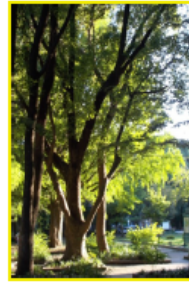




## Why trees are good for you

P  
O  
S  
S  
I  
B  
L  
E  
  
E  
F  
F  
E  
C  
T  
S

- Lower blood pressure
- Accelerated recovery from surgery or illness
- Improved sleep
- Improved mental health
- Increased immunity
- Enhanced anti-cancer cells
- Lower blood sugar
- Cardiac benefits
- Reduced stress and enhanced mood
- Increased energy
- Improved pulmonary function
- Increased ability to focus, even in children with ADHD



In recent years there have been many studies on the effect that trees can have on human health. Although some of the research has been carried out on relatively small numbers of participants, they all point to the same conclusion: that trees offer great benefits for our health.

These effects can occur indirectly (and therefore be hard to measure) through actions such as offering protection from UV rays, reducing stress, improving mood, cooling the atmosphere, removing pollutants and toxins from the air we breathe (thus reducing incidences of asthma and other breathing difficulties) and reducing noise. Many of these aspects are particularly important in urban areas, where incidences of pollution, noise, and intense summer heat can be particularly problematic.

Many of us will be aware of the 'feel-good factor' associated with a pleasant walk in the forest, but how often are we aware that it's probably also benefitting our physical and mental health? Time spent among trees can also have a positive influence over some specific medical conditions. For example, the RSPB noted that even 'the behavioural symptoms of children with attention deficit disorder (ADHD) are reduced when children play in a natural environment'. (1)



More directly it has now been discovered that there are health benefits to be gained through the action of the phytoncides that trees release into the air. Phytoncides are active substances created by trees to help prevent rotting or being eaten by some of the insects, animals and fungi that attack them. Research has discovered that there is also a beneficial effect on people when they visit forests and inhale the phytoncides. So convinced of the positive effect



were the Japanese Ministry of Agriculture, Forestry and Fisheries, that in 1982 they created a term for this therapy: shinrin-yoku (forest bathing). Most of the studies suggest that walks of one or two hours' duration can have benefits which last for many days afterwards.

### Some beneficial effects of trees:

- Improving air quality by:
  - ⇒ Absorbing gaseous pollutants
  - ⇒ Intercepting particulates (pollen, dust, etc.)
  - ⇒ Releasing oxygen (through photosynthesis)
- Acting as wind breaks in cold weather
- Absorbing UV rays via shading in summer
- Providing cooler areas during heat-waves
- Absorbing noise, which may otherwise be an irritant
- Releasing phytoncides, which seem to benefit us

### A small sample of the evidence:

- A clinical trial of 62 ladies (60-80 years) conducted in Korea, found that the group walking for one hour in a forest at a normal pace 'significantly decreased systolic blood pressure, diastolic blood pressure, and CAVI (Cardio-ankle vascular index, to assess arterial stiffness) and significantly increased FEV1 and FEV6 (lung capacity) when compared with the control group walking in the city, in whom no significant changes were found. Conclusions drawn: walking in a forest environment, in contrast to a city environment, can **reduce arterial stiffness and increase pulmonary function.** (2)