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The Workplace Wellness Conference and Exhibition

ANTIOXIDANTS?

In less than one minute you can find out if your diet, lifestyle and supplements provide the antioxidant protection you need for promoting health.

DEHYDRATION

MAY 2024



Antioxidants, what are they?

In recent years, there has been a great deal of attention toward the field of free radical chemistry. Free radicals reactive oxygen species and reactive nitrogen species are generated by our body by various endogenous systems, exposure to different physiochemical conditions or pathological states. A balance between free radicals and antioxidants is necessary for proper physiological function. If free radicals overwhelm the body's ability to regulate them, a condition known as oxidative stress ensues.

Free radicals thus adversely alter lipids, proteins, and DNA and trigger a number of human diseases. Hence application of external source of antioxidants can assist in coping this oxidative stress. Synthetic antioxidants such as butylated hydroxytoluene and butylated hydroxyanisole have recently been reported to be dangerous for human health. Thus, the search for effective, nontoxic natural

compounds with anti-oxidative activity has been intensified in recent years. The present review provides a brief overview on oxidative stress mediated cellular damages and role of dietary antioxidants as functional foods in the management of human diseases.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249911/>

What are free radicals in humans?

Free radicals are highly reactive and unstable molecules that are made by the body naturally as a byproduct of normal metabolism. Free radicals can also be made by the body after exposure to toxins in the environment such as tobacco smoke and ultraviolet (UV) light.

Antioxidants are man-made or natural substances that may prevent or delay some types of cell damage. Antioxidants are found in many foods,

including fruits and vegetables. They are also available as dietary supplements.

Which foods are rich in antioxidants?

Broccoli, spinach, carrots and potatoes are all high in antioxidants, and so are artichokes, cabbage, asparagus, avocados, beetroot, radish, lettuce, sweet potatoes, squash, pumpkin, collard greens and kale. Using lots of spices in cooking is good.

Here are, arguably, the top 5 antioxidants:

- Glutathione. Glutathione is often called the “master antioxidant” for good reasons: it is the most potent antioxidant that our bodies make! ...
- CoEnzyme Q10. ...
- Vitamin E. ...
- Vitamin C. ...
- Selenium. ...
- Dark Chocolate. ...
- Pecans. ...
- Blueberries.

Summary

Antioxidants are powerful molecules that can significantly alter our health. Antioxidants can be obtained through our diet, including glutathione from spinach, CoQ10 through meat, vitamin E through wheat germ, vitamin C through red peppers, and selenium through Brazil nuts. Additionally, foods with high amounts of numerous antioxidants include dark chocolate, pecans, blueberries, strawberries, and artichokes. If you are curious about your body’s antioxidant

levels, functional medicine can help to provide answers through various tests that can assess not only antioxidant levels but your body’s response to various antioxidants and also the amount of oxidative damage. This information can help aim you in the right direction, whether it be increasing your intake of certain antioxidant-filled foods or if supplementation is appropriate.



Coffee is a potent source of healthful antioxidants. In fact, coffee shows more antioxidant activity than green tea and cocoa, two antioxidant superstars. Scientists have identified approximately 1,000 antioxidants in unprocessed coffee beans, and hundreds more develop during the roasting process.

So how what about your level of antioxidants?

The Pharmanex BioPhotonic Scanner is the world’s first measuring tool that gives you a Skin Carotenoid Score (SCS)—immediate evidence of carotenoid antioxidant activity in your body. By placing the palm of your hand in front of the scanner’s safe, low-energy blue light, within seconds you will obtain a reading of the carotenoid antioxidant levels in your skin—your Skin Carotenoid Scores (SCS)—which has

been scientifically correlated to overall antioxidant status.

In less than one minute you can find out if your diet, lifestyle and supplements provide the antioxidant protection you need for promoting health.



The technology of the Pharmanex BioPhotonic Scanner is based on an optical method known as Resonant Raman Spectroscopy, which has been used for many years in research laboratories.

The Scanner measures carotenoid levels in human tissue at the skin surface using optical signals. These signals identify the unique molecular structure of carotenoids, allowing their measurement without interference by other molecular substances and providing the person being measured with their own SCS.

The patented Pharmanex BioPhotonic Scanner is a cutting edge testing tool that non-invasively measures carotenoid levels in living tissue, providing an immediate indication of a person's overall antioxidant levels. Everyone can instantly know their own antioxidant status. This empowers individuals to make improvements to their diet and lifestyle, and helps them make an informed decision

on which supplements are properly formulated to impact their antioxidant health.

Where do I get tested?

To find a doctor near you, contact Mr. Tom Dort: tdort@2dwellness.com

Does Cooking Affect Antioxidant Levels?

