



Fact Sheet

BerryRadical Antioxidant Superfood

- A potent combination of 9 of the worlds most potent, antioxidant, superfoods
- Contains certified organic, antioxidant-rich raw cacao (chocolate), fruits and berries to support healthy immune function and protect cells.
- Contains a wide spectrum of nature's most powerful antioxidants: hydroxytyrosol, zeaxanthin, alpha and beta-carotene, lutein, lycopene, anthocyanin, cryptoxanthin, xanthophyll, epicatechin, quercetin, punicalagins and ellagic, chlorogenic, gallic, ferulic and caffeic acids from organically grown chocolate, berries and fruits
- Helps quench damaging free radicals in the body
- May slow processes associated with aging
- Supports healthy immune function

Ingredients in BerryRadical

certified organic raw unrefined cacao powder, dried coffee fruit extract, certified organic freeze-dried pomegranate powder, certified organic freeze-dried goji berry powder, certified organic freeze-dried acai berry powder, certified organic freeze-dried blueberry powder, certified organic freeze-dried raspberry powder, certified organic freeze-dried strawberry powder, certified organic freeze-dried olive juice extract, natural flavour.

Why Plants Contain Antioxidants

Photosynthesis is the process whereby plants convert light energy from the sun into stored physical energy. Photosynthesis exposes plants to a massive number of free radicals.

Plants produce antioxidants to protect themselves from damage by these free radicals. Antioxidant plant pigments, primarily carotenoids and polyphenols that are responsible for the bright colours of many orange, red, blue and purple fruits, berries and algae, provide most of this protection.

Research has shown that human ingestion of these plant-based antioxidants result in similar protection.

Research also shows that antioxidants work synergistically (where the combined effect is greater than the sum of the individual effects) and are far more effective when a spectrum of antioxidants are ingested, rather than individual isolated compounds.



What Is BerryRadical?

Today's fast-food society and nutrient deficient soils makes it difficult, if not impossible, to obtain the quality and concentrations of daily nutrients necessary to positively impact our health.

BerryRadical is a revolutionary organic, superfood, designed to assist the body in attaining vibrant health, wellbeing and longevity.

The ingredients in Berry Radical have been proven to assist the body in neutralising free radical damage. Make a super-nutritious beverage by blending Berry Radical with hot water and rice or soy milk. Sweeten to taste.

Add to your favourite smoothie recipe to supercharge it!

Dairy milk should be avoided with BerryRadical, as research has shown that the casein in dairy milk blocks the beneficial vascular effects of the antioxidants.

Free Radicals & Antioxidants Explained

Oxidation occurs when free radicals (highly reactive, high-energy particles) ricochet wildly throughout the body and damage cells.

Free radicals can be produced within the body by natural biological processes or introduced from outside via tobacco smoke, toxins, pollutants and sub-optimal eating habits. Free radicals are believed to accelerate the progression of cancer, cardiovascular disease, rheumatoid arthritis, chronic fatigue, and age-related diseases.

Antioxidants found in fruits and vegetables help to neutralise free radicals in our bodies.

What Are ORAC Units & How Many Do We Need?

ORAC, short for Oxygen Radical Absorbance Capacity, is a standardised measurement of the total antioxidant power of a substance. Antioxidant power is the ability to neutralize oxygen free radicals.

The more free radicals a substance can absorb, the higher it's ORAC score. Nutritionists recommend that we consume around 5000 ORAC units per day to significantly impact antioxidant activity in the body and reduce free radical damage.

One serving (half a cup) of fruits or vegetables provides approximately 500 ORAC units. If you're not eating at least 10 servings of fruits and vegetables a day, you're not getting the recommended amount of ORAC units to mop-up the damage caused by free radicals in your body every day.



The ORAC (total) score of 1 gram of BerryRadical is 1448. So, one 5g serve of BerryRadical contains over **7000 ORAC units!** One 105g bottle contains over **123,375 ORAC units.**

