# WHY RAW WORKS

# The Food & Beauty Connection

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ealth. Beauty. Youth. We all want them, and some people are willing to do whatever it takes to get them. Keeping people looking young is a billion-dollar industry, but looks aren't everything. In fact, looks can be deceiving. Lots of things can make you look younger, and even more beautiful, but what can actually make you feel younger? What can actually turn back the hands of time and reverse your physiological age?

There are many keys to achieving a more naturally youthful appearance, brighter eyes, a clearer complexion, more supple skin, shinier hair, stronger nails, a sharper memory, or a more positive outlook on life. Some people claim yoga is the key. Others say meditation. Still others swear by their favorite natural cosmetics, structured water, or exotic superfoods. In reality, a variety of products, practices, and lifestyle choices work together synergistically, and the mix differs for





each individual. The good news is that taking any one positive action to look and feel younger often starts a chain reaction that improves other areas, as well.

But of all the actions you could take to look younger, feel more vibrant and joyful, and have clear beautiful skin, one thing stands out among the rest—raw plant foods.

#### RAW WORKS! HERE'S WHY:

Whole, fresh, raw natural plant foods contribute nutrients important for clear skin, vivid

eyesight, a sharp mind, and radiant health as we age. Many of these act as antioxidants, helping protect our cells from free radicals (highly reactive molecules

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that contain unpaired electrons, which can damage cells and cause premature aging). Let's look at a few.

#### Antioxidants

Noteworthy antioxidants include the anthocyanins found in blue or purple foods such as blueberries, blackberries, and black mission figs. Vanillin, found in vanilla beans, also contains antioxidant properties. Isothiocyanates are plentiful in cruciferous vegetables such as collard greens, kale, bok choy, broccoli, and Napa cabbage.

Research shows that increased intake of the antioxidants lutein and zeaxanthin (abundant in dark green leafy cruciferous vegetables and yellow-orange foods like squash, peaches, sweet potatoes, and carrots) is associated with decreased risk for age-related macular degeneration in the elderly (Stahl, 2005). These substances can also be found in concentrated amounts in the macula of the human eyeball, which is involved in tasks associated with central vision, including reading, driving, and viewing objects straight ahead. They may also play a role in protecting the macula from damage caused by sunlight-induced free radicals. At this point, no recommended dietary intake values are established for lutein and zeaxanthin, but we should still make sure to get an adequate supply.

#### VITAMIN C

Vitamin C plays numerous vital roles in the body, including the formation of collagen. Collagen is a strong, elastic protein-based substance that makes up connective tissue within our bodies and is also a component of cartilage, bone, teeth, muscle tissue, and skin. Without adequate vitamin C, these tissues can be weak and may not function properly. Damage to collagen in the skin can result in wrinkles. Research has noted that people who consume higher amounts of

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vitamin C have lower risk for several chronic diseases, including eye diseases, cancer, and neurodegenerative conditions (Jacob et al. 2002). This effect can largely be attributed to the antioxidant capacity of vitamin C,

along with the more healthful diet and lifestyle that often accompany increased intake of foods that are rich in vitamin C.

Vitamin C is an essential nutrient our bodies do not make, so we must obtain it from our foods. A diet rich in fruits and vegetables can provide us a significant amount of vitamin C. Depending on the foods included, the vitamin C content of most raw food menus can range from about 500 mg to more than 1,800 mg per day, well above the RDA values. Good sources of vitamin C include red bell peppers, kiwi, strawberries, broccoli, cauliflower, kale, papaya, mustard greens, lemons, tomatoes, cantaloupe, romaine lettuce, and of course, oranges.

## Essential fatty acids

Research suggests that standard western diets are low in omega 3 fatty acids (Simopoulos, 2008). These fats are essential to good health and critically important for optimal brain function, visual acuity, and many other common heath and age-related issues, including healthy skin. Omega 6 fats, on the other hand, are found in a large variety of foods. One's diet may contain too many omega 6 fats if the diet includes animal products and snack foods containing oils from corn, cottonseed, soybean, sesame, sunflower, safflower, and peanuts. Because the average American eats a diet high in these foods, and low in fruits and vegetables (especially leafy greens), they may get an overabundance of omega 6 fats compared to omega 3 fats.

An excess of omega 6s over omega 3s contributes to an excess of inflammation and inflammatory conditions such as arthritis, but may also contribute to degenerative diseases such as heart disease, stroke, and other age-related diseases (Schwalfenberg, 2006).

Small amounts of omega 3 fats are found in almost all fruits and vegetables, although it is difficult to eat enough calories from those foods alone, without including good amounts of green leafy vegetables and certain seeds, like chia, flax, and hemp. One can move toward the correct balance between omega 3 and omega 6 fats by consuming good amounts of leafy green vegetables such as romaine lettuce, kale, dandelion greens, and seeds like chia, flax, and hemp, while cutting down on animal foods, processed foods, and some oils.

