



Hope for older men

Research targets low testosterone

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MELBOURNE scientists are a step closer to discovering a new pathway to reduce weight gain in men with low testosterone levels.

As men age their levels of the sex hormone decreases, which causes an increase in fat, less muscle mass and weakened bones.

Men who have prostate cancer therapy encounter similar problems when they have a treatment that blocks the actions of androgens.

In order to find a way to prevent these negative health effects in ageing men and cancer patients, Austin Health scientists said it was vital to first understand how the sex hormone exerted these effects on bone, muscle and fat.

Dr Rachel Davey, from the University of Melbourne Department of Medicine at Austin Health, said it had been shown that deleting the target



Hormone hope for men.

for androgen action led to weight gain.

Her research project tried to determine if bone marrow stromal cells, a type of stem cell that can turn into fat, bone or muscle and expresses the target for androgens, could be used to control weight gain.

Her supervisor, Austin Health director of endocrinology and head of the University of Melbourne department of medicine, Professor Jeffrey Zajac, said studies had shown

low testosterone in men was associated with increased fat, cardiovascular disease, osteoporosis and falls and fractures, and decreased muscle mass.

“What we don’t know yet is if we give testosterone to men, will it fix all of those things?”

A trial is under way that gives men testosterone, but for men undergoing prostate cancer treatment this isn’t an option as their treatment requires it to be blocked.

“But if you could find the pathway independent of testosterone that causes the muscles to grow back and the fat to go down and the bones to stay strong, this would be very positive for the increasing number of men diagnosed with prostate cancer, who need this particular therapy,” he said.

“This research could lead to that outcome.”

The project was presented at the Austin Health Medical Research week.

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