World Physical Therapy Day
2015
Resources on why physical therapy matters
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Notes about this booklet

The terms physical therapy and physiotherapy refer to the same profession – some countries use one term, some the other. When the words physical therapy and physical therapist are used in this document, they also refer to physiotherapy and physiotherapist.

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Introduction

This booklet provides facts, research findings, statistics and articles to help you demonstrate the contribution of physical therapists, as part of your World Physical Therapy Day events and campaigns.

World Physical Therapy Day falls on 8th September every year. It is an opportunity for physical therapists (known in some countries as physiotherapists) all over the world to raise awareness about the crucial role their profession plays in making and keeping people well, mobile and independent. The day was established in 1996, by the World Confederation for Physical Therapy – the profession’s global body representing over 350,000 physical therapists in 111 countries.

WCPT has compiled this information for you to use freely. If you’re not sure what to organise for World Physical Therapy Day yet, there are plenty of suggestions in the complementary booklet “World Physical Therapy Day: what to do, how to do it, how to get noticed”.

![Image of physical therapy session]

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About physical therapy

Here is some basic information about physical therapy for you to copy and use in any material you produce to educate the public. If you refer to “physiotherapists” rather than “physical therapists” in your country, do change the text appropriately.

Physical therapists are experts in developing and maintaining people’s ability to move and function throughout their lives. With an advanced understanding of how the body moves and what keeps it from moving well, they promote wellness, mobility and independence. They treat and prevent many problems caused by pain, illness, impairments and disease, sport and work related injuries, ageing and long periods of inactivity.

Physical therapists work with people affected by a wide range of conditions and symptoms, for example:
- painful conditions such as arthritis, repetitive strain injury, neck and back pain
- cancer
- strokes, Parkinson’s disease and spinal cord injury
- heart problems
- lung disease
- trauma, such as road traffic accidents and landmines
- incontinence

They work in a variety of settings, including hospitals, health centres, sports facilities, education and research centres, hospices and nursing homes, rural and community settings.

Here are some examples of how physical therapists make a difference. They:
- use their skills to treat the underlying causes of pain and limitations in movement and function
- use many treatment approaches to help individuals regain their mobility and maximise their potential
- promote healthy lifestyles and exercise
- treat each patient/client as an individual and thoroughly assess them to identify their needs
- treat sports injuries
- promote safe and healthy activities
- work with children with coordination, balance and other movement problems to improve and maximise their independence.

To achieve all this, physical therapists are educated over several years, giving them a full knowledge of the body’s systems and the skills to treat a wide range of problems. This education is usually university-based and at a level that provides full professional recognition and allows them to practise independently. Continuing education ensures that they keep up to date with the latest advances in research and practice. Many physical therapists are engaged in research themselves.
Facts and figures about physical therapists

Physical therapists work with people of all ages to bring about improvements in their health and independence.

Physical therapists provide exercise prescriptions to help people keep fit and achieve/maintain a healthy weight.

Around 600 million people are obese worldwide. Physical activity is one of the best means of countering obesity.

Children and young people under the age of 18 need 60 minutes of moderate to vigorous physical activity each day to promote and maintain health.

According to the World Health Organization, adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity. They should also do muscle strengthening exercises on two or more days a week.

Research has shown that physical therapy exercise prescriptions help women who experience incontinence, osteoporosis or breast cancer surgery.

Studies have indicated that physical therapy treatments have a major impact on conditions such as back and neck pain.

Physical activity provided under the guidance and supervision of a physical therapist reduces the risk of heart attack, stroke, type 2 diabetes, colon cancer and breast cancer.

Despite limited numbers of physical therapists in some countries around the world, they have proved their effectiveness at getting and keeping people healthy.

Physical therapists provide exercise programmes for conditions that affect the bones and muscles, such as arthritis, back and neck pain, osteoporosis, joint replacements, and urinary incontinence.

