



## THE IMPORTANCE OF VITAMIN C – ASCORBIC ACID

Everyone knows about Vitamin C. If you don't get enough fruit and vegetables in your diet, you could get a Vitamin C deficiency and get Scurvy. Captain Cook didn't know about Vitamin C at the time, but he discovered that giving his sailors cabbage and limes prevented the disease – that's why they called Englishmen "Limeys"

Well, Scurvy exists today in our community. You may be surprised, but there are many people who can't afford fresh fruit and vegetables, so they fill up on bread and potatoes and inexpensive foods. As a result, they may find themselves getting symptoms like bleeding gums, red dots on the skin that don't go away (doctors call them petechiae), wounds that don't heal or break down.

In addition to not getting enough from food, humans, gorillas, fruit bats and guinea pigs can't make their own Vitamin C in response to stress like other animals can – I bet you didn't know that!

These days we are all more stressed. There is probably a case to be made for a regular dose of vitamin C, especially during times of stress like overwork, illness, surgery etc. You see, animals like chimpanzees make up to 9000mg Vitamin C in response to stress and a dog can make up to 12,000mg!

I think a normal dose for an adult with a busy life may be around 1000mg. If you are quite stressed, perhaps up to 3000mg. But if you are really sick, you might need 6000mg. Watch out because too much will give you runny bowels.

Below is a list of all the things vitamin C is important for.

### Main actions and functions

- Prevent scurvy
- Antioxidant and free radical scavenger
- Protects other antioxidants- Vitamins E,A,Essential Fatty acids -Omega 3
- Helps absorption of iron
- Stimulates the immune system
- Production of Collagen, Neurotransmitters, corticosteroids, Carnitine
- Formation of Tyrosine which is a precursor to Dopamine neurotransmitter and thyroid hormone
- Bone formation
- Wound healing
- Hydroxylation of proline, tryptophan therefore helps in collagen production

- Metabolism of cholesterol
- Energy release from Fatty deposits
- Modulation of iron and copper absorption and prevents their oxidation
- Reduction of nitrosamine formation in the stomach – helps prevent cancer
- Formation of thyroid hormone
- Antihistamine
- Immunoglobulin synthesis
- Cell mediated immunity
- Activation of folic to folinic acid
- Anti cancer effects
- Synthesis of interferon
- An anti-carcinogenic effect
- A selective cytotoxic (cancer killing) effect

**The dose of vitamin C found in research to prevent the common cold and reduce its severity is 200-2000mg taken daily**

## REFERENCES

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Dr Frances Pitsilis  
 2A Dodson Avenue, Milford, Auckland  
 PO Box 31-572, Milford, North Shore City 0741, New Zealand  
 PHONE: +64 9 486 0030 FAX: +64 9 486 0333  
 EMAIL: info@drfrances.co.nz WEBSITE: www.drfrances.co.nz



Dr Frances Pitsilis  
2A Dodson Avenue, Milford, Auckland  
PO Box 31-572, Milford, North Shore City 0741, New Zealand  
PHONE: +64 9 486 0030 FAX: +64 9 486 0333  
EMAIL: [info@drfrances.co.nz](mailto:info@drfrances.co.nz) WEBSITE: [www.drfrances.co.nz](http://www.drfrances.co.nz)

