

Exercise is key following a cancer diagnosis

The National Cancer Registry of Ireland reports an overall improvement in cancer survival. This means we have more cancer survivors, but many need physical and psychological help to improve their quality of life. Physical functioning is affected by the disease and side-effects of treatment (surgery, chemotherapy, radiation). Survivors may have low exercise tolerance, decreased muscle weakness and mass, and higher body fat. Restoring body composition and physical performance is needed to improve physical functioning and may also help prevent secondary disease, particularly cardiovascular, which is a risk for cancer survivors.

While we understand the benefits of exercise in preventing and treating cancer, we know less about prescribing individualised exercise programmes. Professor Juliette Hussey's research group in the Clinical Research Facility at St James's Hospital works on this topic with the Department of Surgery and Professor John Reynolds. Aiming to regain pre-diagnosis

activity level may not be enough, since about 65% of people in Ireland get too little exercise. Cancer survivors must make major changes in exercise levels to achieve health benefits.

“The expectation is that this research over the coming years will provide the evidence to support guidelines for rehabilitation including individualised exercise prescriptions.”

Professor Juliette Hussey

Professor in Physiotherapy, School of Medicine, and Vice President for Global Relations, Trinity College Dublin

Different cancers have different rehabilitation requirements. Complex diseases such as oesophageal cancer cause physical and nutritional impairment, and the usual treatments affect overall wellbeing. Findings from the ReStOre project (Rehabilitation

Strategies following Oesophageal Cancer), which includes prescribed exercise, show cardiorespiratory fitness can be improved without compromising body composition. This success formed the basis for ReStOre 2 (Rehabilitation Strategies in Oesophagogastric and Hepatopancreaticobiliary Cancer).

Prehabilitation (pre-surgery exercise training) would also help, but the time between diagnosis and surgery is often too short for typical exercise programmes to show benefits. However, high-intensity interval training can improve exercise tolerance within two weeks.