#### SELENIUM

The mineral selenium also contributes to antioxidant activity in the body. It is also essential for the production of thyroid hormone and proper immune system function. By far the richest food source of selenium is Brazil nuts; a single 5-gram Brazil nut contains 174% of the recommended dietary allowance of this mineral. No other food, in any category, even comes close.

#### ZINC

Along with vitamin C and selenium, zinc plays an integral role in skin health. It is involved in skin cell growth and replication, collagen synthesis, DNA formation, and immune system function. It is also involved in our ability to taste and smell. Plant food sources of zinc include pumpkin seeds, sesame seeds, sunflower seeds, pine nuts, cashews, and lentils.

# RAW FOODS FOR HEALTH AND BEAUTY

Here is an expanded list of the healthy plant foods discussed in this article.

- » Deeply colored foods high in phytonutrients and antioxidants that combat free-radical damage and promote eye health. Examples include blue or purple foods such as blueberries, blackberries and black mission figs; cruciferous green vegetables such as collard greens, kale, spinach, Swiss chard, dandelion greens, beet greens, bok choy, many lettuces, broccoli, and Napa cabbage; yellow-orange fruits and vegetables such as squashes, peaches, sweet potatoes, and carrots; as well as red bell peppers, beets, zucchini, and vanilla beans.
- » Foods high in vitamin C, such as lemons, oranges, grapefruit, peaches, strawberries, pineapples, mangos, papaya, kiwi, cantaloupe, broccoli, cauliflower, Brussels sprouts, tomatoes, bell peppers, romaine lettuce, kale, and mustard greens.
- » Foods containing omega 3 fatty acids, such as chia, flax, and hemp seeds and dark green leafy vegetables lime kale, romaine, and dandelion greens.
- » Foods containing selenium, particularly Brazil nuts.
- » Foods containing zinc, such as pumpkin seeds, sesame seeds, sunflower seeds, pine nuts, cashews, and lentils.
- » Hydrating foods, such as juicy fruits, highwater-content vegetables, and of course pure drinking water.

They say beauty is as beauty does. This can mean that inner beauty is more important than outer beauty, or it can mean that our lifestyle, including the foods we eat, has a direct impact on our beauty potential (often expressed as "you are what you eat"). In our opinion, both are true. Develop your outer beauty through your lifestyle and your inner beauty by being a beautiful person. Together they create a beautiful life!

That's what we really want. •

# KALE & BOK CHOY SLAW WITH SPICY SESAME-GINGER DRESSING

Yield: 4 cups/1 L (3–4 servings)

The distinctively
Asian flavors of
this dish make it
perfect for any Asianinspired meal. This one
dish contains 6 of the
nourishing plant foods
recommended in this
article.



### Nutrition Note

A serving of this lively salad provides 8 grams of protein, more than 20% of your day's supply of calcium, five B vitamins (folate, niacin, riboflavin, thiamin, and vitamin B6), and fiber, plus all the vitamins C and K and beta-carotene you'll need for the day. It's a good source of iron and zinc too.

#### SPICY SESAME-GINGER DRESSING

½ cup (60 mL) raw tahini

- 1 tablespoon (15 mL) purified water
- 1 tablespoon (15 mL) light miso
- 1 tablespoon (15 mL) freshly squeezed lemon juice
- 1 tablespoon (15 mL) agave syrup
- 2 teaspoons (10 mL) grated fresh ginger
- 1 teaspoon (5 mL) onion powder
- ½ teaspoon (1 mL) powdered mustard
- ¼ teaspoon (1 mL) salt
- 1 small clove garlic, crushed

Pinch of cayenne

# SALAD

- 2 cups (500 mL) kale leaves, firmly packed, cut into thin ribbons
- 1 ¾ cups (435 mL) thinly sliced bok choy, packed
- 1 tomato, finely diced
- 1 apple, finely diced
- ½ cup (120 mL) mung bean or lentil sprouts
- 1 ½ tablespoons (20 mL) finely diced red onion
- 1. For the dressing, combine all of the dressing ingredients in a small bowl and whisk until well blended.
- 2. Place the kale in a large bowl and massage it well for a few minutes to soften. The kale should take on a "cooked" appearance and reduce dramatically in volume.
- 3. Add the remaining salad ingredients to the kale. Then add the dressing and toss well.
- 4. Kale Bok Choy Salad is best served within 3 hours, but it can also be stored in a covered container in the refrigerator for up 24 hours. The slaw will release some liquid when it is stored, but it will still taste good.

#### Pure Power Bars

Yields 64 bars (32 servings)

These tasty, power-packed bars make a great midmorning snack or travel companion. Don't be put off by the fact that they contain sea vegetables. If anything will make you fall in love with sea vegetables, this could be it! If they are to be used as a travel snack, they can be dehydrated, or eat them as is—soft and chewy. Contains 5 of the nourishing plant foods recommended in this article.

