



TOMATO+HEALTH NEWSWIRE
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Protect yourself

Nutritional self-defence for all ages

New reference book tells why tomato juice, soup, sauce and salsa could save your life

Tamsin Rockwell interviews Dr. Venket Rao for Tomato+Health Newswire
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A groundbreaking new reference book about the extraordinary health story behind the tomato is gaining a following amongst a surprising variety of readers. This title is the first independent edition on the subject written and edited by the scientists themselves. Two dozen of the world's leading nutritional specialists have assembled and reviewed in a single volume the most recent findings in 13 areas of research. The result is a broad, yet increasingly detailed picture of the inner workings of a new dietary superstar.

Tomatoes and their processed products are packed full of vitamin C, folate, fibre and lycopene and are a basic staple of the Mediterranean diet. Together with virgin olive oil (itself full of antioxidant polyphenols and helping to transport the goodness of cooked tomatoes into the body) tomato juice, sauces, salsas and soups of this antioxidant-rich red fruit are being hailed as heart healthy superfoods that protect us against heart disease and a list of other chronic illnesses.

Lycopene is the potent red carotenoid which gives tomatoes their colour and protects against the oxidative action of the sun to stop them ripening too fast. Lycopene can effectively do the same for us. I had a chance to interview the editor of "*Tomatoes, Lycopene & Human Health, preventing chronic diseases*" Dr. A. Venket Rao, professor Emeritus of the faculty of medicine at the University of Toronto.

T+H: *Dr. Rao, tell us about this exciting new book and how it will affect the way tomato products are viewed and valued in the future.*

Dr. Venket Rao: Over the last decade, lycopene has been singled out for increased attention on account of its potential role in the prevention of chronic diseases. This book is the direct result of that interest. '*Tomatoes, Lycopene & Human Health*' provides, for the first time ever, comprehensive, up to date information on important aspects of tomato lycopene showing how we can protect our health simply through attention to our diet.

T+H: *Does this mean that simply consuming more tomato products such as sauces or soups can really protect our health?*

Dr. Venket Rao: Lycopene can now be referred to as a *chemopreventive agent*. There is growing evidence that a diet rich in carotenoids can protect against cardiovascular disease. A review of population studies provides convincing evidence in favour of a protective role for lycopene.

T+H: *to really make a difference in protecting our health, how much do we need to consume?*

Dr. Venket Rao: Lycopene has to be provided through diet because we cannot produce it ourselves. Studies show a daily intake of 7-8 mg is enough to fight oxidative stress and prevent chronic diseases. That's one medium sized glass of tomato juice or a fair serving of a good tomato pasta sauce.

T+H: *Dr. Rao, how would you describe in non-scientific terms what all of this really means?*

Dr. Venket Rao: Explaining the science in simple terms, the best metaphor is to describe the human body as a car. With a car, whatever the model, the same physical rules apply. The car will age with the passing of time and during this time will be attacked continuously by exposure to the elements.

Oxidative Stress: Is the rusting of the car. The metal reacts with oxygen forming a brown coloured oxide that ruins the paintwork. If you allow that to continue it won't be long before the continuous rusting action leaves a hole in the bodywork and its time for a new door panel and a re-spray. In human terms though we cannot simply go to the body repair shop, we have to consider some other way to control the rusting action.

Antioxidants: Anti-rust treatment for your body. Lycopene is one of the best. Tomatoes, especially processed tomato products also contain other nutrients, which act and work together to increase anti-rust protection.

Phytochemicals: Are the plant's own self defence system against the sun. They are extremely potent and very effective and also work for humans.

Carotenoids: The colour pigmentation of food provided by Mother Nature. Lycopene is part of this family. Beta-carotene is what makes carrots orange and lycopene is what makes tomatoes red. Carotenoids are efficient free radical scavengers making them good for plants and good for us.

Free Radicals: It is these reactive molecules that cause the rusting action. Free radicals run around looking for something to react with. That can be bad news if a chronic disease is provoked. Antioxidants in the diet find and neutralize these damaging molecules preventing further harm.

Bioavailability: In the case of tomatoes, processing or cooking unlocks the most effective parts. This means we can absorb more of the right nutrients. This is bioavailability. Note, the same essential nutrients are found in fresh tomato but are much more available from cooked or processed. Therefore tomato juice or rich tomato pasta sauce provides some of the best ways to access these nutrients.

T+H: *We can drink to better health with another tomato juice. Thank you Dr. Rao for taking the time to explain this complex and yet simple issue.*

The book is available from Caledonian: www.caledoniansciencepress.com