

Joydens Wood Pharmacy

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Opening Times

Monday 9am - 6.30pm

Tuesday 9am - 6.30pm

Wednesday 9am - 6.30pm

Thursday 9am - 6.30pm

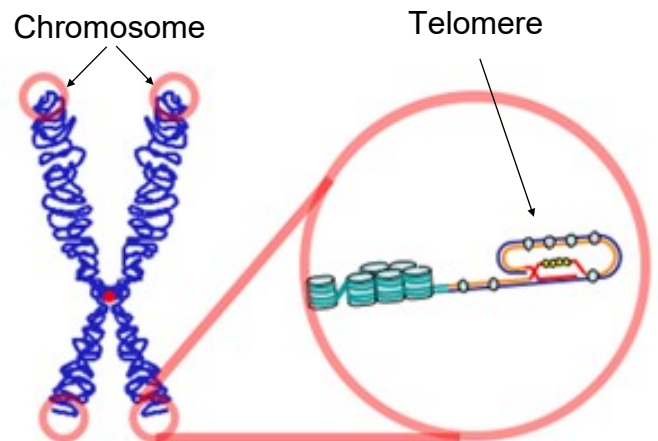
Friday 9am - 6.30pm

Saturday 9am - 4.00pm

Closed for Lunch 1pm - 2pm

Your FREE Healthy Living Leaflet for July 2019

1. What are telomeres?
2. Why are they important?
3. How are they linked to ageing?
4. Why is that a problem?
5. How many base pairs does a baby's telomeres have?
6. How many base pairs does a 65-year old person have?
7. Can this decline be reversed?
8. How can it be reversed?
9. What else affects the length of your telomeres?
10. Can my lifestyle affect the length of my baby's telomeres?



Answers on the bottom of page two

What are telomeres?

A telomere is a short sequence of non-coding DNA base pairs found at the end of each of your chromosomes. The telomeres are important because they act like the plastic ends of a shoe lace and stop your DNA from unravelling each time it duplicates as your cells divide. Your cells are dividing throughout your life but it has been discovered most cells can only divide a set number of times - the longest being about 50 to 70 - before the cell stops dividing permanently. This is caused mainly by your telomeres becoming too short to allow your cells to divide.

How are telomeres linked to ageing?

Once the telomeres in a cell become too short, the cell

stops dividing which is one of the primary reasons your cells get old. But that is not the worse part of it. The telomere will send out distress signals which eventually lead to wide spread chronic inflammation. When too many of your cells reach this stage, your body's tissues start to age and you move from the health span of your life to the disease span. Your genes affect your telomeres – both the

length of them when you are born and how quickly they dwindle down. However, the wonderful news is that research has shown that you can step in and take some control of how short or long your telomeres are by following the healthy living advice of eating well, exercising and not smoking.



Can this decline be reversed?

A baby starts out with 10,000 base pairs in their telomeres but by the time they reach 65 this will have reduced to 4,800 pairs

An indication of how long your telomeres are, is how old you look. We all know people who look young for their age and others who look older than they are. Generally, this difference depends on the issues they have had to cope with in their lives and the effect those have had on their telomeres.

This decline can be reversed by changing your lifestyle so you eat less meat and more vegetables, you take at least 150 minutes of moderate exercise per week, stop smoking, drink no more than 14 units of alcohol per week and reduce your stress levels.

By finding a job you love that leaves you time to cook good meals for your family and spend time together swimming or enjoying long walks in the countryside, your telomeres will thrive and the chances are, you will look younger than your years and remain in the health span for longer.

What else affects my telomere length?

The more stress you are under the shorter your telomeres will be, but it is not that simple. It is the way you respond to stress that affects your telomere length. If in a stressful situation you feel challenged rather than threatened and you recover quickly after the event, your telomeres will be longer.

Mindfulness is a good way to combat stress. By concentrating on one task at a time and not allowing your mind to wander, especially avoiding negative thoughts, you will reduce your stress levels and hence help your telomeres to grow.

Exercise is good for your telomeres though you don't need extreme fitness to thrive. People who exercise live longer and have lower risk of stroke, diabetes, depression and they avoid dementia for longer.

Poor quality sleep is linked to shorter telomeres. Getting at least 7 hours sleep is associated with longer telomeres but if you find you need 8-9 hours don't try to manage on just 7 hours. When sleep quality remains good,

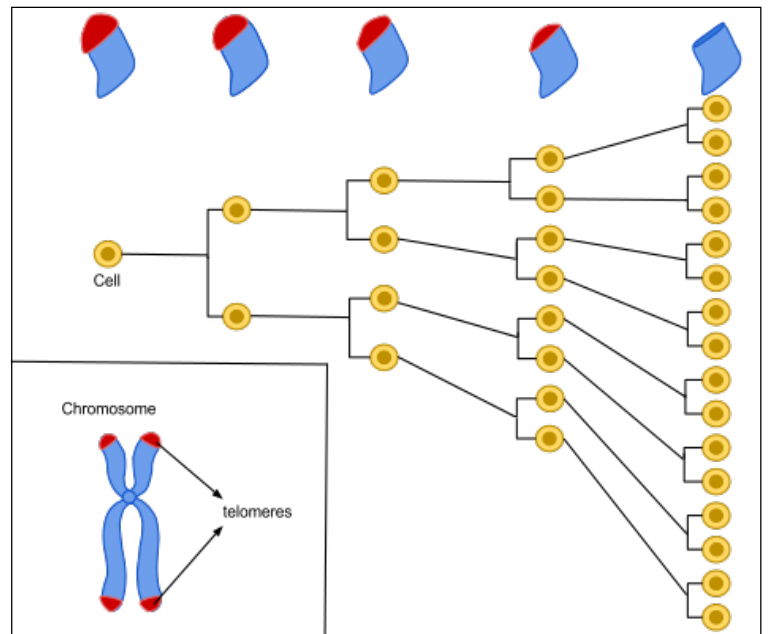
telomere length stays pretty stable over the decades.

Your relationships and the neighbourhoods you live in affect your telomere length. Communities where people feel less safe and where they fear violence are damaging to telomere health. Living in areas where there is a lot of greenery helps lengthen your telomeres.

People in neighbourhoods where there is low "social cohesion" have greater cellular ageing. However, you don't need to be rich to have long telomeres. Having enough money for basic needs helps but more money doesn't seem to matter. The more education you have the longer your telomeres are likely to be. Poor education level is one of the most consistent predictors of early disease.

The astounding thing is that the changes in your telomere lengths caused by your lifestyle, good or bad, can be directly passed onto your unborn children directly via the eggs and sperm that create your child.

If you would like more information about this or any other health related matter, please talk to a member of our trained team



The average cell will divide between 50-70 times before cell death. As the cell divides the telomeres on the end of the chromosome get smaller.

Answers: Q1, A short sequence of non-coding DNA at the end of your chromosomes. Q2, They stop your DNA from unravelling when it divides. Q3, Each time your cells divide your telomeres become shorter. Q4, When they become too short the cell stops dividing permanently and eventually dies. Q5, 10,000. Q6, 4,800. Q7, Yes. Q8, By living a healthy lifestyle. Q9, Genetics, your neighbourhood, your level of education. Q10, Yes.