommended, preventative measure for optimal health and disease prevention...

In 2002, Harvard researchers Drs Robert Fletcher and Kathleen Fairfield published a landmark review that recommended all adults to supplement daily with a multivitamin. What made this review of 38 years of scientific evidence even more significant is that it was published in the previously conservative *Journal of the American Medical Association (JAMA)*. In two reports, the authors reversed a long-standing antivitamin *JAMA* policy to state that the current North American diet, while sufficient to prevent acute vitamin-deficiency diseases, such as scurvy and pellagra, is inadequate to prevent an increased risk of chronic disease.



“Recent evidence has shown that suboptimal levels of vitamins, even well above those causing deficiency syndromes, are risk factors for chronic diseases such as cardiovascular disease, cancer, and osteoporosis...Most people do not consume an optimal amount of all vitamins by diet alone. Pending strong evidence of effectiveness from randomized trials, **it appears prudent for all adults to take vitamin supplements.**”

(Fletcher & Fairfield 2002).

High-potency supplements have also been reported in the reputable *American Journal of Clinical Nutrition* to extend human life span in a compelling study of 11,178 elderly participants (Losonczy et al. 1996). Risk of total mortality was reduced by 34% and risk of coronary disease reduced by 47% with vitamin E supplementation alone. Interestingly, further reductions in risk were apparent for both total mortality (42%) and coronary disease (53%) when a combination of vitamin C and E were used. Of even greater significance in this study was the finding that only those participants taking the high-dose vitamin C and E supplements benefitted in comparison to those taking low-potency one-a-day multiple vitamins (Losonczy et al. 1996).

Large-scale studies in women have also revealed positive health benefits from regular multivitamin use. In the Women's Health Study conducted between 1992 and 2004, 39,876 healthy US women consuming 600 IU of natural vitamin E on alternate days reduced the risk of cardiovascular death by 24% in women at least 45 years old and by 49% for those aged 65 years or over (Lee et al. 2005).

Another major study investigating 88,756 nurses from 1980 to 1996 (Nurses' Health Study) found multivitamin intake providing more than 350 mg of vitamin C was associated with a 25% reduction in the risk of heart disease (Osganian et al. 2003). In the same study, nurses taking multivitamins with vitamin B6 also reduced their risk of heart attack by 30% (Rimm et al. 1998).



The Nurses' Health Study also investigated the risk for colon cancer in nurses who took a daily multivitamin supplement that contained folic acid (a B-complex vitamin). Higher intakes of 400mg/day or more of folate together with prolonged use (greater than 15 years) were strongly related to reduced risk. It appears that long-term use of multivitamins with folic acid may substantially reduce the risk for colon cancer.

Health benefits are evident for men as well. In a recent large-scale, randomised, double blind, placebo-control prevention trial of 14,641 male US physicians (Physicians' Health Study II) published in *JAMA*, daily multivitamin supplementation modestly but significantly reduced the risk of cancer (Gaziano et al. 2012).



Fish oils abundant in the long-chain highly unsaturated omega-3 fatty acids (n-3 FA) eicosapentanoic acid (EPA) and dicosahexanoic acid (DHA) are known to have numerous health benefits. Indeed, when EPA and DHA become enriched within tissues, the metabolic and physiological responses are well documented to improve health and lower disease risk (Calder & Yaqoob 2009; Lavie et al. 2009).



For example, fish oil supplementation reduced premature death by 47% in a group of elderly Norwegian men with no evidence of heart disease (Einvik et al. 2010). Without doubt, the available evidence supporting the importance and efficacy of omega-3 fatty acids for cardio protection and reducing disease risk is substantial and convincing.

Vitamin D, or the sunshine vitamin, has primarily been considered as an important nutrient for healthy bones and teeth. However, vitamin D is now understood to have a pivotal role in a host of other areas within the body including cell metabolism, cardiac health, immune function, neurological support and the regulation of systemic inflammation which is the precursor to the development of chronic disease. Indeed, substantial scientific evidence suggests a strong protective relationship for vitamin D status in regards to colorectal, breast, prostate and pancreatic cancer. In particular, numerous epidemiological studies have shown that higher intake or blood levels of vitamin D are associated with a reduced risk of colorectal cancer (Ma et al. 2011; Gandini et al. 2011; Woolcott et al. 2010; Jenab et al. 2010). In a recent meta-analysis, low levels of vitamin D have been associated with an increased risk of depression (Ju et al. 2013), however large, randomised controlled trials are required to test whether this association is causal.

Despite there being adequate sunshine hours, a significant number of Australians and New Zealanders are considered to be vitamin D deficient. Rates of vitamin D deficiency in Australia are up to 80% amongst people with dark skin, pregnant women and women who wear veiled clothing for religious or cultural reasons (Grover & Morley 2001). In New Zealand, children of Maori and Pacific ethnicity may be at particular risk of low vitamin D levels (Rockell et al. 2005) along with pregnant women (Judkins et al. 2006).