More detailed information about what physical therapists do can be found in WCPT’s Description of Physical Therapy at [www.wcpt.org/policy/ps-descriptionPT](http://www.wcpt.org/policy/ps-descriptionPT).
What does fulfilling potential mean and how can physical therapists, empower and evoke that potential in our clients and patients?

Potential is individually defined by each person, so physical therapists must truly adopt a patient-centred approach. The people who seek and need the services of physical therapists range from small babies to older people, from people with profound disabilities to the highest performing athletes.

Through our engagement with them and our focus on physical activity, exercise and movement we have the power to ensure that people reach their potential whatever that may be.

Research indicates that 31% of the world’s population do not meet the recommended physical activity guidelines, 65% of our patients and clients don’t complete their home exercise programmes and 10% fail to complete their journey of care with us1,2.

So one area I would urge all physical therapists to consider for World Physical Therapy Day is how we work with our patients and clients to ensure that the health behaviour changes that are important to sustainable healthy lives are “owned” by them.

Research is showing that the addition of motivational strategies to physical therapy and exercise interventions can enhance attendance and adherence3.

The overarching message of World Physical Therapy Day is “Movement for Health” and on this day when we mark the foundation of WCPT and communicate to thousands of people around the world the value of physical therapy, let’s also ask ourselves what more can we do to enable our patients and clients to achieve their potential.

How can we ensure they fulfil their potential through our expert interventions and advice on exercise and movement? Are our services recognised and employed in the best way within our health services? How can their potential be further developed and optimised?

Increasingly, the evidence is there in support of the value of physical therapy. We provide examples in this booklet and a number of our member organisations have open resources that provide the support and evidence for the value of physical therapy4,5.

Let’s use World Physical Therapy Day to communicate the impact that physical therapy can have on individual lives, and to reach out to politicians and other key decision makers to move our profession closer to fulfilling its full potential in changing the lives of the people we serve.

Emma Stokes, WCPT President

About physical therapy, independence and participation

The facts

People with disabilities are more likely to be unemployed. An Organization for Economic Co-operation and Development study of working age people with disabilities in 27 countries found that their rate of employment (44%) was almost half that of people without disabilities (75%).


Physical therapy brings participation

A United Kingdom Hospital introduced early access to physiotherapy services for NHS staff who were off sick with musculoskeletal problems, or reporting MSK problems. This resulted in more staff remaining in work, absent staff returning quicker, and a saving to the hospital of £586,000 over six months as a result of not having to bring in temporary staff.

Source: NHS Employers, Rapid access to treatment and rehabilitation for NHS staff. London 2012

Research shows that rehabilitation at home after a stroke is cost-effective and reduces long-term dependency. The total economic cost of stroke to the UK in 2006/07 was £4.5 billion.


Multidisciplinary interventions involving physical components such as physical therapy alongside psychological and vocational components have been shown to lead to higher return to work rates.


Participation benefits economies

According to the World Health Organisation and the World Bank, the economic cost of disability comes mainly from “loss of productivity from insufficient investment in educating disabled children, and exits from work or reduced work related to the onset of disability, and the loss of taxes related to the loss of productivity.”


A Canadian analysis estimated that the national economic cost caused by the loss of productivity due to short and long-term disability was 6.7% of gross domestic product.


An Australian study has concluded that increasing participation by disabled people and reducing their unemployment by one third over a decade would result in a cumulative increase in Australia’s GDP of AUD 43 billion.


The economic cost of disability in Africa is between 3% of GDP in Malawi, and 7% of GDP in South Africa. In Asia, the costs lie between 3% of GDP in Vietnam and 4.6% of GDP in Thailand.

A UK study has shown that if just half of breast cancer survivors who initially return to work but then leave were helped to stay in work the economy could save £30 million every year.
Source: Making it Work, Macmillan Cancer Support, London 2010

What the World Health Organization and the World Bank say
In their World Report on Disability (2011) The World Bank and the World Health Organization support rehabilitation as an effective means to help people participate and fulfil their potential.

