

Supplements and surgery: what you need to know (part 2)

Hello and welcome to all my readers – I hope you all had a safe and peaceful Memorial Day weekend.

In our last installment, I shared with you my thoughts on supplements that should be avoided before surgery – if you missed that, you can read it [here](#).

But what about supplements that can be beneficial? If you're wondering what you *should* take before surgery, wonder no more. Here are some suggestions for supplements that could prove beneficial:

Magnesium: Surgery is a form of trauma, and the shock of trauma depletes magnesium. Many surgical patients are magnesium-deficient because of the medications they take, poor absorption, or skimpy diets. Magnesium regularizes heart rate and promotes circulation. Therefore, take 200-400 mg of elemental magnesium per day, preferably as magnesium taurate or Jigsaw Magnesium, the most absorbable kinds.



Vitamin D: Especially in orthopedic surgery, vitamin D deficiency hampers proper recovery. Have your vitamin D levels checked before surgery, and supplement with 2000-5000 IU of Vitamin D3 per day accordingly.

Vitamin C: Ascorbic acid counters free radical damage and is an essential co-factor for collagen synthesis, necessary for proper wound healing. I often give a pre-op IV of vitamin C and other nutrients to my patients prior to elective surgery. They soar through it with flying colors, and recover in record time.

Zinc: Essential for wound healing and immunity. Take 30-50 mg of zinc picolinate or gluconate daily.

Selenium: A vital co-factor for glutathione, the body's premier antioxidant, selenium also confers protection against infections. Take 200 mcg of methylselenocysteine daily.

L-glutamine: Studies have shown that this amino acid revs up the immune system, cuts infections, and promotes cell growth and organ repair. It also counteracts "leaky gut syndrome" which can occur transiently during surgical stress. L-glutamine is a building block for glutathione; it can also boost levels of regenerative growth hormone. Take 1 tsp of the powder in cold water, two or three times daily.

L-arginine: According to research pioneered in the 1970s by my beloved Biochemistry professor at Albert Einstein College of Medicine, Dr. Sam Seifter, arginine has been shown to promote healing and reduce post-op infections. In fact, it has long been incorporated in a nutritional booster formula for surgical patients called Impact (available by prescription only). Consider taking three 1000 mg l-arginine caps three times daily for a few days prior to surgery. (Patients who are herpes-prone might want to skip this because arginine-rich diets tend to provoke outbreaks in susceptible individuals)

Probiotics: Surgical patients often receive oral or intravenous antibiotics while in the hospital, so it makes sense to replenish beneficial bacteria, and provide a bulwark against hospital-acquired *C. difficile* infections.

N-acetyl cysteine (NAC): While some authors claim that NAC can increase bleeding risk, more recent studies have exonerated it. One recent paper showed that its use pre-operatively did not increase blood loss in patients undergoing cardiac surgery. NAC is a premier antioxidant, and it has been shown to protect the liver and kidneys from operative stress. Take 500-600 mg twice daily.

Bromelain: Studies have shown that its anti-inflammatory effects help reduce post-operative swelling, heal wounds more quickly, and even reduce post-surgical pain. Starting 72 hours before surgery, take 1000-1500 mg of standardized bromelain 3 times daily on an empty stomach. Or, try Wobenzym, which combines potent bioflavonoids with bromelain and is frequently used in Europe for injury or surgery (three to five tablets, two or three times daily away from food).

Pycnogenol: While some express concern over the potential blood-thinning effects of pycnogenol *before* surgery, it may be an ideal post-surgery supplement because of its ability to counteract swelling. Take 100 mg twice daily within three days after surgery.

CoQ10: This supporter of mitochondrial energy metabolism has been found to enhance the contractility of heart muscle. Studies have confirmed that it cuts the number of erratic heartbeats heart surgery patients experience and can reduce recovery time. Take 150 mg of CoQ10 (or 100 mg of Ubiquinol) daily before and after surgery.

Arnica: Homeopathy is controversial, but among the most cherished traditional remedies for trauma is Arnica. Although research is inconclusive, considerable anecdotal evidence supports its use, and it's harmless. Arnica is available in tiny pellets or tinctures. Take as directed.

Consider taking a balanced multivitamin to plug your nutritional gaps before and after surgery.

Share your stories of surgical success using these nutritional protocols with us via radioprogram@aol.com

If you'd like a more in depth discussion of this topic, check out my recent Clinical Focus podcast on the subject: [Supplements for Surgery](#).