Can a Mediterranean diet slow the ageing process?

Telomeres are repetitive DNA sequences at the end of chromosomes. Their function is to protect the integrity of the chromosome. Telomeres undergo gradual reduction each time the cell divides and this process is accelerated by oxidative stress and inflammation.

Telomere length is considered to be a biomarker of ageing; shorter telomeres are associated with decreased life expectancy and increased rate of developing chronic disease. Studies suggest that the shortening of telomeres is modifiable and this study sought to determine whether eating a Mediterranean diet can slow the attrition of telomeres.

The Mediterranean diet consists of a high intake of vegetables, fruit, nuts, unrefined grains, olive oil and fish; a low intake of saturated fats and dairy products and regular but moderate intake of alcohol, specifically wine with meals.

This study included 4,676 healthy, middle-aged and older female nurses who completed food intake questionnaires and provided regular blood samples so telomere length could be measured. It was found that those who adhered more to the Mediterranean diet had significantly longer telomere length. The protective effects of the Mediterranean diet on oxidative stress and chronic inflammation might be responsible and so point to a biological mechanism for its anti-ageing effects.


Limiting damage to the urethra from catheters

Urethral erosion can occur at either the bladder neck or the urethral meatus in male and female patients who have been catheterised. Sudden pulling on the catheter can cause damage or necrosis can develop after longer-term pressure. This can be exacerbated by the tension put on the catheter by a drainage bag full of urine. As a result, painful cleavage can develop along the shaft of the penis or similar damage can occur to the labia in women.

Securing the catheter can reduce the risk of damage but this must be done appropriately and not just using adhesive tape. Two main types of device are available – specifically designed straps, fitted around the patient's leg, to which the catheter is secured or adhesive devices which remain in place for up to a week.

The two commonly used adhesive devices marketed in the UK are CliniFix and StatLock. Clinifix uses a hydrocolloid adhesive and allows some movement of the catheter. StatLock uses a foam pad that needs to be removed with alcohol and has a swivel clip to secure the catheter.

The authors cite a previous study showing that patients with neurogenic bladder using StatLock had reduced incidence of urinary tract infection compared with patients using straps or adhesive tape.


Drug treatments for Parkinson’s disease compared

Researchers found a Mediterranean diet, which consists of a high intake of vegetables, fruit and fish, was linked to longer telomere length

Three classes of drug, levodopa, dopamine agonists and monoamine-oxidase B inhibitors (MAOBI), are used in the initial treatment of Parkinson’s disease. Levodopa is better at controlling motor symptoms but abnormal involuntary movements known as dyskinesias develop after long-term use or high-dose treatment. As a result levodopa is used as the initial treatment most often in patients over the age of 70 in whom long-term complications are judged less important.

Dopamine agonists are associated with side effects such as nausea, hallucinations, oedema and sleep disturbance while one study reported higher mortality with the MAOBI selegiline.

This randomised trial assigned 1,620 patients to receive one of the three classes. Findings showed small but persistent benefits in mobility scores when treatment was initiated with levodopa rather than the other two classes of drug.

The authors conclude that no short-term or long-term benefit was seen from avoiding levodopa when treating patients with early Parkinson’s disease.