They say:
“Rehabilitation is a good investment because it builds human capacity. It should be incorporated into general legislation on health, employment, education, and social services and into specific legislation for people with disabilities.”

Providing assistive technology – the responsibility of rehabilitation professionals such as physical therapists – “increases independence, improves participation, and may reduce care and support costs”.

“Convincing evidence shows that some therapy measures improve rehabilitation outcomes. For example, exercise therapy in a broad range of health conditions – including cystic fibrosis, frailness in elderly people, Parkinson’s disease, stroke, osteoarthritis in the knee and hip, heart disease, and low back pain…”

“Unmet rehabilitation needs can delay discharge, limit activities, restrict participation, cause deterioration in health, increase dependency on others for assistance, and decrease quality of life. These negative outcomes can have broad social and financial implications for individuals, families, and communities.”

“Many countries – particularly low-income and middle-income countries – struggle to finance rehabilitation, but rehabilitation is a good investment because it builds human capital. Financing strategies can improve the provision, access, and coverage of rehabilitation services, particularly in low-income and middle-income countries.”


What the United Nations Convention on the Rights of Persons with Disabilities says
“...the full enjoyment by persons with disabilities of their human rights and fundamental freedoms and of full participation by persons with disabilities will result in their enhanced sense of belonging and in significant advances in the human, social and economic development of society and the eradication of poverty…”

“...the importance of accessibility to the physical, social, economic and cultural environment, to health and education and to information and communication, in enabling persons with disabilities to fully enjoy all human rights and fundamental freedoms…”

One of the eight general principles of the convention is “Full and effective participation and inclusion in society”.

Source: www.un.org/disabilities/convention/conventionfull.shtml
According to the World Health Organization, the number of overweight or obese children is likely to increase from 42 million in 2013 to 70 million in 2025. Source: WHO [www.who.int/end-childhood-obesity/facts/en/](http://www.who.int/end-childhood-obesity/facts/en/)

Obesity in childhood is linked with asthma, musculoskeletal problems, hypertension, early signs of cardiovascular disease, low self-esteem and depression. In the long-term, it can increase the likelihood of being an obese adult, and having a greater risk of cancer, type 2 diabetes and cardiovascular disease. Encouraging children and their families to reach recommended levels of physical activity is a cornerstone of obesity treatment and prevention.

Participation in physical activity helps prevent many chronic diseases. All physical therapists are experts in movement and exercise, and the ways in which it promotes health. Some physical therapists, called paediatric physical therapists, specialise in working with children. A physical therapy assessment is particularly important for children who are obese. The assessment can screen for musculoskeletal impairments and guide therapeutic exercise and physical activity prescription.

Children’s choices, diet and physical activity habits are influenced by their surrounding environment. Source: WHO [www.who.int/features/factfiles/obesity/en/](http://www.who.int/features/factfiles/obesity/en/)


Rising levels of childhood obesity are being caused mainly by a shift towards energy-dense foods high in fat and sugars, and decreasing levels of physical activity. Source: WHO [www.who.int/dietphysicalactivity/childhood/en/](http://www.who.int/dietphysicalactivity/childhood/en/)

### Defining child obesity

The World Health Organization defines childhood obesity as having a body mass index (BMI) standardised deviation score (SDS) above 2.0. Childhood growth and BMI should be plotted on WHO age and gender specific charts in tandem with national growth reference charts. Measures of body composition such as waist circumference should be used to describe obesity. Source: WHO [www.who.int/growthref/who2007_bmi_for_age/en/index.html](http://www.who.int/growthref/who2007_bmi_for_age/en/index.html)

