

A Clear Mind for a Clean Health

Upon the reflection of my high school years, it seemed almost unbelievable that the countless number of girls that had been living with the symptoms of Polycystic Ovary Syndrome were about 5'3" and weighed around 130 lbs which was not really considered to be overweight then . But I guess with the raising challenges of everyday life , teens fall victims to this stress, whether some people would like to believe it or not , the peer pressure and the struggles that teens may face can have a huge effect which can put a huge load of stress on to a teens body .

With PCOS becoming a 21st 'cult' syndrome among the youth, its ever-increasing stress levels have expanded its 'membership' that has only raised eyebrows of many medical research scientists on the minds of the growing one's and this only brings me to believe that there is an intimate and a systematic connection between our mind and the body. That's because studies have shown that women with PCOS produce higher than normal amounts of stress hormones namely cortisol that do not metabolize them well for which stress often becomes a factor in the onset of insulin resistance PCOS. Stress is a major contributor to PCOS and diabetes but most people do not understand what stress is or what to do about it. Here is how stress works and what are the foods that can help you deal with it .

Say you're walking down the street, and you bump into a hungry lion waiting to gobble you up . This is when your consciousness would sense a dangerous threat, and your body would automatically respond to it such that the adrenal glands would pump out several hormones, among these is the cortisol, which tells your liver and other cells in your body to pour out all their stored sugar (glucose) into your bloodstream which can be used as fuel for running away. At the same time, your other cells would become "insulin-resistant." Insulin's job is to get glucose into our cells to be used as fuel but in such acrisis, most of your cells become resistant to insulin, so that the muscles involved in fighting or fleeing will have more energy. This reaction is called "stress." In nature, the stress response is vital to survival but the whole thing would only last for over ten minutes but in case when the thousands of other potential threats in modern society haunt you for which you can't run or hide, they begin to create stress for over a longer period of time and over the time insulin resistance builds up which becomes a major cause of many lifestyle diseases, and one among them is PCOS .

More than you might even realize, stress drives people to overeat or eat unhealthy foods which triggers physiological changes that can make your mood worse. But when healthy food is carefully chosen they can have an opposite effect that will work to boost your spirits and lower the damage that stress does to your body.

Magnesium in foods act as a mood regulating neurotransmitter and research shows that eating green leafy vegetables, nuts, seeds, dark chocolate and yogurt temporarily blocks the feeling of mental pain and depression along aside which yoga being an exercise of the mind - body practice which has been considered to bring together physical and mental disciplines that may help you to achieve peacefulness of the body, mind and soul. But for those who don't have such health conditions, you'd be nipping these diseases anyways for which it could only be decided through diagnosis and before it's too late for you to stave off these lifestyle diseases, it's better to get yourself checked and remember to stay fit.

- by **Roshini Vaishnavi .S**
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Principal's Note

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Teacher's Note

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Citrus fruit extract may prevent kidney stones:

Researchers have found evidence that a natural citrus fruit extract can inhibit the growth of painful kidney stones and even dissolve the crystals.

The compound hydroxycitrate (HCA) can dissolve calcium oxalate crystals, the most common component of human kidney stones, said the study that prepares the groundwork to design an effective drug for the painful condition.

"HCA shows promise as a potential therapy to prevent kidney stones," the researchers wrote in the study published online in the journal Nature.

Kidney stones are small, hard mineral deposits that form inside the kidneys. High blood pressure, diabetes and obesity can increase the risk, and the reported incidence is on the rise.

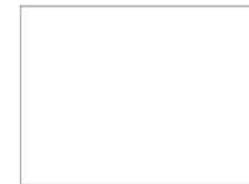
Preventive treatment has not changed much over the last three decades. Doctors tell patients who are at risk of developing stones to drink lots of water and avoid foods rich in oxalate, such as rhubarb, okra, spinach and almonds.

They often recommend taking citrate (CA), in the form of potassium citrate, a supplement that can slow crystal growth, but some people are unable to tolerate the side effects.

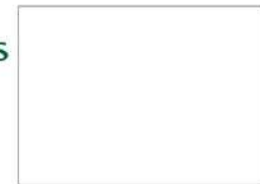
The head-to-head studies of CA and HCA determined that while both compounds inhibit the growth of calcium oxalate crystals, HCA was more potent and displayed unique qualities that are advantageous for the development of new therapies.

HCA was also tested in human participants, as seven people took the supplement for three days, allowing researchers to determine that HCA is excreted through urine, a requirement for the supplement to work as a treatment.

(Reference: Times Of India; August 9, 2016 article.)



Annual Events



Prebiotics, Probiotics & Synbiotics

PROBIOTICS

Probiotics are live microorganisms that can positively impact your health, according to the World Health Organization. Microorganisms are tiny animals made of a single cell. While most probiotics are bacteria, there are also strains of yeast that benefit your body. You can find probiotics in many food products, including fermented dairy and soy products. Probiotics can also be purchased in supplement form. The bacteria and yeast in probiotic products are well-studied strains that have been specially prepared to survive the journey through the stomach into the intestines where they can grow.