#### Nutrition Note

These delicious bars are filled with calcium-rich seeds and have many nutrients that tend to be hard to obtain, like iodine, selenium, and zinc. The dulse in this recipe provides your day's supply of iodine in a serving (2 bars). However, if you have another source of iodine, such as iodized salt or a supplement, you can omit it and still have an excellent, nutrient-rich bar.



- 3 cups (750 mL) chopped black mission figs
- 3 cups (750 mL) warm purified water
- 1 cup (250 mL) almonds, soaked for 8 hours, rinsed, and drained
- 1 cup (250 mL) Brazil nuts, soaked for 8 hours, rinsed, and drained
- 1 cup (250 mL) walnuts, soaked for 3 hours, rinsed, and drained
- 3 cups (750 mL) sesame seeds, soaked for 3 hours, rinsed, and drained
- 1 cup (250 mL) pumpkin seeds, soaked for 3 hours, rinsed, and drained
- ½ cup (60 mL) dulse flakes
- 2 tablespoons (30 mL) ground cinnamon
- 1½ cups (370 mL) ground flaxseeds
  - 1 cup (250 mL) dried blueberries
- 1½ cups (370 mL) agave syrup
- 1. Soak the figs in the warm water for 20 minutes. Transfer the figs and their soaking water to a blender and process into a paste.
- 2. Rinse and drain all the seeds and nuts and allow them to air-dry for 2 hours. Place the almonds, Brazil nuts, and walnuts in a food processor fitted with the S blade and grind them into a fine meal.
- 3. Add the sesame seeds, pumpkin seeds, dulse, and cinnamon and pulse briefly. Do not overprocess; the mixture should have bits of seeds visible.
- 4. Transfer the mixture to a large bowl. Add the flaxseeds and blueberries and stir well. Stir in the agave syrup, mixing until it is evenly incorporated.
- 5. Dehydrating the bars is optional. To dehydrate them, spread 6 cups (1.5 mL) of the mixture evenly on each of 2 dehydrator trays lined with non-stick sheets, and carefully score each one into 32 bars. (Score into 4 long strips in one direction and 8 strips in the opposite direction, forming 32 rectangular bars.) Using a second dehydrator tray without a nonstick liner, flip the tray over and remove the nonstick sheet to allow complete airflow. Dehydrate at 105 degrees F/40 degrees C for 18–24 hours.
- 7. Stored in a sealed container in the refrigerator, dehydrated Pure Power Bars will keep for up to 2 months; if the bars are not dehydrated, they will keep for up to 2 weeks.

Variation: For a chunkier texture, chop the walnuts and add them with the flaxseeds and blueberries.

#### REFERENCES:

Brown K, Arthur J. "Selenium, selenoproteins and human health: a review." Public Health Nutr. 2001;4(2B):593-9.

Guyton, A. Textbook of Medical Physiology, 8th Edition. Philadelphia, PA: W.B. Saunders Company, 1991.

Groff JL and Gropper SS. Advanced Nutrition and Human Metabolism, 3rd Edition. Belmont, CA: Wadsworth Thomson Learning, 2000.

Krinsky N, Landrum J, Bone R. "Biologic mechanisms of the protective role lutein and zeaxanthin in the eye." Annu Rev Nutr 2003;23:171–201.

Jacob R, Sotoudeh G. "Vitamin C function and status in chronic disease." Nutr Clin Care 2002;5(2):66–77.

Porrini M. "Functional foods: from theory to practice." Int J Vitam Nutr Res. 2008;78(6):261–8.

Schwalfenberg G. Omega-3 fatty acids: their beneficial role in cardiovascular health. Can Fam Physician. 2006;52:734-40.

Seeram N, Adams L, Zhang Y, Lee R, Sand D, Scheuller H, Heber D. "Blackberry, black raspberry, blueberry, cranberry, red raspberry, and strawberry extracts inhibit growth and stimulate apoptosis of human cancer cells in vitro." J Agric Food Chem. 2006;54(25):9329–39.

Semba R. and Dagnelie G. "Are lutein and zeaxanthin conditionally essential nutrients for eye health?" Med Hypotheses 2003;61(4):465–72.

Sharp R. "Role of whole foods in promoting hydration after exercise in humans." J Am Coll Nutr. 2007;26(5 Suppl):592S–596S.

Shyamala B, Naidu M, Sulochanamma G, Srinivas P. "Studies on the antioxidant activities of natural vanilla extract and its constituent compounds through in vitro models." J Agric Food Chem. 2007;55(19):7738–43.

Simopoulos A.The importance of the omega-6/omega-3 fatty acid ratio in cardiovascular disease and other chronic diseases. Exp Biol Med (Maywood). 2008;233(6):674-88.

Soria C, Davis B, Melina V. The Raw Food Revolution Diet. Summertown, TN: Book Publishing Company, 2008.

Stahl W. "Macular carotenoids: lutein and zeaxanthin." Dev Opthalmol 2005;38:70–88.