### Child obesity and physical activity

The World Health Organization recommends 60 minutes of moderate to vigorous intensity physical activity every day for children aged 5-18. Moderate activity includes activities that raise the heart rate and cause some breathlessness. Vigorous activity is exercise that makes people huff and puff – and could include dancing, household chores and sports like running and football. Activities for children should be fun and age-appropriate. In addition, families should be active together because parents are the most important agents of lifestyle change. Source: WHO [www.who.int/dietphysicalactivity/childhood_what_can_be_done/en/index.html](http://www.who.int/dietphysicalactivity/childhood_what_can_be_done/en/index.html)

**Childhood obesity facts**

The vast majority of overweight or obese children live in developing countries, where the rate of increase has been 30% higher than in developed countries. Source: WHO [www.who.int/end-childhood-obesity/facts/en/](http://www.who.int/end-childhood-obesity/facts/en/)

Childhood obesity affects people regardless of their income. The problem is global and is steadily affecting many low-and middle-income countries, particularly in urban settings. Source: WHO [www.who.int/mediacentre/factsheets/fs311/en/](http://www.who.int/mediacentre/factsheets/fs311/en/)
Physical activity recommendations

Children from birth to age five should engage in daily physical activity that promotes skill in movement and lays the foundations of health-related fitness.

Infants should interact with caregivers in daily physical activities that are dedicated to exploring movement and the environment and that promote skill development in movement.

Toddlers should engage in a total of at least 30 minutes of structured physical activity and at least 60 minutes per day of unstructured physical activity and should not be sedentary for more than 60 minutes at a time, except when sleeping.
Source: www.shapeamerica.org/standards/guidelines/pa-children-5-12.cfm

Children under five should be physically active daily for at least 180 minutes spread throughout the day.
Source: WHO recommendations 2010 in WCPT Active and Healthy.

The role of the physical therapist

In cases of childhood obesity, a physical therapy assessment covers: 1) parental beliefs around healthy childhood growth and development; 2) cardiorespiratory (exercise testing); 3) musculoskeletal (including assessment of range of movement; strength; flexibility; balance; coordination; posture; gait and bony alignment); 4) sedentarism (eg screen-time); 5) sleep; 6) physical activity levels and perceived barriers to reaching recommended levels.

Treatment includes: 1) general health literacy education for child and parent 2) management of any associated conditions (eg painful flat fee, knee pain, weak core) identified in physical assessment; 3) age-appropriate and fun exercise training to increase physical fitness; 4) assisting parent/s to make changes at home to prevent obesity developing or progressing; 5) providing education and practical strategies to improve sleep and energy balance; 6) liaison and onward referral within the interdisciplinary team.

Positive communication between the therapist and family is essential. Many parents may not be aware that their child’s weight is a problem. Ensuring that a holistic assessment is used to identify areas where the child may have functional difficulties (eg balance or low cardiorespiratory fitness) may help the therapist discuss the child’s health without solely focusing on shape or size. In order to facilitate a child’s lifestyle change, it is recommended that the full family works towards this.
Sources: Júlíusson PB, et al., Overweight and obesity in Norwegian children: prevalence and socio-demographic risk factors.
A review of evidence on the effect of physical activity on the development of pre-school children concluded that the availability of outside playing areas, and the encouragement and involvement of adults, were important in encouraging exercise.


Children with illness or disabilities are more restricted in exercise participation, and have higher levels of obesity than their peers. Finding structures that support them to participate brings psychological and social, as well as physical, advantages. Professionals such as physical therapists are well placed to ensure that activities are appropriate.


This information was produced with the kind assistance of the International Organisation of Physical Therapists in Paediatrics.
Cardiovascular disease is the term used to describe diseases affecting the heart and circulatory system, and includes heart disease, stroke and raised blood pressure (hypertension).

Exercise, particularly aerobic conditioning and strength training, is one of the key interventions that can prevent death and disability from cardiovascular disease. Physical therapists are experts in prescribing these as part of a structured, safe and effective programme.

For those already affected by cardiovascular disease, the expert advice provided by physical therapists can help bring a return to usual roles. Physical therapists help people achieve a return to work, education, community participation and fulfilled lives.

