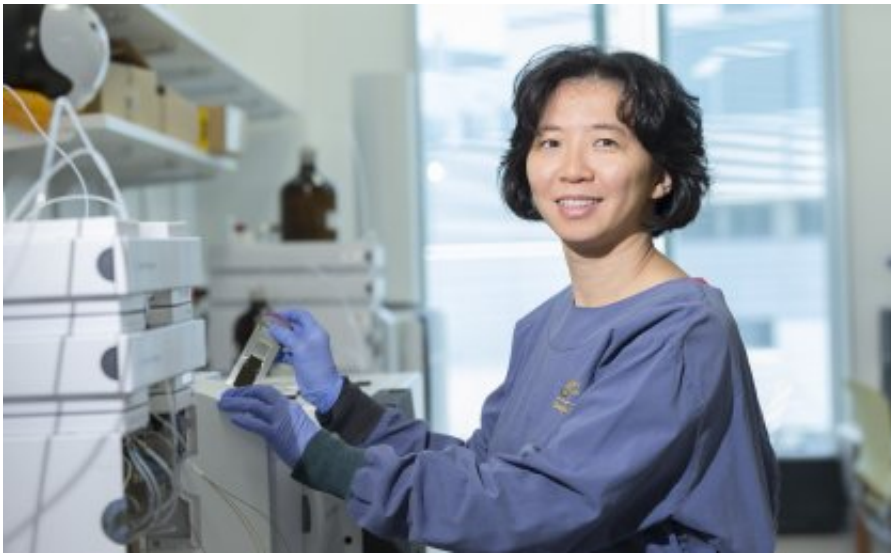


# Study reveals high-cholesterol diet increases spread of prostate cancer

March 31 2015, by Kate Templeman

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University of Queensland research has shown that a high-cholesterol diet increases the spread of prostate cancer tumours to lymph nodes, lungs and bones.

UQ Diamantina Institute study leader Dr Michelle Hill said the research highlighted why it is important for patients with [prostate cancer](#) to choose a low-cholesterol diet.

"High cholesterol doesn't change the size of the original prostate cancer

tumour, but the effect on cancer spreading was shown to be significant," Dr Hill said.

The team investigated if the findings could also lead to a treatment to stop the spread of prostate cancer.

"We found two key proteins which enable the [high cholesterol](#) to prompt cancer spreading," Dr Hill said.

"Cholesterol acts like a magnet, pulling these two proteins to the surface of the cancer cell.

"This disrupts the function of the cell, makes it more aggressive and spreads it elsewhere in the body.

"If we can block the magnetic effect cholesterol has on these two proteins, our research could lead to future treatments preventing the spread of prostate cancer.

"In the meantime, clinicians should work with patients to reduce [cholesterol](#) through dietary modification and existing [cholesterol medication](#)."

Princess Alexandra Hospital and Metro South Health Service Medical Director of Cancer Services Associate Professor Euan Walpole said he welcomed the study because of its relevance to patient management.

"Results from this study highlight the potential importance of monitoring and managing [cholesterol levels](#) in patients with prostate cancer." he said.

Dr Hill's study, with collaborators from UQ, Queensland University of Technology and the University of New South Wales, was funded by The

Association of International Cancer Research and the Prostate Cancer Foundation of Australia.

The research is published in the journal *Oncotarget*.

**More information:** "Diet-induced hypercholesterolemia promotes androgen-independent prostate cancer metastasis via IQGAP1 and caveolin-1." [www.impactjournals.com/oncotar ...  
article&op=view&path%5B%5D=3476&path%5B%5D=6882](http://www.impactjournals.com/oncotarget/article&op=view&path%5B%5D=3476&path%5B%5D=6882)

Provided by University of Queensland

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