Cooking does affect antioxidant levels; however, how it affects them varies by cooking preparation. A study was done in the journal *Antioxidants* assessing three different cooking methods, frying, boiling, and steaming, on six different edible leaves that contained various antioxidants, including polyphenols and carotenoids. Results showed that frying reduced the number of antioxidants while boiling and steaming actually increased antioxidant levels in some of the leaves!

Are Antioxidant Supplements Safe?

Antioxidants, as discussed above, can confer many health benefits by fighting free radicals. However, like many things in life, even too much of a good thing can turn bad. Elevated levels of certain antioxidants may not only not have benefits but may even negatively impact health. For example, in smokers, high levels of beta-carotene may increase the risk of lung cancer. High doses of vitamin E may raise the risk of prostate cancer and strokes. This is why it's crucial to work with a practitioner before starting any new supplement regime. It also highlights the importance of testing. Testing levels

can take the guessing out of deciding which supplement is right or appropriate for you.



What percentage of humans are dehydrated?

According to the lay press, 75% of Americans are chronically dehydrated. While this is not supported by medical literature, dehydration is common in elderly patients. It has been reported to occur in 17% to 28% of older adults in the United States. [1] Dehydration is a frequent cause of hospital admission.

National Institutes of Health

What is dehydration?

Dehydration is the absence of enough water in your body. The best way to beat it is to drink before you get thirsty. If you're thirsty, you're already mildly dehydrated, and that can cause signs of dehydration like headache, fatigue, dizziness and more. Dehydration can contribute to life-threatening illnesses like heatstroke.

Symptoms of dehydration in adults and children include:

- feeling thirsty.
- dark yellow, strong-smelling pee.
- peeing less often than usual.
- feeling dizzy or lightheaded.
- feeling tired.
- a dry mouth, lips and tongue.
- sunken eyes.

When you aren't properly hydrated, your body's natural response is thirst. You should respond to thirst right away by drinking fluids — preferably water. You can usually treat mild dehydration by drinking more fluids. But dehydration isn't always easy to spot. It can be found in the aging parent who forgets to drink water or the fussy baby who can't tell you they're thirsty. Make sure to keep your loved ones hydrated. If you or a loved one has a moderate to severe case of dehydration, you may need to go to the hospital to get IV fluids. Left untreated, severe dehydration can be fatal.

What does water do for your body?

Up to 78% of your body is made of water. Your brain is made up of 73% water, and so is your heart. Your bones are 31% water, your muscles and kidneys are 79%, and your skin is 64%. A whopping 83% of water makes up your lungs.

Water helps:

- Aid digestion and get rid of waste.
- Your joints work. Water lubricates them.
- Make saliva (which you need to eat).
- Balance your body's chemicals. Your brain needs it to create hormones and neurotransmitters.
- Deliver oxygen all over your body.
- Cushion your bones.
- Regulate your body temperature.
- Act as a shock absorber for your brain, your spinal cord and, if you're pregnant, the fetus.

Water is important to your body, especially in warm weather. It keeps your body from overheating. When you exercise, your muscles generate heat. To keep from burning up, your body needs to get rid of that heat. The main way your body discards heat in warm weather is through sweat. As sweat evaporates, it cools the tissues beneath. Lots of sweating reduces your body's water level, and this loss of fluid affects normal bodily functions.

What are the symptoms of dehydration?

If you suspect that you or your child is severely dehydrated, seek immediate medical attention.

Signs of dehydration in kids include:

- Dry tongue and dry lips.
- No tears when crying.
- Fewer than six wet diapers per day (for infants), and no wet diapers or urination for eight hours (in toddlers).
- Sunken soft spot on your infant's head.
- Sunken eyes.
- Dry, wrinkled skin.
- Deep, rapid breathing.
- Cool, blotchy hands and feet.

Dehydration symptoms in adults may include:

- Headache, delirium and confusion.
- Tiredness (fatigue).
- Dizziness, weakness and lightheadedness.
- Dry mouth and/or a dry cough.
- High heart rate but low blood pressure.
- Loss of appetite but maybe craving sugar.
- Flushed (red) skin.
- Swollen feet.
- Muscle cramps.
- Heat intolerance or chills.
- Constipation.
- Dark-colored pee (urine). Your pee should be a pale, clear color.

Can dehydration cause fever?

No, dehydration doesn't typically lead to fever. But many diseases and disorders that cause fever can also cause dehydration.

Does dehydration cause high blood pressure?

Dehydration can actually make your blood pressure drop to dangerously low levels. When this happens, your body goes to work to try to correct

it. But in doing so, your body can overcorrect and make your blood pressure skyrocket.

Can dehydration cause diarrhea?

No, but diarrhea can cause dehydration. Severe diarrhea causes a loss of fluids in your body.

Can dehydration cause nausea?

Yes, dehydration can lead to disorientation and dehydration headaches. One of the symptoms of these headaches is nausea and vomiting.