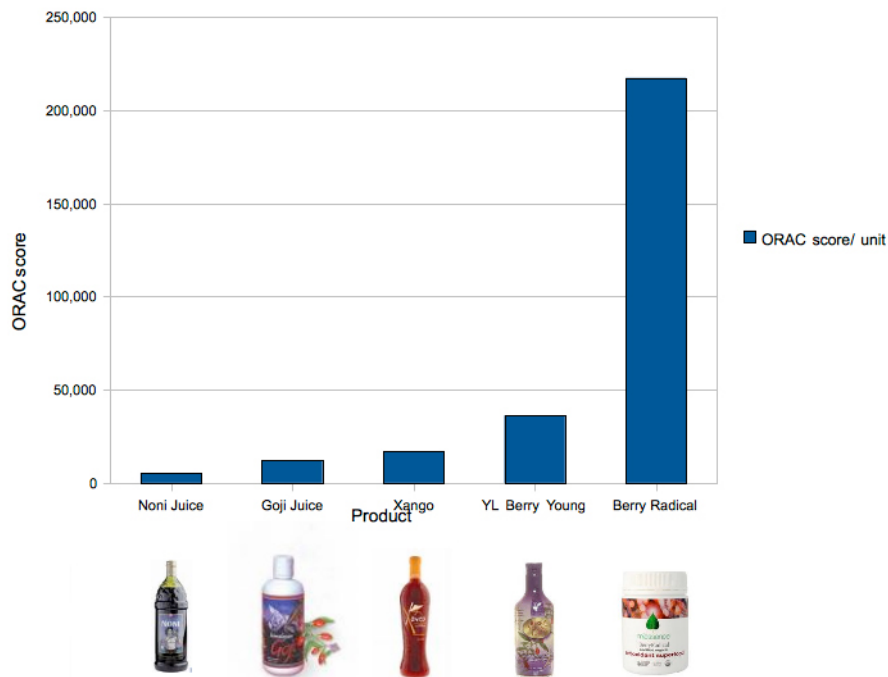
Below is the published data of the ORAC score of some high antioxidant foods and supplements:

Food/Supplement	ORAC Score / Serving
100g blueberries	2400
100g strawberries	1540
100g raspberries	1220
30ml YL Berry Young	1130
30ml Xango	530
30ml Himalayan Goji Juice	380
30ml Tahitian Noni Juice	165

We compared the antioxidant power of Berry Radical to some high antioxidant foods and supplements and ascertained how much you'd have to buy to get the equivalent amount of ORAC units in one jar of Berry Radical:

Foods	Supplements
9 kilos of blueberries @ ~\$500	6 bottles of YL Berry Young @ US \$324
14 kilos of strawberries @ ~\$220	12 bottles of Xango Mangosteen juice @ US \$480
17 kilos of raspberries @ ~\$840	17 bottles of Himalayan Goji juice @ US\$ 893
	41 bottles of Tahitian Noni juice @ US \$1727

ORAC Comparison of Antioxidant Products





Food V Supplements

If you're supplementing with single dose antioxidants, or a combination of a few isolated antioxidant nutrients, you may not be getting the benefits you hoped for.

Whilst isolated nutrients may have powerful antioxidant benefits in vitro (test tube) they rarely have significant benefits in vivo (humans). Whereas foods high in antioxidants have proven benefits in both humans and in vitro. It is known that a diet rich in fruits and vegetables can help prevent cancers, coronary heart disease and strokes. Synthetic antioxidants appear to be so ineffective that they may actually increase cancer risk. In fact, every large clinical trial that has used isolated antioxidant nutrients has failed to show benefit for cancer and cardiovascular disease. ^{61,62,63,64}

Most isolated antioxidant nutrients are chemically, and structurally, different to those found in foods; and do not have the desired effect in the human body. Research has found that whole tomato powder but not lycopene, a carotenoid found in tomatoes, inhibited prostate carcinogenesis in rats, which demonstrates the superior functionality and efficacy of whole-food nutrition compared with high dose, isolated nutrient, supplementation. ⁶⁵

How Much Caffeine Does BerryRadical Contain?

Interesting research on caffeine in the field of homeopathy indicates caffeine's stimulating effect when cooked, but not when eaten raw. One experiment conducted with a decoction of roasted ground cacao beans in boiling water produced an excitement of the nervous system similar to that caused by black coffee and an excited state of circulation, demonstrated by an accelerated pulse. Notably, when the same decoction was made with raw, unroasted cacao beans neither effect was noticeable.

A cup of tea contains an average of 40mg of caffeine, compared to 85mg as found in a cup of freshly brewed coffee. A cup of hot chocolate usually contains about 4 or 5 milligrams of caffeine, which is about 1/20 that of a cup of regular coffee. A serving of BerryRadical contains about 6mg of caffeine, about as much as in a hot chocolate, but considering the coffee berry and cacao in BerryRadical are both raw, there will be no stimulant effect.

Why A Powder & Not A Juice?

By utilising raw, freeze-dried powders we have concentrated all the nutrition from the fruits and berries into a much more potent, nutrient dense form.

Which is why 1 bottle of BerryRadical is equivalent to 9 bottles of mangosteen juice 12 bottles of goji juice and 29 bottles of noni juice, in terms of antioxidant capacity.

