

Winter Shorts



With the holidays behind us, we're hunkering down for winter 2020. But it's sure not been quiet on the health/nutrition front. Here are some of the stories that have fascinated me:

IV vitamin C vs. septic shock: Septic shock is one of medicine's most dread emergencies. A pathogen enters the bloodstream, leading to disseminated infection. Patients languish in the intensive care unit, hovering between life and death. Their kidneys may shut down, their lungs fill with fluid, and often fingers, toes and limbs need to be amputated. The average survival rate is a mere 50 per cent.

For decades, pioneering integrative physicians like me have been administering high dose intravenous vitamin C to patients with diverse infectious problems with astounding results. Belatedly, IV vitamin C has been embraced by mainstream doctors for septic shock.

Paul Marik, MD, of Eastern Virginia Medical School made waves in 2017 with a study in *Chest* suggesting IV vitamin C has tremendous potential as a treatment for sepsis (*Chest*. 2017 Jun;151[6]:1229-38). But the therapy remains controversial, with some claiming there's not enough evidence.

Now comes a study by Eric Wald MD of Northwestern School of Medicine demonstrating that a cocktail of vitamin C and vitamin B1, combined with steroids, helped reduce mortality in children with septic shock. Steroids alone conferred no advantages in the study, but when combined with C and B1 the death rate plummeted from 28% to 9%.

As Dr. Wald reports in *Science Daily*:

"While it is still unclear why vitamin C appears to reduce mortality from septic shock and we need to dig deeper to understand the mechanism, our results are incredibly promising. We hope to encourage larger, multi-center studies in children with septic shock to confirm our data."

I discussed the latest research on the benefits of IV vitamin C in a recent podcast with Dr. Jeanne Drisko.

Eat fish . . . love longer? Fish are reputed to support cardiovascular health, and shellfish are legendary for their aphrodisiac properties. A new study suggests there may be a real basis for the claims.

In a Danish survey of 1679 men, *"fish oil supplements were associated in a dose-response manner with higher semen volume and total sperm count, larger testicular size, a higher calculated free testosterone to luteinizing hormone ratio, and lower follicle-stimulating hormone and luteinizing hormone levels."*

These positive changes in measures of testicular function via fish oil supplementation may have implications for male fertility; it remains to be demonstrated whether they translate to better performance in the bedroom.

Can pomegranate juice fend off memory loss? If you remember all those PomWonderful commercials, pomegranate juice delivers all kinds of health benefits. After all, it's rich in proanthocyanadins, specifically Punicalagins, with a slew of health attributes.

But, since they're a food, the Federal Trade Commission (FTC) has seen fit to rein in health claims about pomegranates, going so far as to enjoin PomWonderful from invoking scientific studies in their ads. After a costly, lengthy battle, the Supreme Court denied PomWonderful's appeal in 2016.

But that hasn't stopped pomegranate science from advancing. The latest issue of the *American Journal of Clinical Nutrition* features an article entitled "Randomized placebo-controlled study of pomegranate juice in middle-aged and older adults."

In this study, 261 subjects were assigned to drink either one 8-ounce serving of pomegranate juice per day, or a placebo drink, for 12 months. They were administered memory tests which revealed that while pomegranate juice didn't make the participants any smarter, it did forestall the memory losses their peers experienced without pomegranate juice.

The researchers conclude: *"In this 12 month randomized controlled trial, visual memory performance, specifically the ability to learn new visual information over repeated learning trials, was shown to be maintained in individuals who drank pomegranate juice compared with a placebo drink . . . Thus, these findings . . . could have a potential impact on visual memory issues commonly associated with aging."*

Don't expect ads to feature this attribute of pomegranate juice because, as PomWonderful painfully learned, the current U.S. regulatory scheme favors suppression of even truthful research-based claims for health benefits of anything other than FDA-approved prescription drugs.

Sunshine makes you svelte: Despite earnest New Year's resolutions, many North Americans are having trouble shedding those extra pounds. A new study suggests a tropical vacation may kickstart your weight loss efforts during these dark winter months.

You might be saying to yourself: "But I take a hefty dose of the sunlight vitamin-D. Won't that help and save me the airfare?"

Studies have been equivocal on the effects of vitamin D on obesity. While it's true that many overweight people with metabolic syndrome have low vitamin D, that may be because excess body fat sequesters D in fat cells and prevents it from showing up in the circulation. In other words, low D may be an effect, not a cause, of obesity.

Trials of vitamin D supplementation for weight loss and type 2 diabetes have yet to yield consistent, robust benefits.

But this new study examined the effect of sunlight on subcutaneous fat cells, or white fat cells, that can be found right beneath our skin. Direct sunlight exposure in some way seems to kindle fat metabolism.

When subject to natural sunlight "lipid droplets reduce in size and are released out

of the cell. In other words, our cells don't store as much fat," says the aptly named Dr. Peter Light, author of the study.

This makes sense, given our current epidemic of childhood obesity. So many kids languish indoors glued to screens instead of getting outside. Even when they do, they're slathered with sunscreen.

Thus inspired, I'm gearing up for a scuba dive trip this winter—for medical reasons entirely, of course!