PREBIOTICS

Prebiotics are substances that encourage the growth of beneficial bacteria—you can think of prebiotics as food for probiotics and the healthy bacteria in your system. Whereas probiotics are living microorganisms, prebiotics are non-living. Most prebiotics are carbohydrates that the human body cannot digest but which make excellent food sources for beneficial bacteria. Prebiotics can encourage the growth of beneficial bacteria already living in the body and also aid in the growth and maintenance of probiotics.

SYNBIOTICS

The combination of probiotic and prebiotic therapies is referred to as synbiotics. The strategy of combining a probiotic with its preferred nutrient may allow for probiotics to stay present in your body for longer, according to a May 1999 article in the "American Journal of Clinical Nutrition." Synbiotic therapies are relatively new and are the focus of many studies to determine their efficacy.

BENEFITS

Probiotics and prebiotics have similar health benefits because they both accomplish the goal of increasing the population of healthy bacteria and yeast in your body. Healthy bacteria can form a protective shield in your digestive tract that prevents harmful bacteria and viruses from infecting your body, according to an April 2005 article in "FEMS Microbiology Ecology." The presence of healthy bacteria can also keep your immune system "primed" and ready to respond to a threat. Probiotics and prebiotics are particularly useful in replenishing healthy bacteria communities after a disruption such as an infection or antibiotic use.

Can Diet Prevent Alzheimer's Disease?

Diet and Alzheimer's Disease: Omega-3 Fatty Acids and B Vitamins

"A few studies found a correlation between high dietary fish with omega-3 fatty acid intake and a decrease in developing Alzheimer's," says Tara Harwood, registered dietitian at the Cleveland Clinic in Ohio. "However, more studies must be conducted before any conclusions can be drawn."

High levels of homocysteine, an amino acid in the blood, have been associated with the risk of dementia. One avenue being examined is whether increasing intake of folate and vitamins B6 and B12, which break down homocysteine, can help prevent Alzheimer's disease. "Neither vitamin B6 or B12 supplementation has been proven effective," says Harwood, "but data from one study found a lower incidence of Alzheimer's for individuals with the highest folate intake."

Health Benefits of Noni Juice

Organic Facts
www.organicfacts.net



Caution: Avoid consumption if suffering from kidney problems and high blood pressure

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From Plant To Plate !!!

It is so important to know which plant we are eating from in this era. The plant that is nourished by mother earth, that grows with the help of vital elements of nature, that grows to enrich the soil and the ones dependent on it, or are we eating from the plant (mill, factory) that runs on electricity, that enriches the pockets of few handful of people who intend nothing but to make profit.

One plant makes better health and the other makes only food taste better. Let things directly from the farm be your food rather than the one that goes through various processes like refining, further processing and later re-addition of certain nutrients to make the product look and sound more nutritious.

Supermarket and food institutes serve innumerable products today that weren't known a few decades back. Be an aware consumer to know what goes into becoming your food. As a conscious buyer, try and select the ones that do not have or at least have a minimum ingredients list on it. Natural foods like fruits, vegetables, grains, pulses, dairy and dairy products, etc do not have a vast ingredients list.

Some of us sometimes end up buying products from the shelf that have an enormous ingredients list and some of which we haven't even heard before. It's high time we start thinking about it and be more mature enough by making the right choices.

- by **Dimple D.**
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Effect of Black Tea on Diabetes and Metabolic Syndrome

Black tea consumption has been popular widely across the world. Tea (*Camellia sinensis*) has been used as a daily beverage since time immemorial. Tea is mainly available in three variants, approximately 76% to 78% of the tea produced and consumed worldwide is black, 20-22% is green and less than 2% is oolong. Tea is an excellent source of polyphenolic compounds, particularly flavonoids. The active components of tea responsible for such biological effects are known to be catechins (known as polyphenols), which constitute seven forms including epigallocatechingallate (EGCG). EGCG is a major catechin compound present in tea extracts and is also the most active form in a variety of biological activities.]. The purpose of this review will focus on the effect of black tea catechins extracted from the *Camellia sinensis* plant on type 2 diabetes and metabolic syndrome. It is hoped that black tea can be consumed in a suitable manner as a supplement to prevent the progression of type 2 diabetes along with imparting other health benefits as well.

Reference

Roy, N., Bhattacharjee, K., Bandhopadhyaya, S., Chatterjee, S., Saha, A. K., Chatterjee, A., ... Maity, C. (2016). Effect of black tea on diabetes and metabolic syndrome. , 53(3), 354. doi:http://dx..org/10.21048/ijnd.2016.53.3.5341

THE FURIOUS FIVE CANCER-FIGHTING FOODS

Though all fruits & vegetables contains nutritional goodness, these FIVE foods are so fierce they've been dubbed the furious FIVE for their cancer-preventing & cancer-fighting potential

Water Cress

Twice the calcium of milk, twice the iron of spinach and richer in folic acid, vitamins A, C, E and B6.

Berries

One of the richest fruit-based sources of vitamins-C. This tangy juice also contains vitamin A, copper, manganese and folate, which is necessary for producing new healthy cells.

Berries

The darker the berry, the more they will hold free radicals at bay.

Avocado

Twice the calcium of milk, twice the iron of spinach and richer in folic acid, vitamins A, C, E and B6.

Walnuts

One of the best plant sources of protein, walnuts are incredibly rich in fibre, B vitamins, manganese, antioxidants and omega-3 fatty acids.