

Vitamin C in the News

Compiled March 2010

The Vitamin C Foundation monitors research and news reports from around the world concerning vitamin C - ascorbic acid. We have been surprised by the increasing frequency of recent positive reports. The links to the following sample of these reports can be found from our main web page, vitaminCFoundation.org

Vitamin C increases the Production of Induced Stem Cells

Soon after the exciting discovery of a method to turn human adult cells into stem cells came the frustration of actually trying to make that transformation efficient. In creating induced pluripotent stem (iPS) cells, scientists typically only get 0.01 percent of a sample of human fibroblast (skin) cells to change.

A group led by Duanqing Pei of the Guangzhou Institutes of Biomedicine and Health in China has found that a simple chemical can boost the efficiency by 100-fold—namely, vitamin C.

Full story:

<http://www.scientificamerican.com/article.cfm?id=stem-cell-vitamin-boost>

Non-Toxic Vitamin C Inhibits Formation of New Blood Vessel Growth to Tumors

WICHITA, Kan. Feb 26. Bio-Communications Research Institute's (BCRI's) recent research study has found that high levels of vitamin C (ascorbate) inhibit the formation of new blood vessel growth to tumors.

To grow, tumors rely on a high level of nutrients to flow to the tumor site. This nutrient flow is critical to tumor growth and is facilitated in the host body by the growth of new blood vessels. The new blood vessel growth process is known as angiogenesis. In tumor angiogenesis, the blood vessels grow to support the growth of the tumor. This groundbreaking BCRI study has shown that angiogenesis or the proliferation of new blood vessels, in support of tumor growth, is retarded when high levels of vitamin C are present in the blood. High levels of vitamin C saturation necessary for angiogenesis to occur are obtainable with the intravenous infusion of vitamin C (ascorbate).

In the study published in the February 2010 issue of Journal of Angiogenesis Research, two assays were used to evaluate the effect of high-doses of vitamin C on the inhibition of new blood vessel growth. One was ex vivo and one in vivo and both illustrated the inhibition characteristics vitamin C has on new tumor blood vessel growth. The in vivo assay treated with vitamin C indicated 30% less blood vessel growth than untreated tissue.

Full story:

<http://www.prnewswire.com/news-releases/non-toxic-vitamin-c-inhibits-formation-of-new-blood-vessel-growth-to-tumors-85543947.html>

Vitamin C Improves Myocardial Perfusion in Elective PCI

In patients undergoing elective percutaneous coronary intervention (PCI), vitamin C infusion both improves microperfusion and reduces markers of oxidative stress after revascularization, according to a study published in the February 2010 issue of JACC: Cardiovascular Interventions. The findings suggest that oxidative stress plays a role in causing periprocedural myocardial injury and that vitamin C may help counteract it, the authors say.

Full story:

<http://www.tctmd.com/show.aspx?id=88778>

Vitamin C, E, Omega 3-fatty acids Prevent Pancreatic Cancer

A study published Jan 26 2010 in the International Journal of Cancer has found evidence suggesting that high intake of omega-3 fatty acids, vitamins C and E may reduce the risk of developing pancreatic cancer.

Gong Z and colleagues from the School of Medicine University of California in San Francisco analyzed data from a large population-based case-control study in the San Francisco Bay area and found high intake of vitamin C and E and omega 3 fatty acids was associated with low risk of pancreatic cancer.

Study subjects with intake of eight saturated fatty acids in the highest quartile were at a 60 to 160 percent increased risk of pancreatic cancer compared to those with their intake in the lowest quartile.

Full story:

http://www.foodconsumer.org/newsite/Nutrition/Supplements/vitamins_omega_3-fatty_acids_prevents_pancreatic_cancer_31011009.html

Vitamin C Protects Against Hypertension-Induced DNA Damage

The researchers found that vitamin C protected blood cells against hypertension-induced genotoxicity. Brain, liver and heart cells were all protected by vitamin C after hypertension-induced DNA damage.

They also found that vitamin C improved the severity of hypertension.

Full story:

http://www.foodconsumer.org/newsite/Nutrition/Vitamins/vitamin_c_hypertension-induced_dna_damage_1601101055.html

Vitamin C 'Cures' Mice With Accelerated Aging Disease

A new research discovery published in the January 2010 print issue of the FASEB Journal suggests that treatments for disorders that cause accelerated aging, particularly Werner's syndrome, might come straight from the family medicine chest. In the research report, a team of Canadian scientists shows that vitamin C stops and even reverses accelerated aging in a mouse model of Werner's syndrome, but the discovery may also be applicable to other progeroid syndromes.

Full story:

<http://www.sciencedaily.com/releases/2010/01/100104101210.htm>

Vitamin C and other Supplements May Be Key to Preventing Diabetic Retinopathy

According to a study found in the American Academy of Ophthalmology journal, nutritional supplements vitamins C, E and magnesium may help prevent the effects of Diabetic Retinopathy (DR), furthering the notion that simple dietary changes may be more beneficial than medications and prescriptions.

Researchers found that patients with higher levels of vitamin C in their bodies had a less chance of developing DR. While there was only one study that suggested magnesium may help, other studies are unable to draw a conclusion about vitamin E.

Full story:

<http://www.betterhealthresearch.com/news/nutritional-supplements-may-be-key-to-preventing-diabetic-retinopathy-19538858/>

IV/C Can Save Your Cat's Life Too

LOUISVILLE, KY. (From Sally Jewell) There has been yet another miracle I have seen with Intravenous ascorbate. My cat, Linus, with lymphosarcoma has now lived nearly two years beyond his vet-predicted death date due to months of intravenous ascorbate at approximately 1g per pound of body weight (14,000 mg).

I recently lost two cats to the deadly cat disease Feline Infectious Peritonitis (FIP) before I could figure out (1) what they were dying from and (2) the proper Vitamin C dosage amount and time to stop this virus. Each of them was placed on a drip but in both cases it was apparently inadequate.

When a third kitten from the same litter as the other began to show FIP symptoms Having failed in the two previous cases, I decided to take her straight to my alternative vet and get her on IV ascorbate. We titrated her quickly to 2g per pound of body weight according to the Wendell Belfield DVM protocol he had used for FIP cats. Though she had a different type - the "dry" form - than those that Belfield had reported about, I assumed it should be treated similarly and so that is how I instructed my vet.

After 8 consecutive days on the drip at 10,000 mg daily her fevers began to fall and stay down, and according to Belfield's protocol, I kept her on the drip for at least five days after the fevers were controlled to make sure that the virus had been completely eradicated. She received her last drip on Friday, November 20, and so far she is symptom-free and the happy little kitten she was prior to this horrific ordeal.

Anyway, I had to report this to you, as cats never survive the deadly FIP and ours did, again thanks to the likes of Klenner, Cathcart, Pauling and Wendell Belfield. The vet has agreed to a controlled clinical trial and I will keep you informed. Sally Jewell.

Full story:

<http://www.vitaminfoundation.org/forum/viewtopic.php?f=3&t=7743>

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