

# Trial set to determine Alzheimer's onset origins

November 19 2013, by Chris Thomas

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Prof Martins says there have also been several independent traditional-based studies that have shown fish consumption and omega 3 fatty acids can have an impact on amyloid. Credit: Kiks Balayon

A world-first clinical trial being conducted in WA is exploring whether testosterone and fish oil may prove to be the key in preventing or postponing Alzheimer's disease.

After receiving a \$500,000 State Government grant, McCusker Alzheimer's Research Foundation chair Professor Ralph Martins is now assessing anecdotal evidence that the two substances combined may be effective.

The aim of the treatment is to get in before any primary damage to [brain](#)

cells occurs—so none of the men in the research project (400 WA men aged 60 or more) have yet been diagnosed with Alzheimer's disease.

"We got information on testosterone and fish oil from separate lines of research," Prof Martins says.

"Testosterone plays a big role in stopping the production of amyloid in the brain and in the blood.

"A group of people treated for prostate cancer were chemically castrated and their [testosterone levels](#) went down. What we found for the very first time is that amyloid levels dropped in the blood."

In patients with Alzheimer's disease, beta-amyloid is the protein that builds up in the brain and impairs its function—and animal studies, where guinea pigs and mice were castrated, clearly showed testosterone reduces the build-up of this protein in the brain.

Prof Martins says there have also been several independent traditional-based studies that have shown fish consumption and omega 3 fatty acids can have an impact.

"Our trial is a long process and what we want to do is basically take people who have got amyloid in their brain and treat them with [testosterone](#), [fish oil](#) or a combination of the two," he says.

"The actual trial will take 12 months and at the end of that period we scan the brain again trying to find the most powerful diagnostic markers."

While Prof Martins warns the treatment won't be a "magic bullet", he believes a 10 to 15 per cent reduction in people being diagnosed with Alzheimer's disease would be a good result.

Provided by Science Network WA

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