

Read all about it... It can be awkward when a patient asks you about a report in their favourite tabloid detailing an amazing research breakthrough or a 'cutting-edge' new treatment / test and you don't know what they are talking about! So this section fills you in on the facts.

Cannabis oil helped cure my cancer, claims father who was given two years to live

Published in *The Daily Mail*
15 August 2014.

This story details a gentleman who opted to treat his bladder cancer using alternative therapies. For a urologist, the story is disappointingly light on details – we are told though that Mr Smith was diagnosed with 'bladder cancer'. The story goes on to explain that Mr Smith was advised to undergo a radical cystoprostatectomy, possibly with adjuvant chemotherapy.

Mr Smith declined this surgery and instead ingested 60g of imported cannabis oil over a period of 10 weeks. The high tetrahydrocannabinol content of this oil apparently rendered him sleepy and non-responsive. The story avoids detailing what conventional treatment he did receive, but one has to wonder whether he received intravesical immunotherapy or chemotherapy. Nevertheless, Mr Smith is

pleased to report to *The Daily Mail* that he is now 'in remission'.

Browsing PubMed; it is clear a great deal of research is currently being done to investigate the medical use of cannabinoids, particularly in the field of oncology. In a forthcoming publication in *Biochemical Pharmacology*, evidence is presented that cannabinoids promote the expression intercellular adhesion molecule 1 (ICAM-1), which in lab-grown lung cancer cell lines causes adhesion of (and lysis by) lymphokine activated killer cells.

In the same month, Dr McCormick of the University of East Anglia is co-author of a paper detailing that two cannabinoid receptors (CB2 and GPR55) are upregulated in tumour cells and that modulation of the receptors may interrupt

or modify cell signalling in tumour cells in a way that may open the door to development of new cancer treatments in the future. Furthermore, there are numerous pieces of research over the last few years detailing the effects of CB1 receptor stimulation on cancer cell lines. Indeed, in some prostate cancer cell lines cannabinoids can have anti-proliferative, apoptotic and anti-invasive effects. There does not appear to be any research at all regarding CB1 or CB2 receptors in bladder cancer.

Clearly, this kind of research is a long way from anything approaching a clinical trial, but is fascinating nonetheless. I feel a legal obligation to point out that importing cannabis into the UK is against the law and risks a prison sentence.

Eating tomatoes slashes the risk of cancer

Published in *The Daily Express*
28 August 2014.

I am commonly asked about tomatoes in clinic. I suspect you are as well. The idea that lycopene in tomatoes can be beneficial with regards prostate health has been around for quite a while. Lycopenes are anti-oxidants in the carotenoid family. You may recall that a few months ago I reported on an article about carotenoids from carrots reducing the risk of prostate cancer.

This article about tomatoes references a new study in *Cancer Epidemiology* which has been carried out as part of the NIHR funded ProtecT study. This study compares the dietary habits of 12,005 cancer-free men aged 50-69 against the diet of 1806 men with prostate cancer. The researchers identified that eating 10 or more portions of tomatoes a week correlates with an 18% risk reduction for developing prostate cancer.

With many pieces of similar research, the counter-argument has always been that eating plenty of fruit and vegetables

is just one part of a healthy lifestyle and other parts of that healthy lifestyle are contributing factors in reducing the risk of cancer. However, this study also examined the role of weight, physical activity, meat intake and alcohol intake. Interestingly, only the intake of plant foods and tomatoes (including baked bean and pizza sauce) showed a correlation with prostate cancer risk. Indeed, the effect appears dose-dependent.

This study indicates that there is still insufficient information to develop a full set of evidence-based lifestyle recommendations for prostate health. However, the authors do suggest a Prostate Cancer Dietary Index – a diet low in calcium and high in selenium and lycopene. This requires further validation in other studies. My personal interpretation of this study suggests that it is absolutely fine for a man to eat an entire extra-large takeaway pizza by himself.



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