



Active Organs Science Show Resource – FORTEe

FORTEe is the world's largest study into the effects of exercise on the successful treatment of children undergoing anti-cancer treatment.

What is cancer?

Cancer is a disease that causes certain cells in the body to grow out of control. The human body is made up of 37.2 trillion cells! Normal (good) cells duplicate themselves, to replace old, dead, or damaged cells. This process is controlled by the body. Cancer (bad) cells divide uncontrollably. These cells are not normal. They produce clumps of cells called tumours. Tumours can destroy normal (good) cells.

Exercise and feeling better

When you exercise you feel good! This is because you produce something called *endorphins*. Endorphins make you happy and can reduce pain. Exercising also makes you stronger and healthier. Research has been shown that exercise in patients with cancer can improve mental wellbeing, physical health and reduce some effects of cancer.

FORTEe

Children with cancer are often weak and inactive. Oxford Brookes researchers Dr Peter Wright, Dr Kim Straun, Stan Windsor and Hayley Marriott, working with FORTEe, are asking the question: *can exercise improve the response to anti-cancer treatment in children?*



To test this, the researchers have developed an exercise app designed specifically for use with children undergoing anti-cancer treatment, which they are testing out in



@ScienceBazaar







hospitals. The app uses both Augmented Reality (AR) and Artificial Intelligence (AI) to guide child cancer patients through personalised exercises focusing on strength, flexibility, balance and endurance, whilst taking into account possible side effects of cancer treatments and physical limitations.

To find out more about project FORTEe please visit: <u>https://fortee-project.eu/</u>