Our organic fruit and berry powders are highly concentrated foods, with all the nutrients and enzymes in the fresh fruit. Only water has been removed.

Gram for gram, powders are far more potent and concentrated than watered-down juices.



Many fruits are more than 90 percent water, which mean you get at least 10 times the nutrients in a freeze-dried fruit than the fresh fruit or a rehydrated juice. Powders do not require the preservatives that juices do.

The freeze drying process does not kill the enzymes. It puts them in a state of suspended animation. They are brought back to life by adding the BerryRadical to liquid.

Our certified organic cacao powder is cold pressed from the cacao beans without solvents, then fine-milled and sifted so the most bio-available cacao particles filter into the final product.

As the temperature is never allowed to exceed 55°C, which occurs only for a short time during the grinding phase, the powder is considered a raw food with all heat-sensitive vitamins, minerals and anti-oxidants remaining intact, thereby maximizing digestion and absorption.

Balanced for the Highest Potency & Best Taste

Avoiding degradation of the phytonutrients during processing is a critical step, as most green food ingredients are susceptible to both extreme heat and oxidation.

Most quality green food suppliers use low-temperature or freeze-drying techniques to retain the carotenoid and enzymatic content.

Nitrogen-flush packaging of bulk materials and/or frozen storage ensure the long-term quality of the processed material.

“We freeze dry, use carbon dioxide, oxygen barrier packaging and other techniques to ensure our product stays active. The intended goal must be delivering value to the consumer.”

Australians are encouraged to eat 7 serves of fruit and vegetables. Specifically, 2 serves of fruit and 5 serves of vegetables each day.

Many people in Australia and New Zealand struggle to eat the recommended amounts of fruits and vegetables each day.

Within Australia only 14% of men and 21% of women report eating the recommended four or more servings of vegetables daily.

Berry Radical contains 9 of the world's most potent, antioxidant, superfoods





BerryRadical Contains

RAW CACAO (CHOCOLATE!)

Grown and harvested ethically and sustainably in Ecuador, raw cacao contains antioxidant polyphenols, catechin, epicatechin and gallic acid. Epicatechin and its metabolites have been singled out as providing cacao's vasodilation benefits, which help protect against thrombosis formation and hypertension. Cacao provides significant protection to cardiovascular health, and has been found to provide more than 21 times the free radical protection of green tea. ^{1, 2, 3, 4, 5, 6, 7, 8}

Cacao and Magnesium

Cacao is believed to be the richest source of magnesium of any common food. Magnesium is one of the most important minerals in the body and is the number one mineral that assists and supports healthy heart functioning.

It is vital for over 300 enzyme systems in the body – more than iron and zinc combined, yet nearly 70% of the population is deficient in magnesium. Many experts believe even with a healthy diet, produce may still be grown in mineral-depleted soil and lacking in this vital nutrient. Studies have shown magnesium may have a beneficial effect on the cardiovascular system.

Low magnesium levels have also been found in patients who have died from heart attacks. Magnesium has also been found to be beneficial in Asthma, where it promotes relaxation of the bronchial smooth muscle. Magnesium may help prevent calcium crystallising in the kidneys to create kidney stones. Magnesium deficiency is strongly implicated in PMS. Symptoms like abdominal bloating, breast pain, headaches, fatigue, fluid retention, mood swings, insomnia and anxiety are all symptoms of magnesium deficiency and PMS!

Magnesium supplementation is as important as calcium supplementation in the treatment and prevention of osteoporosis. It helps the body metabolise calcium and converts dietary vitamin D to an active form. Magnesium is also beneficial for Gastric Disturbances (heartburn and flatulence) as it neutralises the stomach acid converting it to magnesium chloride. With less acid available less gas is produced, resulting in alleviation of the symptoms.

Magnesium may also help relieve constipation, by relieving pressure on the bowel and allowing fluid to soften bowel movements. Studies have found magnesium supplementation may help relieve tension headaches, muscle tension, and associated pain and cramps. Low magnesium levels have also been found in chronic migraine sufferers.

COFFEE BERRY

Like many plants, coffee distributes its powerful nutrition throughout the whole fruit, not just in the seed. Whole coffee fruit is loaded with high concentrations of beneficial antioxidants and other extraordinary nutrients including polyphenols, chlorogenic, caffeic and ferulic acid.

Coffee plants grow on the slopes of high-altitude volcanic mountainsides. Nourished by mineral-rich soil and warmed by intense tropical sunlight, coffee plants produce a profusion of wonderful bright red fruit.



