

extra!

George & Partners

A healthy regard for lycopene research

Winter 2010/11

Dear Customer,

Welcome to the autumn edition of **EXTRA!** where we round up the latest research into tomato lycopene and its health benefits.

Let me start with a word of caution – there has been a spate of newspaper headlines and on-line articles recently claiming far more health benefits for lycopene than can reasonably be established. If you believe everything you read, you'll be hoping an increased lycopene intake will simultaneously reduce the risk of asthma, reverse baldness and increase your sex drive! All worthwhile ambitions, of course, but the research doesn't stand up to serious scrutiny, based in one case on just a single study of a few mice. By comparison, we've known for many years that lycopene helps the fight against prostate and heart disease, conclusions that are supported by a wealth of human studies from around the world including a London Hospital trial which showed marked benefits with LycoPlus for most men on the trial with established prostate cancer.

Perhaps less well known is the role lycopene is believed to play in protecting the skin from ageing and more serious problems associated with too much sunlight. Recent studies in Germany and the UK have confirmed a link between lycopene and skin health and so we have asked our very own Dr Fritz Boehm, Consultant & Professor of Dermatology, Berlin, to explain the findings – essential reading for those lucky enough to be seeking a little extra sun this Winter.



As ever, if you have any comments, questions or suggestions about **EXTRA!**, we would love to hear from you. I can be contacted on Freephone 08000 234 235 or via enquiries@lycoplus.co.uk.

T. George Truscott
Professor of Medicinal Chemistry and
Managing Director of George & Partners Ltd

THE HISTORY OF THE SUN TAN

In many early civilisations, a tanned skin was regarded as a sign of low social status, indicating long hours of manual work in the sun. So driven were women of the time to appear pale that many used dangerous lead-based cosmetics and arsenic to whiten their skin. Even in more enlightened times, full length clothes, powders, and parasols were popular until the end of the Victorian era.

Then in the 1920s, after influential designer Coco Chanel accidentally sunburnt herself on the French Riviera, tanned skin started to become regarded as a fashion statement, signifying an affluent lifestyle. In the 1940s, women's magazines started carrying advertisements that encouraged sun bathing, the first tanning oil became available and swimsuits' skin coverage began decreasing, culminating in the launch of the bikini by the French designer Louis Reard in 1946.

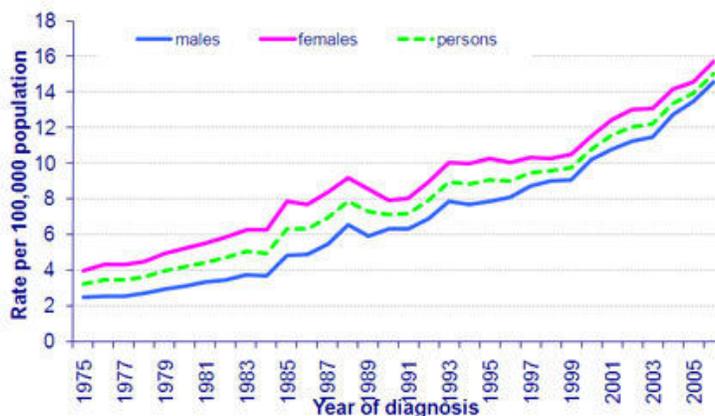


Over the last 60 years, the desire to tan has grown exponentially. It has influenced where we go on holiday and given rise to a host of new industries such as sun protection products and tanning salons.

SUN BEHAVIOR AND SKIN CANCER

We now know that too much ultra-violet radiation leads to sunburn and probably increases the risk of malignant melanoma and other skin cancers.

Age-standardised (European) incidence rates, malignant melanoma, by sex, Great Britain, 1975-2007



Over the last thirty years, the incidence of malignant melanoma has increased more than for any other common cancer in the UK. Some of the increase may be due to increased surveillance and early detection as well as changes in diagnostic criteria but most is considered to be real and linked to changes in sun behaviour (Cancer Research UK).

There are two major types of UV radiation from the sun:

- UVB – causes reddening and pain and is responsible for the majority of sunburns.
- UVA – penetrates deeper into the skin. It does not cause sunburn but ages the skin.

We now know that both UVA and UVB can damage DNA in the skin which can lead to skin cancer.

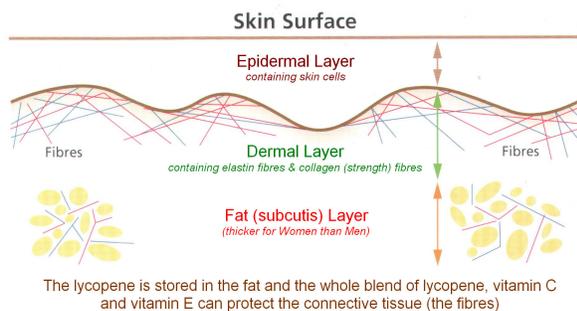
Around 100,000 new cases of skin cancer are diagnosed in the UK each year. Shade, clothing and a minimum factor 30 sunscreen are recommended to protect your skin.