What causes dehydration?

Dehydration happens when you don't drink enough water, or when you lose water quickly through, for example, sweating, vomiting and/or diarrhea. Certain medications like diuretics (water pills) can result in increased urination and dehydration.



What are the risk factors for dehydration?

Anyone can become dehydrated if they don't drink enough water. But infants and children are at a higher risk because they may be unable to communicate that they're thirsty. This is especially important when they're sick. So, make sure to monitor the amount of fluids your child takes in.

Adults ages 65 and older are also at a higher risk. They don't carry as much water in their bodies and they can't tell as easily when they're thirsty. If you're a caregiver, especially for someone with memory problems, offer them drinks frequently. Even if they're enduring an uncomfortable infection like a UTI (urinary tract infection), they still need to consume liquids.

What are the complications of dehydration?

If you or your child has symptoms of severe dehydration, get medical care right away. Severe dehydration can lead to serious complications, including:

- Electrolyte imbalances.
- Heat-related illnesses like heatstroke.
- Kidney issues including kidney stones and kidney failure.
- Shock, coma and even death.

How is dehydration diagnosed?

If you feel thirsty, you're already dehydrated. That's the easiest way to tell that you need more fluids. If you see your healthcare provider for possible dehydration, they may diagnose the condition based on your symptoms and a physical exam. Laboratory tests can also diagnose dehydration.

These tests may include:

- Blood tests to check your electrolyte levels and kidney function.
- Urine tests to check for possible causes of dehydration.

Healthcare providers categorize dehydration as:

- **Mild:** You just have to take in more fluids orally (by mouth). Drink water, but replace fluids with a drink that contains electrolytes if

you experience significant sweating or fluid loss from vomiting and diarrhea. You should feel better after five or 10 minutes.

- **Moderate:** Moderate dehydration requires an IV (hydration through your vein). You'll get this in an urgent care, emergency room or hospital.
- **Severe:** See a healthcare provider if your symptoms of dehydration are severe. Call 911, your local emergency services number or go to an emergency room.

What is the fastest way to cure dehydration?

Drink water. You could also try increasing your hydration with oral rehydration sachets — powders you mix in with your water.

How can I help my dehydrated child get better at home?

- Carefully follow your child's provider's instructions for feeding.
- Don't give children younger than age 2 over-the-counter (OTC) medicine for diarrhea, unless instructed by their provider.
- Encourage your child to drink fluids that are unsweetened (sugary sodas, juices and flavored gelatin can irritate diarrhea).
- Continue to breastfeed (chestfeed) infants normally.
- Electrolyte solutions may be helpful when given as recommended by their provider.
- Slowly increase the amount of fluid and food you give your child.
- Give your child acetaminophen (Tylenol®) for fever. Don't give your child aspirin.
- Allow your child plenty of rest.
- Watch for signs of dehydration that get worse or come back.

Can dehydration be prevented?

Yes, you can prevent dehydration by keeping track of how much fluid you drink. Drink water throughout the day, including at meals. Avoid soda, alcohol and caffeinated drinks. One way to make sure you're properly hydrated is to check your pee. If it's clear, pale or straw-colored, it's OK. If it's darker than that, keep drinking.

To avoid dehydration, active people playing a sport or exercising — should drink at least 16 to 20 ounces (oz.) of fluids one to two hours before an outdoor activity. After that, you should consume six to 12 ounces of fluid every 10 to 15 minutes when you're outside. When you're finished with the activity, you should drink more. To replace what you've lost, drink at least another 16 to 24 ounces.

Exactly how much water you need depends on your weight, age, level of activity, the climate of your environment and other factors. People with diabetes, heart disease, cystic fibrosis and other conditions may need to be cautious. The amount of water you need can also depend on the climate and what clothes you're wearing. Although the standard advice is eight glasses of water per day, talk to your healthcare provider to confirm the right amount for you.

Cleveland Clinic

What are the best drinks to hydrate?

- Water. No surprises here. ...
- Milk & milk alternatives. One scientific study . has suggested that milk is right up there with the most hydrating drinks. ...
- Fruit and herb-infused water. ...
- Fruit juice. ...
- Sports drinks. ...

- Coconut Water. ...
- Tea.



What Are Antioxidants?

Antioxidants are substances that may protect your cells against free radicals, which may play a role in heart disease, cancer and other diseases. We now provide the opportunity to get your antioxidant levels tested in 90 seconds or less by use of the Pharmanex S3 bioPhotonic Scanner. Pharmanex is the first nutritional supplement company to provide a non-invasive, fast, and convenient way to determine your antioxidant status and whether your supplements are actually working for you. Ask your pharmacist today!



How Does the Pharmanex Scanner Work?