Coffee fruit is so exceptionally rich in antioxidants because it grows in high altitude, low-latitude regions where the sun's rays are strongest. As the plants mature, they develop powerful antioxidants to protect them from damage caused by high doses of the sun's radiation and the natural byproducts of photosynthesis.

One gram of our coffee berry provides the same free radical protection as over two kilograms of grapes. ^{9,10}

Coffee Berry and Glyconutrition

The whole coffee fruit also contains many healthy poly-, oligo- and five of the eight essential mono-saccharides.

Polysaccharides, such as mannans and arabinogalactans, make up nearly 50% of the coffee berry. Conventional roasting destroys these nutrients, so they're not found in traditional coffee.

We all know that carbohydrates provide the 'fuel' that we use to run our bodies. Until recently, it was thought energy creation was the only role that carbohydrates played in our body.

During the last few years, however, emerging science has suggested that eight carbohydrates, Mannose, Galactose, Fucose, Xylose, Glucose, Sialic acid, N-Acetylglucosamine, and N-Acetylgalactosamine, are essential to life because they are the basic building blocks of all biological communication.

Scientists believe that this family of eight mono- saccharides is essential in order for our immune systems to function properly. Coffee berry releases unusually high levels of mannose, galactose, fucose, xylose, arabinose and glucose during digestion.

AÇAÍ BERRY

Wild harvested sustainably and fairly from the Amazon forest, the powerful purple berry, Açai (ah-sigh-ee) contains a potent antioxidant, anthocyanins.

Anthocyanins are a group of phytochemicals found in red wine that are thought to contribute to the "French paradox", i.e. France has one of the lowest incidences of heart disease of any western society despite the prevalence of smoking and a diet high in saturated fat and cholesterol.

Açai contains the potent antioxidant, anthocyanins, at 10-30 times the concentration found in red wine. Other potential physiological effects of anthocyanins include radiation-protective, chemoprotective, vasoprotective and anti-inflammatory agents. ^{11,12,13}

GOJI BERRY

The 'red diamond' of Traditional Chinese Medicine for over 2000 years, contains the powerful carotenoid antioxidants, zeaxanthin, beta-carotene, lutein, lycopene, cryptoxanthin and xanthophyll.

Carotenoids are thought to protect against cardiovascular and inflammatory diseases, vision-related diseases (such as age-related macular degeneration and glaucoma), and are anticancer agents. ^{14,15,16,17,18}



BLUEBERRY

Contains the polyphenolic antioxidant anthocyanins. Anthocyanins, which are flavonoids, were found in one study to have the strongest antioxidant power of 150 flavonoids tested. Anthocyanins have been shown to exhibit anti-inflammatory properties and protect both large and small blood vessels (including those in the eyes) from oxidative damage.^{19,20,21,22}

RASPBERRY

Contains the polyphenol antioxidant, ellagic acid, which has been shown to reduce heart disease, birth defects, liver problems, and promote wound healing.

Ellagic acid may help inhibit different types of cancer causing agents, including aflatoxin and nitrosamines. Ellagic acid seems to have some anti-cancer properties and has been found to cause death in cancer cells in the lab.^{23,24,25,26}

STRAWBERRY

A rich source of the polyphenol antioxidants, quercetin, ellagic acid and anthocyanin. Quercetin has been shown to protect colon, breast, ovarian and gastrointestinal cells against cancer growth. Quercetin has also been shown to protect strokes, cataracts, virus' and allergies.^{27,28,29,30}

POMEGRANATE

Contains the polyphenol antioxidants, punicalagins and ellagic acid. Research suggests that pomegranate may be beneficial for arterosclerosis, heart disease, osteoarthritis and prostate cancer.^{31,32,33,34,35,36,37,38}

OLIVE

Contains antioxidant polyphenols extracted from the pulp of fresh, organically grown olives. Hydroxytyrosol is the natural olive polyphenol with the highest level of free radical protection activity ever reported for any natural antioxidant compound!

While the olive has received most attention for its oil, until now the olive water, or juice, has been a mere byproduct of olive production. In fact, disposal of the juice has been costly for the industry. After all, the olive is only 15-20% oil and more than 50% juice.

So what have we been throwing away?

The answer is olive polyphenols, especially Hydroxytyrosol, a highly potent and protective antioxidant. In fact, polyphenols are much more prevalent in the olive juice than in the oil. Yet it is these unique polyphenols that are considered responsible for extra virgin olive oil's health benefits. Imagine the antioxidant capacity of olive juice with up to 300 times more polyphenols than the oil!

39,40,41,42,43,44,45

See over the next few pages for 65 medical studies supporting the amazing health benefits of the ingredients in BerryRadical Antioxidant Superfoods!



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