

### EM Chapter 31 Tools: vitamin C - learn to use this vital tool well – the key is getting the dose right

Vitamin C is a fantastically useful tool and in recent years has revolutionised my practice. It is the starting point to treat fermenting gut and all infections acute and chronic and therefore any condition involving inflammation. It multitasks to improve detoxing, is an essential anti-oxidant, vital for healing and repair. It kills all microbes (bacteria, viruses and fungi) and is toxic to cancer cells. In healthy people it slows the ageing process, in the acute and chronically sick, vitamin C to bowel tolerance is part of Groundhog Acute and Chronic. In achieving all this vitamin C is completely non-toxic to human cells. There is much more detail in our book “The Infection Game-life is an arms race”.

Vitamin C was the final tool that allowed me to tell my patients that vaccination is redundant since we have a far more effective, and far safer tool in vitamin C. With vitamin C we get the best of both worlds. Children can safely experience viral infections without risking complications of such, but receive the vital, alive virus immune programming needed to protect against disease later in life, particularly cancer. The only vaccination I recommend is tetanus, but this should be postponed until the child is at risk of stabbing a muck caked pitchfork through her foot. And yes, I have done that too!

Note from Craig - My ‘tetanus moment’ was whilst climbing a tree at my Nan’s. I was reaching to a bird’s nest and fell. A strategically placed rusty nail [holding a swing] ripped down my chest from just under the neck to near the tummy button. If you look carefully, you can still see a scar. It is only the second time I ever saw my Nan cry. We went to the hospital for the vaccination. I was over the moon because I had a scar to show off to my school friends! Craig

The key to vitamin C is the dose. We simply do not take enough of the stuff. The reason is to be found in Nature – all other animals (except guinea pigs and fruit bats and dry-nosed primates) can synthesise their own vitamin C. Furthermore, the amount generated is matched to requirements – vitamin C synthesis is hugely ramped up to deal with infection. Goats for example may generate 15 grams a day on demand. We humans have lost this essential biochemical function but instead we have our brains. So use it!

For those readers interested in the genetics of Vitamin C synthesis, please see “The Genetics of Vitamin C Loss in Vertebrates” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3145266/>- Curr Genomics. 2011 Aug; 12(5): 371–378., Guy Drouin, Jean-Rémi Godin, and Benoît Pagé

Thankfully we have a mechanism to determine the dose we require. This will need to be varied from day to day because the body absorbs what it needs and leaves the excess in the gut. This allows us to adjust the dose according to our guts. Turn this logic on its head – the dose required to achieve bowel tolerance is a reflection of our total infectious load, the extent to which we have a fermenting gut as well as our toxic load and possibly other issues. In other words, our bowel tolerance is a measure of our health.

Lower bowel tolerance => lower infectious load  
High bowel tolerance => higher infectious load

### How to take vitamin C to bowel tolerance

Do the PK diet – vitamin C is much better absorbed in the absence of sugar and starch. There is no point killing microbes with vitamin C if you are feeding them at the same time. Take ascorbic acid at least twice daily (could be more often). It dissolves much better in warm water. Add fizzy water to produce a rather delicious drink! The ascorbic acid helps to sterilise the upper gut

and prevents fermentation of food. Any microbes inadvertently consumed with foods are killed. Acid further helps digest proteins and also helps the absorption of essential minerals such as iron and zinc. Use ascorbic acid which is the cheapest and most effective form of vitamin C. If this is not tolerated, then use a neutral preparation such as sodium or magnesium ascorbate. Once you are PK and vitamin C adapted you should tolerate ascorbic acid well. The cheapest form of ascorbic acid is fermented from corn but the corn allergics may not tolerate this at all. Failing that one can get ascorbic acid from sago palm.