Cardiovascular general

Cardiovascular disease is now the leading cause of deaths worldwide. Globally, 17.5 million people died from cardiovascular disease in 2012, 31% of all deaths. 7.4 million were due to coronary heart disease and 6.7 million due to stroke. Over three quarters of cardiovascular disease deaths occur in low- and middle-income countries.


The death and disability rates caused by heart disease and stroke for every country are available at: http://whqlibdoc.who.int/publications/2011/9789241564373_eng.pdf

It has been estimated that if everyone walked briskly at 4.8-6.4 kph (3-4 mph) on most days of the week, about 30% of deaths from cardiovascular disease would be prevented each year.


Manson JE et al. A prospective study of walking as compared with vigorous exercise in the prevention of coronary heart disease in women. NEJM. 1999;341(9):650-658. content.nejm.org/cgi/content/abstract/347/10/716

Research involving people at risk of cardiovascular disease has indicated that exercise supervised by physical therapists, along with counselling from a dietician, brings significant improvements in blood pressure, weight, quality of life and other health indicators after one year.


Raised blood pressure

Raised blood pressure, which is a risk factor for heart attack and stroke, can be controlled by exercise. One study has indicated that endurance exercise brings an average reduction of 10mm Hg for both systolic and diastolic blood pressure readings.


The type of strength training prescribed by physical therapists can effectively reduce blood pressure in older men and women.


Major analyses of available research have indicated that exercise can reduce resting blood pressure by 3mm Hg for resting systolic blood pressure.

Sources: Cornelissen VA, Fagard RH. Effects of endurance training on blood pressure, blood pressure-regulating mechanisms, and...
Heart disease

Systematic reviews of evidence have shown that therapeutic exercise provided by physical therapists is beneficial to people with coronary heart disease, heart failure and chronic obstructive pulmonary disease.


Reviews of evidence have shown that exercise-based cardiac rehabilitation for patients with coronary heart disease significantly improves health outcomes and mortality rates.


Stroke

Exercise reduces the risk of stroke. Walking at 4.8 kph (3 mph) for 5 hrs/wk brings a 46% lower risk of stroke, compared with non-exercisers.


Structured exercise also brings improvement in all measures of impairment and disability in people who have had a stroke.


In one study, patients who had had a stroke performed strengthening and functional tasks three times a week for four weeks, and gained significant improvements in strength, walking speed, standing/sitting and endurance.


This information was produced with the kind assistance of Julie Redfern.
Diabetes mellitus is a condition where the amount of glucose in the blood is too high, causing tissue damage. There are two types. Type 1 diabetes occurs when the body is unable to produce any insulin. It cannot be prevented. Type 2 diabetes develops when the body isn’t producing enough insulin, or becomes resistant to insulin. This type of diabetes can be prevented. Most cases of type 2 diabetes are associated with being overweight.

Exercise is one of the best ways to control or reduce weight, and reduce risk of type 2 diabetes. Physical therapists are experts in prescribing structured, safe and effective exercise programmes.

Their advice can also help people who have health complications as a result of diabetes. For example, they can help those who have lost limbs through diabetes-related amputations recover their mobility and adapt their environment so that they have independence. Physical therapists help people achieve a return to work, education, community participation and fulfilled lives.

Diabetes facts

The World Health Organization (WHO) estimates that in 2014 9% of adults had diabetes, and that in 2012 diabetes was the direct cause of 1.5 million deaths. This number is expected to double by 2030.


Diabetes was traditionally more common in developed countries, but modernisation and lifestyle changes have meant it is increasingly prevalent in developing countries. According to WHO, almost 80% of diabetes deaths occur in low and middle-income countries.


Diabetes and its complications have a significant economic impact on individuals, families, health systems and countries. For example, WHO estimates that in the period 2006-2015, China has lost $558 billion in national income due to heart disease, stroke and diabetes alone.

