

# Chemical Cuisine

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Nutrition and exercise advice is tossed around so freely today, I find even my aesthetic professionals are quick to give me a tip or two. Even when their advice is sound, I question if they understand what they are saying or why. My point is, are we walking our talk or just repeating what marketers have prepared for us? Two of my favourites are upping phytonutrients and anti-oxidants. Thanks to creative advertising departments, these words are tossed around too easily. Currently, my household contains 17 products that are “enriched with phytonutrients” or contain “levels of anti-oxidants” and neither you nor I would ever ingest these “all-natural” products! Why does my hair conditioner have vitamins B1, B6 and E?

Eating a balanced and varied diet helps guarantee that we are supplying our bodies with a steady stream of goodness: anti-oxidants and phytonutrients. A healthy diet also includes good for you fats, lean protein and the very-important F-word: fibre! Nourishing meals and snacks offer a nutritional cocktail so that we don't have to worry about the marketing.

## What Are We Talking About?

Phyto-nutrients are plant chemicals, anti-oxidants are molecules that inhibit oxidation of other molecules (break-down; similar to your car rusting, breaking apart) and both may play an important role in helping prevent, delay or repair certain types of cell damage. Damage to our cells is the precursor to illness, disease or even just feeling unwell. By adopting a whole-foods eating philosophy, you are giving your body, more specifically, your ever fast-replicating cells reinforcements that scientists<sup>1</sup> believe by and large are your greatest defense. Your best sources of these super-heroes are fruits and vegetables.

## Free Radicals & the Nasty Three

Our bodies never shut-off. That's a good thing! We need a steady stream of healthy food, fluids, exercise, time with loved ones, and rest. Around the clock we are repairing cells & tissue damage, breathing and experiencing many chemical reactions known as metabolism. This is a very complex process. What gets in our way of reproducing health is exposure to free radicals from environmental pollution, cigarette smoke and self-inflicted harm from a poor life-style (junk food, inactivity, abusing alcohol and drugs (even OTC), over processed food, and artificial sweeteners).

Free radicals can trigger cell and tissue damage, leading to altered DNA and RNA that are responsible for regulating your cell reproduction<sup>2</sup>. “Cell damage or changes due to oxidative stress may play a part in development of many different diseases – among them are cancer, cardiovascular diseases, diabetes,

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<sup>1</sup> Health Letter, Mayo Clinic, Volume 31, Number 11, November 2013

<sup>2</sup> Health Letter, Mayo Clinic, Volume 31, Number 11, November 2013

Alzheimer’s disease, Parkinson’s disease and some eye diseases, including cataracts and age-related macular degeneration.”<sup>3</sup>

**Eat Your Way to Vitality**

Are you still eating fast-food, meals from boxes but feeling virtuous because you pop a daily multi? Real foods offer a complexity of phytonutrients that cannot be replaced by a dietary supplement; an orange has more than 170 different nutrients<sup>4</sup> plus fibre and fluids. Eating an assortment of whole foods (fruits, vegetables, legumes, whole-grains) unlike dietary anti-oxidant supplements, have not been a concern for over-consumption of these vitamins, minerals and plant chemicals. Beware when you pop a supplement rather than chew and swallow your nutrients (Canadians spend over \$3 billion annually on vitamins and dietary supplements)<sup>5</sup>. Contrary to popular belief “dietary supplements haven’t shown much benefit at all with regard to improved health outcomes. In fact, a 2011 study found 17 % more cases of prostate cancer among men who took vitamin E supplements compared with men taking placebos.”<sup>6</sup>

Make 2014 the year that you choose whole over processed. Diversity is the key to covering all of your nutritional bases and if the benefits to your cellular health aren’t enough, there is a good chance you will have more energy and a healthier body composition. Who doesn’t want that?

**Covering Your Bases: How many on the following table do you eat daily, weekly or even monthly? We should be aiming for 7 to 10 fistfuls of the following foods daily.**

<b>Phytonutrients may support:</b>	<b>Food sources include:<sup>7</sup></b>
Eye & prostate health	Apricots, cantaloupes, citrus fruits, kiwis, papayas, red fruits such as tomatoes, guava and watermelon, asparagus, broccoli, carrots, corn, kale, pumpkins, spinach, sweet potatoes, Swiss chard, winter squash
Healthy brain function & heart health	Apples, berries, cranberries, cherries, citrus fruits, grapes, broccoli, onions, chocolate, cinnamon, cocoa, peanuts, red wine, and black, oolong and green teas
Eye and heart health	Apples, citrus fruits, pears, coffee
Menopausal health; bone, immune and heart health; brain function	Broccoli, cauliflower, carrots, soybeans and soy-based foods, lentils, seeds and nuts, flaxseed, rye
Heart, immune, digestive health; may help detoxify undesirable compounds	Cruciferous vegetables, garlic, onions, leeks, scallions

<sup>3</sup> Health Letter, Mayo Clinic, Volume 31, Number 11, November 2013

<sup>4</sup> Health Letter, Mayo Clinic, Volume 31, Number 11, November 2013

<sup>5</sup> Globe & Mail, April 2012

<sup>6</sup> Health Letter, Mayo Clinic, Volume 31, Number 11, November 2013

<sup>7</sup> Health Letter, Mayo Clinic, Volume 31, Number 11, November 2013