The scientific evidence above reflects only a few from the many thousands of independent studies confirming the effectiveness of high quality nutritional supplementation for long-term

health. Collectively, a significant amount of scientific evidence substantiates the health benefits of nutritional supplementation, however universal support does not exist amongst the scientific community. For example, many studies conclude there is little proof of health benefits at all from the use of supplements.

In the world of an evidence-based discipline, there will always be conflicting evidence that casts doubt, particular in the nutritional sciences area. When contrasting results are then framed by the media in a distorted and sensationalized way, mixed and misleading messages run rampant and create the intended controversy in the market place. As a result, health-conscious consumers, medical practitioners and health professionals have become increasingly frustrated at the confusion that threatens to undermine public trust in complementary health care.

Thankfully, reputable nutritional sciences companies and organisations typically provide prompt responses to inflated and hyped media coverage of nutritional supplementation controversy. A good example was the recent headline that fish oil consumption increases the risk of prostate cancer, which on closer inspection had little merit due to poor science.

Misconceptions with supplementation

At this stage of the eBook, some of you will still have questions unanswered or are wondering whether any truth exists around some of the common misconceptions that people have and use as their front line defense for not using a nutritional supplement. Here are three of the more popular misconceptions along with statements to demystify them...

1. Taking a multivitamin/mineral supplement is nothing more than expensive urine.

Loss of B-vitamins in the urine does occur when taking a high quality multivitamin supplement as these vitamins are water soluble and excreted easily if excess is consumed. What is misleading however is that this vitamin loss is simply expensive urine.

The mindset of expensive urine primarily results from the perception that the bright yellow urine reflects a lack of absorption by the body and that a majority of the multivitamin has been excreted. Observing urine colour is a very subjective measure that provides no evidence about the extent of vitamin excretion or more importantly, the degree of vitamin absorption by tissues.

To effectively assess the absorption of a multivitamin, urine and blood samples need to be analysed for establishing vitamin retention and excretion – an unlikely scenario unless a clinical deficiency has been identified. Therefore, suggesting multivitamins do nothing but generate expensive urine has little merit, unless robust laboratory testing is conducted to assess your nutritional status.

A high-quality multivitamin will always generate B-vitamin spill over to ensure every cell has an adequate supply. In addition, an excellent broad-spectrum multivitamin has many other highly beneficial compounds such as phytochemicals which are not as readily excreted and in no way can be visually detected in a urine sample.

2. Our food supplies everything needed so nutritional supplementation is not necessary.

As already discussed, the reality is that we can be doing everything possible in terms of eating healthy, however this may still not be enough to supply all of the nutrients required for optimal health.

For many nutrients, the amount required on a daily basis to receive the necessary nutrient intake for optimal cellular function is simply unrealistic to achieve. For example, 20 large eggs are needed daily for an optimal intake of vitamin D if there is insufficient sunlight exposure.

3. Juicing and blending fruit and vegetables is a way to avoid using nutritional supplementation.

Juicing a variety of fruits and vegetables on a daily basis can certainly increase nutrient and phytochemical intake. However, there are several reasons which make this practice less desirable which include 1) fruit juice has a high sugar content leading to weight gain and health problems if used excessively; 2) juicing can be a time-consuming process and use a lot of fruit and vegetables; 3) it's difficult to determine the nutrient concentration in the final product as amounts can vary dramatically depending on the source of fruits and vegetables and 4) important nutrients such as omega-3 fatty acids and vitamin D cannot be obtained from juice.

Blending to create green smoothies is certainly a more effective strategy as the fibre content is retained and you can blend foods not normally eaten such as avocado seeds, lemon skin and even egg shells.

Like juicing however, there is the risk of overconsumption and high sugar intake if using too much fruit which can also cause weight gain. Other factors to consider are eroding enamel from the acid content and uncertainty around the nutrient levels being consumed.

Key supplement criteria

Below is a list of the most important factors to consider when choosing any form of nutritional supplement. There are so many products on the market today that it's literally a mindboggling task trying to determine which to choose.

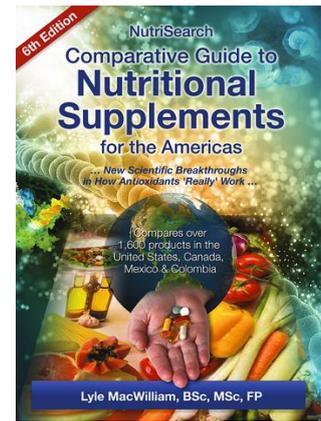
If you can **tick all the boxes below**, then you'll have certainty around which supplements will most benefit your health and which will also give the best value.