Source: World Health Organization factsheet www.who.int/chp/chronic_disease_report/media/china.pdf?ua=1

The death and disability rates caused by diabetes for every country are available at: www.who.int/entity/cardiovascular_diseases/en/cvd_atlas_29_world_data_table.pdf

Exercise and diabetes

Exercise has a role in preventing and controlling diabetes. According to the World Health Organization, 30 minutes of moderate intensity physical activity on most days, along with a healthy diet, can help reduce the risk of developing type 2 diabetes.


Both resistance exercise and aerobic exercise are effective at reducing glucose intolerance and reducing the risk of diabetes.


High-intensity progressive resistance training, in combination with moderate weight loss, is effective in controlling blood glucose levels in older patients with type 2 diabetes.

Moderate aerobic exercise alone or with resistance training improves glycemic control, waist circumference, and protects heart in individuals with type 2 diabetes.

Regular, moderate exercise lowers risk of developing diabetes in those who are overweight and with pre-diabetes.


A 16 week high-intensity exercise programme results in decreased diabetic medication regimes, lowered systolic blood pressure, decreased abdominal adipose tissue, and increases in strength, physical activity, and lean muscle mass.

Prevalence of diabetes by WHO Region

<table>
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<th>Region</th>
<th>2000</th>
<th>2030 (predicted)</th>
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<tbody>
<tr>
<td>Africa</td>
<td>7,020,000</td>
<td>18,234,000</td>
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<tr>
<td>Eastern Mediterranean</td>
<td>15,188,000</td>
<td>42,600,000</td>
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<td>The Americas</td>
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</tr>
<tr>
<td>South-East Asia</td>
<td>46,903,000</td>
<td>119,541,000</td>
</tr>
</tbody>
</table>
Physical therapists are exercise experts, providing services to optimise physical ability in a wide range of people. They prescribe exercise as part of a structured, safe, and effective programme.

An important part of their role is to help people remain active as they age. More than any other profession, physical therapists prevent and treat chronic disease and disability in aging adults through prescribed activity and movement.

The World Health Organization encourages regular physical activity for older adults, because it has been shown to improve their independence and quality of life (www.who.int/dietphysicalactivity/factsheet_olderadults/en/). It says that older adults should engage in at least 150 minutes of moderate-intensity physical activity throughout the week, if appropriate (www.who.int/ageing/active_ageing/en/index.html).

Here is some information demonstrating the contribution of physical therapists in keeping people active as they age – particularly their role in maintaining general health, preventing and treating cardiovascular disease, and countering joint problems.

**Improving functional ability**

Older adults engaged in regular physical activity demonstrate improved balance, strength, coordination, motor control, flexibility and endurance. As a result, physical activity can reduce the risk of falls – a major cause of disability among older people.


Participation in regular exercise programmes leads to older adults having higher levels of function, greater independence, and improved quality of life.


Exercise programmes can slow down functional decline. Elderly adults can, with an appropriate exercise programme, be helped to achieve levels of activity that will bring health benefits, and slow the decline in function that might normally be expected with age.


Even for those in their 80s and 90s, exercise programmes can increase functional ability, postpone disability and maintain independent living.


Physical activity and exercise are inversely associated with mortality and age-related morbidity.


**Promoting cardiovascular health**

Regular exercise in older adults has many positive effects on cardiovascular health, including increasing cardiac output, maximum heart rate, endurance, and arterial blood flow, and decreasing heart rate, blood pressure, and risk of heart disease.


**Improving joint health**


Improving mental health

Cardiovascular fitness is associated with increases in brain volume, in both gray and white matter and thus sparing of brain tissue in aging humans.

Physical activity has been shown to improve cognitive function in older adults. Older people with active lifestyles also exhibit higher levels of functional health, a lower risk of falling, and have reduced risk of moderate and severe functional limitations.

