THE POWER OF PURPLE
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Ever thought of hosting a “Purple Party”? Purple tortilla chips, purple salsa, a big bowl of purple potato chips, finger snacks of purple asparagus, purple carrots, purple peppers…slices of blueberry cheesecake and glasses of wild berry juice. By now you’re thinking, ‘Yeah, right! Purple carrots?’ Actually, such a spread is possible and these purple food items (some more unusual than others) are examples of red, blue and purple foods that pack a powerful phytochemical punch.

So, just what is the power of purple?

Red, blue and purple foods obtain their colors from “anthocyanidins” which are antioxidant water-soluble plant pigments. Next to chlorophyll, anthocyanins are one of the most important groups of plant pigments visible to the human eye.

Dr. Lila further states that the additive, or synergistic, benefits of phytochemicals from whole plant foods results in much greater human disease-resistance responses than if the individual chemicals were acting alone. In other words, phytochemicals work best when they work together. She points out that the media’s focus on antioxidant capacity, as the sole health attribute is not the entire picture. In reality, it is the interaction of different phytochemicals working together, and the unexpected great variety of resulting health benefits that comprise the real bonus for those who are making changes and including whole fruits and vegetables in their daily diet.

I don’t know about you, but that makes me very motivated to add these whole foods to my shopping list and experience the power of purple!
that after eating berries, these compounds are being absorbed into body tissues, rather than being excreted.

Anthocyanins have been shown to play a beneficial role in: good eyesight, prevention of cancer, prevention and treatment of heart disease, and prevention of age-related neurodegenerative disorders according to the Pennington Biomedical Research Center.

Regarding eyesight, several studies have strongly suggested that the enhancement of rhodopsin regeneration is at least one of the mechanisms by which anthocyanins enhance vision. Rhodopsin is a light-sensitive purple-red pigment in the rod cells of the eye, which allows the eye to see in black and white in dim light. Black currants seem to have the greatest on rhodopsin regeneration.

Regarding cancer prevention, anthocyanins have been shown to reduce cancer cell multiplication and growth, as well as prevent tumor formation. There are multiple modes of action that result in these beneficial changes.

Healthy cells in blood vessel walls make vasodilators, or agents that keep blood vessels open and relaxed. This reduces the risk of atherosclerosis, and promotes free circulation of the blood. (Keep in mind that perfect health depends on perfect circulation.) Endothelial dysfunction (changes resulting in fewer vasodilators being produced) leads to the development of vascular disease and hypertension. It has been found that anthocyanins can be directly incorporated into endothelial cells, where they help prevent endothelial dysfunction and also provide significant oxidative stress protection in the blood vessels.

It was found that anthocyanin containing grape juice decreases inflammation, enhances capillary strength and permeability, inhibits platelet formation and enhances nitric oxide (a vasodilator) release – all of which provide significant protection from heart attacks.

The Pennington Biomedical Research Center also stated that in a growing number of human studies, and many animal studies, anthocyanins have been shown to modulate cognitive and motor function, enhance memory and have a role in preventing age-related declines in neural, or brain cell, function.

Chinese researchers have published in the 2009 American Journal of Clinical Nutrition their findings that consuming anthocyanins significantly increases HDL-cholesterol concentrations (this is the ‘good’ kind that transports cholesterol out of the arteries to the liver where it is broken down), and significantly decreases LDL concentrations (this is the ‘bad’ cholesterol that can accumulate in arteries).

Eating foods rich in anthocyanins can help us have a more optimal cholesterol level and ratio, especially if we are combining this with regular outdoor exercise and other healthy habits.

Some benefits, especially from whole ‘superfruits’, mentioned by Dr. Lila from North Carolina State University include:
- Modulating inflammation responses
- Augmenting antioxidant defenses
- Up-regulating defensive enzyme systems
- Repairing membranes, and
- Facilitating cell-to-cell channels of communication.

Well, if anthocyanins are so good for us, we need to know where to get them! Here’s a quick list (excluding foods seen at the ‘Purple Party’…)

- Purple grapes
- Blueberries
- Dried plums
- Acai berry
- Pomegranate
- Black currant
- Blackberries
- Purple figs
- Cranberries
- Acerola cherries
- Black raspberries
- Camu camu
- Elderberries
- Eggplant
- Purple (or red) cabbage, and more...

Note: beet root does not contain anthocyanins…another compound known as betanin is responsible for it’s color.

Each food item can contain multiple types of anthocyanins. Recently, researchers from the US Department of Agriculture’s Agricultural Research Service have identified 36 anthocyanins in red cabbage. This