- 1. Product must be free from contaminants**
Make sure the company has strict criteria on testing its raw product before it is used. For example, pesticides or heavy metals should not be used and the company should be able to give a report on this.
- 2. Pharmaceutically graded (GMPs)**
Made to the same standard as pharmaceutical drugs and meet the strict requirements for manufacturing. Ensures a safe product at the highest standard as opposed to a food grade supplement where there are no guarantees on how they were manufactured or what's in the supplement.
- 3. Potency Guaranteed**
Refers to what is on the label and in each and every pill which is extremely important for people on medication and for doctors prescribing supplements. In addition, consumers can be confident they're actually getting what they pay for.
- 4. Science based formulas (Optimal levels)**
Ensure that supplements are formulated using the latest scientific research rather than Recommended Dietary Intakes (RDIs). Supplements providing nutrients at RDI levels may be sub optimal as they are based on minimum requirements to prevent disease rather than maintain optimal health.
- 5. Approved by anti-doping regulator**
Extremely important for athletes in competition to avoid testing positive to a banned substance. A reputable company would provide an athlete guarantee that supplements are free of banned substances.
- 6. Third party credibility**
Has the endorsement of Consumer watch dogs and companies without financial gain for the sale of the supplements. Look for more than just the company saying "We are the best".

To further help you make the most informed choice, the **NutriSearch Comparative Guide to Nutritional Supplements** is an independent publication that provides a comprehensive assessment of products in the global marketplace.

Written by Lyle MacWilliam, a biochemist, former Canadian Member of Parliament and Member of the Legislative Assembly for British Columbia, over 250 nutritional products for Australia and New Zealand and 1600 for the Americas have been evaluated according to 18 Health Support Criteria that accommodate the latest research findings. In addition, this valuable resource discusses the effects of global nutrient depletion of our foods and the scientific merit of supplementation.

To find out more, visit the NutriSearch website where you can purchase a copy of the new 6th edition for the Americas. If you would like to purchase a copy of the Australia and New Zealand edition, contact myself at nick@nutrifit.co.nz.



Final thoughts...

To protect ourselves from chronic disease and have an abundance of health and vitality in today's world of depleted food and hazardous environments, I recommend mastering the following five areas in life:

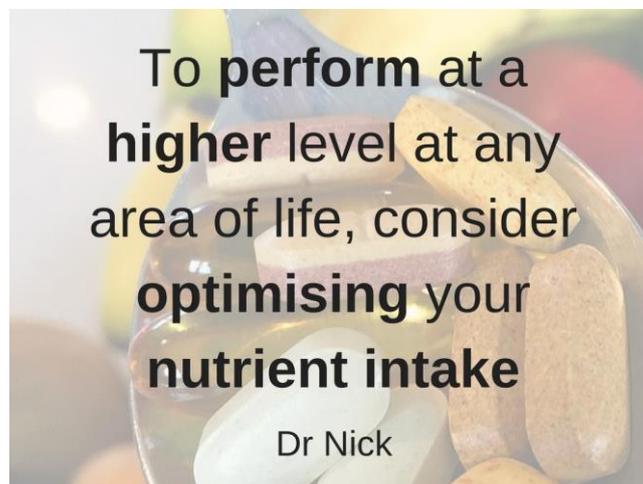


1. **Nutrition** – follow an eating plan such as the NutriFit™ Program that emphasises eating whole, unprocessed food with an abundance of nutrient rich fruit and vegetables together with lean, complete protein at every meal.
2. **Hydration** – drink energy-free fluids whenever possible such as water (2.5 – 3 litres per day) and green tea together with removing sugar rich beverages such as soft drink and fruit juice.
3. **Quality Supplement** – use a pharmaceutical graded micronutrient supplement on a daily basis that meets all of the key criteria to provide optimal cellular nutrition.

4. **Physical Activity** – keep moving every day with whole body exercise and avoid sitting for prolonged periods of time.
5. **Stress Management** – focus on the present moment where possible and find a way to take regular breaks for going within and connecting with who you really are.

If you would like to find out more about the high-quality, pharmaceutical graded nutritional supplements that I personally use and recommend, or are interested in seminars and/or workshops about nutritional supplementation, email me [here](#) or call +64 211 712 369.

For more information about the systemised way of eating called the NutriFit™ Program, visit my website (www.drnick.co.nz) to download a free copy of the eBook Master Your Nutrition.



I trust you've enjoyed this eBook but even more so, that it's given you some fresh insight into what's possible in the world of nutrition for you, your family and everyone else you know.

P.S. – Any thoughts or feedback about this eBook? I'd love to hear them. Just [click here](#) to email me your comments.

Until next time.

Dr Nick