LYCOPENE AND SKIN PROTECTION

Long-term sun damage builds up day-by-day so we get wrinkles (loss of skin elasticity), premature ageing and sometimes skin cancer. Premature ageing continues even in the low levels of sunlight that reach our skin on cloudy days, as well as from other factors such as pollution.

UVA radiation leads to the production of an active and dangerous form of oxygen known as "oxy-radicals". It is these free radicals that are effectively quenched (removed) by lycopene.

The protection of the skin by lycopene is very different from sunscreens which simply give a filter/reflective effect. These are applied to the surface of the skin and are lost within a few hours whereas lycopene builds up in our skin day-by-day over several weeks, protecting us 'from the inside'.



The link between lycopene and skin health is steadily becoming better understood. For example, food & cosmetic heavyweights, Nestlé and L'Oreal, have teamed up to create a lycopene product for the skin health and beauty market.

A recent British study (from the Universities of Manchester and Newcastle) supports the benefits of lycopene in protecting the skin (from within) against sunburn and sun-induced skin ageing. Subjects who consumed tomato paste were found to have 33 per cent more protection against sunburn, compared to the control group. The results were presented at the British Society for Investigative Dermatology in April 2010.

The researchers recruited 20 people and randomly assigned them to receive 55 grams (five tablespoons) of standard tomato paste with 10g of olive oil daily, or just olive oil, for 12 weeks. The skin of the volunteers was exposed to UV light at the start and end of the trial and the researchers found that the tomato paste-supplemented group had 33 per cent more protection against sunburn than the olive oil only-fed group.

Skin samples taken from the subjects indicated that the tomato paste-supplemented individuals had higher skin levels of pro-collagen, a molecule which gives the skin its structure and loss of which leads to skin ageing and lack of elasticity. Professor Rhodes, Professor of Dermatology at Manchester University, said:

"The tomato diet boosted the level of procollagen in the skin significantly. These increasing levels suggest potential reversal of the skin ageing process. This is in addition to the significant reduction in sunburn."

"People should not think that tomatoes in any way can replace sun creams, but they may be a good additive. If you can improve your protection through your diet then over several years, this may have a significant effect."

Ask George...

Professor George Truscott dips into his correspondence and answers some recent customer questions.

I currently take Lycoplus EXTRA for protection against prostate disease. Is the recommended dose of one capsule a day also suitable for skin protection?

Yes, the UK skin trial used a very similar amount of lycopene to that in one capsule of Lycoplus EXTRA.

Is Lycoplus EXTRA suitable for women?

Yes, Lycoplus EXTRA is suitable for both sexes. Whilst regular readers will know of the positive relationship between lycopene intake and prostate health in men, research in Sweden and Israel has also linked increased lycopene levels in older, post-menopausal women to a reduced risk of breast cancer, and of course everyone benefits from its role in skin protection and anti-aging and the fight against heart disease.

My wife tells me she thinks Lycoplus EXTRA extends her sun tan for a few weeks. Is this possible?

Yes, indeed, scientists established several years ago (e.g. Dietary carotenoids contribute to normal human skin colour and UV photosensitivity, by Dr S. Alaluf and co-workers, Journal of Nutrition, 2002) that dietary carotenoids can accumulate in the skin and influence its colour.

Of course, it depends on skin type with fair skin showing the greatest effect and the explanation may be linked to the melanin pigment (responsible for the skin colour). Melanin is produced by sunlight and is subsequently lost as the colour fades. This fading may be slowed by anti-oxidants such as lycopene.

ABOUT GEORGE & PARTNERS

George and Partners Limited is the collective brainchild of Professors Jim Barber F.R.S., Fritz Boehm M.D. and George Truscott D.Sc., F.R.S.E., three internationally renowned carotenoid experts who over the last 30 years have published more than 800 scientific papers between them. The company specialises in lycopene "nutraceuticals", tracking the latest research findings from around the world, particularly relating to prostate cancer, breast cancer and heart disease. The company is also active in the field of skin anti-aging.



£28 incl. P&P
for **two month's**
supply (60 capsules)

Lycoplus EXTRA is the latest product from George & Partners. Each capsule contains 15mg of lycopene plus 60mg of vitamin C which the company's own research has shown reactivates "spent" lycopene in the body, enhancing and prolonging the effect of the supplement.

Lycoplus EXTRA can be purchased directly from George & Partners. Please call us on Freephone **0800 234 235** or visit www.lycoplus.co.uk