Start with 2 grams twice daily and increase at the rate of 1 gram every day. You will start to get foul smelling wind. This occurs initially as microbes in the upper gut are killed, swept downstream and are fermented by microbes in the lower gut. Later it occurs as you start to kill some of the friendlies in the lower gut. This is likely to need more than 10 grams of vitamin C. Keep increasing the dose until you get diarrhoea. Hold the dose at this level for 24 hours. At this point you should have a clean, digesting (non-fermenting) upper gut with low levels of microbes in the lower gut. Adjust the daily dose in the longer term. The idea is to find a dose of vitamin C that kills the grams of unfriendly microbes in the upper gut but does not kill the kilograms of friendly microbes in the lower gut. This will depend on several variables that you will have to work out for yourself vis:

- A dose that allows you to pass a normal formed daily turd
- No smelly farting
- A dose that stops you getting coughs, colds and flu when all around are succumbing
- A dose that reduces, gets rid of or reverses any disease symptoms that you may be suffering from. These may be symptoms of the upper fermenting gut or the symptoms of chronic infection. As you can see from the Cathcart link below you have to get to 90% of bowel tolerance to reverse the symptoms of any disease process.

At the first hint of any infection such as a tickle in the throat, runny nose, sneeze, cough, feeling unwell, headache, cystitis.....well you know what from bitter experience.....

Immediately take 10 grams of vitamin C. (half this dose for children, according to body weight) If this does not produce diarrhoea within one hour

Take another 10 grams. If this does not produce diarrhoea within one hour,

Take another 10 grams.....and so on. Some need 200grams to get a result. Whilst this may seem like a huge dose, compare this with sugar - 4 bars of milk chocolate would provide a similar dose of sugar – and vitamin C is legions safer than sugar!

Some people are appalled at the idea of vitamin C causing diarrhoea, but I have to say I would rather have a jolly good bowel emptying crap than suffer the miserable symptoms of flu or a cold for the next two weeks. Indeed, I have not suffered such for 35 years thanks to vitamin C. My father used to say – “you can’t beat a good shit, shave and shampoo”.

Adjust the frequency and timing of subsequent doses to maintain wellness. Remember the dose is critical. You cannot overdose, you can only under-dose. Just do it!

I am not alone in this advice:

Dr Robert Cathcart

Dr Cathcart was a similar advocate of high dose vitamin C. Some helpful clinical details can be seen at:

<http://vitaminfoundation.org/www.orthomed.com/titrate.htm>

Key points of the Vitamin C Foundation paper are:

- Everyone's bowel tolerance dose is unique to them. It will vary through time with age, diet and infectious load. You have to work it out yourself and it will not remain constant!
- You must get to 80% of your bowel tolerance dose for vitamin C to relieve symptoms. This is another useful clinical tool as you can feel so much better so very quickly if you use vitamin C properly.

Cathcart details many diseases that are improved with vitamin C. Interestingly this includes many cases of arthritis. I suspect this illustrates one mechanism of arthritis which is that it is often driven by allergy to gut microbes. Correct this and the arthritis goes. For example, we know ankylosing spondylitis is an inflammation driven by klebsiella in the gut and rheumatoid arthritis is driven by proteus mirabilis.

#### Dr Paul Marik

From the Eastern Virginia Medical School in Norfolk, Virginia, Marik added intravenous vitamin C to his normal antibiotic protocol for treating patients diagnosed with advanced sepsis and septic shock in his intensive care unit. Before using vitamin C, the mortality was 40%. Mortality is now less than 1%. Had this been a novel antibiotic it would have made headline news!

Dr Marik offered the following observations:

*"In the doses used, vitamin C is absolutely safe. No complications, side effects or precautions. Patients with cancer have safely been given doses up to 150 grams - one hundred times the dose we give. In the patients with renal impairment we have measured the oxalate levels; these have all been in the safe range. Every single patient who received the protocol had an improvement in renal function."*

(Please note anyone receiving intravenous vitamin C must be first checked for glucose-6-phosphate dehydrogenase deficiency. High dose vitamin C in these people may cause a haemolytic anaemia. I can find no evidence of this being an issue for oral vitamin C)

Ref: "Vitamin C and Sepsis - The genie is now out of the bottle", **Orthomolecular Medicine News Service, May 24, 2017**

<http://orthomolecular.activehosted.com/index.php?action=social&chash=44f683a84163b3523afe57c2e008bc8c.66>

Lots more good science and practical detail at 'AscorbateWeb'  
<http://seanet.com/~alexs/ascorbate/index.htm#Rev-Ed>

And if nothing else, please do remember that vitamin C is Spanish for vitamin Yes!