The Scanner measures carotenoid levels in human tissue at the skin surface using optical signals. These signals identify the unique molecular structure of carotenoids, allowing their measurement without interference by other molecular substances and providing the person being measured with their own SCS. In less than one minute you can find out if your diet, lifestyle and supplements provide the antioxidant protection you need for promoting health.

What is a Pharmanex scan card for?

Scan Card is a reusable membership card, which is the customers' access to free lifetime monitoring of his or her Skin Carotenoid Score (SCS). It is required for a scan with the Pharmanex Biophotonic Scanner.

How does a Pharmanex scanner work?

How It Works: The scanner produces a narrow beam of light in which all the photons are the same color – blue. This blue light has a wavelength of 473 nanometers. When a 473 nm photon of light comes into contact with a carotenoid, the photon begins to vibrate and becomes a 510 nm photon and turns green.

What is the Pharmanex antioxidant score?

Based on carotenoid antioxidant research* using the Pharmanex® BioPhotonic Scanner, Pharmanex has developed a reference scale (below) called the Skin Carotenoid Score Index. Your individual score may vary based on factors that include diet, physical activity, and exposure to the sun and toxins such as cigarette smoke.

Which fruit is no 1 when it comes to antioxidants?

Although red and purple fruits like blueberries, pomegranates, tart cherries, blackberries, goji berries and raspberries have the highest quantities, antioxidants are also abundant in various plant foods.

To find a doctor near you, contact Mr. Tom Dort: tdort@2dwellness.com



Air purifiers work by using a combination of filters and technologies, such as HEPA (High Efficiency Particulate Air) filters and activated carbon filters to capture and eliminate airborne particles, such as dust, allergens, mold spores, pet dander, and some are proven to filter bacteria and viruses.

Dry indoor air can lead to a variety of problems, including dry skin, dry eyes, and throat irritation. It can also aggravate respiratory conditions such as allergies or asthma, as dry air can irritate the nasal passages and make it harder to breathe.

What is better for allergies humidifier or air purifier?

Both humidifiers and air purifiers can be helpful for people with allergies, but they work in different ways and have different benefits.

Humidifiers add moisture to the air, which can soothe dry nasal passages and reduce irritation in the throat and lungs. This can be especially helpful for people with allergies that cause dry or irritated nasal passages, like hay fever.

But if the air is already humid, using a humidifier can actually make allergy symptoms worse by increasing mold and dust mite growth.

Air purifiers, on the other hand, work to remove allergens from the air, such as dust, pollen, and pet dander. They use filters or other mechanisms to trap

these particles and prevent them from circulating in the air.

Is an air purifier the same as a humidifier?

No, an air purifier is not the same as a humidifier. While both devices are designed to improve air quality, they work in different ways and serve different purposes.

Can you use an air purifier and humidifier together?

Yes, you can use an air purifier and a humidifier together in the same room.

In fact, using both devices together can help to create a comfortable and healthier indoor environment. An air purifier can help to remove pollutants and contaminants from the air, while a humidifier can add moisture to the air to combat dryness.

If you have dry as well as polluted air in your home, then an air purifier with a humidification function is a good option. These all-in-one machines, such as the Dyson Purifier Humidify+Cool™, clean the air with filters and humidify it before blowing it back into the room.

Can a humidifier help with dry skin?

When the air is dry, it can cause the skin to lose moisture, leading to dryness, flakiness, and itching. Humidifiers help add moisture to the air, which can help to alleviate dryness in the air, particularly during the winter months or in dry climates.



Dr. Tabor Smith

Due to a serious injury, Dr. Tabor Smith had to quit basketball and struggled to attend school.

After a fruitless hospital visit, his parents took him to a chiropractor, resulting in a remarkable improvement.

This experience inspired him to become a chiropractor himself and spread awareness about natural health care and spinal care. He highlights the importance of regular maintenance for spinal health and continues to study chiropractic, spinal hygiene, and natural health.

Dr. Tabor Smith is a spinal hygiene expert, a speaker, a producer, and a chiropractic advocate. He developed the Certified Spinal Hygienist Program at Life University and produced the documentary "A Better Way." His discussion will center around the necessity of daily spinal health.

[Visit his website](#)

Learn About The Spine

The spine is divided into 5 main sections that have a major impact on all areas of the body.

- Cervical
- Thoracic
- Lumbar
- Sacrum
- Coccyx

Within each spinal section, there are individual vertebrae that align down the backbone. When these become misaligned, you can experience symptoms in other places of the body.

Sometimes these symptoms are intense and immediate, while other times you may not even notice it.

Spinal health is extremely important for the overall health of the body. For more information click here:

[A Better Way](#)

The 2024 Workplace Wellness Conference and Exhibition

December 7 & 8, 2024

Stay tuned for more details

Registration begins September 1, 2024

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