Research has indicated that increased levels of physical activity reduces the risk of Alzheimer’s disease. Exercise, along with cognitively stimulating activities, can reduce some of the symptoms of the disease.

Aerobic exercises significantly reduced depressive symptoms in people over 60.

A regular programme of aerobic exercise can slow or reverse functional deterioration, reducing the individual’s biological age by 10 or more years, and potentially prolonging independence.

This information was produced with the kind assistance of Marilyn Moffat, Professor of Physical Therapy at New York University and former President of WCPT.
About physical activity and cancer

Cancer is an umbrella term used to describe more than 100 different diseases with the common characteristic of uncontrolled malignant cell growth. It is a leading and growing cause of death worldwide, with the total number of cases globally increasing, as the world population grows and ages.

The growing global population with cancer faces unique challenges – from their disease and from the treatments they receive. Physical therapists can help them achieve health and quality of life. The prescribed exercises and lifestyle advice that physical therapists provide can also help people reduce their risk of getting cancer.

Cancer facts

Cancers are among the leading causes of morbidity and mortality worldwide, with approximately 14 million new cases and 8.2 million cancer related deaths in 2012.


The number of new cases of cancer is expected to rise by about 70% over the next two decades. More than 30% of cancer can be prevented by modifying or avoiding key risk factors, including:

- being overweight or obese
- physical inactivity.

Other risk factors include:
- tobacco use
- low fruit and vegetable intake
- alcohol use
- HPV-infection
- urban air pollution
- indoor smoke from household use of solid fuels.


The link between physical activity and cancer

Getting adequate physical activity, maintaining a healthy weight and eating a healthy diet can reduce the chance of recurrence of many cancers and increase the likelihood of disease-free survival after a diagnosis, say new guidelines from the American Cancer Society.


Large population studies have identified a strong association between lower levels of physical activity and higher cancer mortality. Walking or cycling an average of 30 minutes per day has been associated with a 34% lower rate of cancer death and a 33% improved cancer survival.


Increasing numbers of studies are indicating that physical activity can reduce the incidence of cancer. World Health Organization recommendations say that undertaking 150 minutes of moderate intensity aerobic physical activity a week can reduce the risk of breast and colon cancers. The same amount of exercise can also reduce the risk of diabetes and heart disease.


Physical activity helps people with the effects of treatment for cancer

A systematic review of controlled trials of physical activity interventions in cancer survivors, during and after treatment, showed that physical activity had a significant effect. A large effect was shown on upper and lower body strength, and a moderate effects on fatigue and breast-cancer-specific concerns. Exercise was generally well-tolerated during and after treatment, with minimal adverse events. The study abstracted data from over 82 studies.


A panel of experts convened by the American College of Sports Medicine concluded that exercise training is safe during and after cancer treatments and results in improvements in physical functioning, quality of life and cancer-related fatigue in several cancer survivor groups.


Physical activity helps improve outcomes for people with cancer

Studies have indicated a relationship between higher physical activity levels and lower mortality in cancer survivors. A recent meta-analysis reported that, post-diagnosis, physical activity reduced breast cancer deaths by 34%, all causes mortality by 41% and disease recurrence by 24%.


Studies also indicate the volume of exercise necessary to bring benefits. The Nurses’ Health Study reported 50% fewer cancer recurrences in women who exercised more than three hours per week. Among people who have had colo-rectal cancer, a study found a 50% lower rate of recurrence and related death in those who exercised more than six hours per week.


Current lack of physical activity among people with cancer

Generally, cancer survivors display low levels of physical activity. A study has reported that in Canada less than 22% of cancer survivors are physically active.


This information was produced with the kind assistance of Julie Walsh-Broderick, HRB Research Fellow, Department of Physiotherapy, Trinity Centre for Health Science, St James’s Hospital, Dublin
Materials produced by WCPT’s member organisations also make the case for physical therapy and the difference it can make to individuals, societies and economies.

**Australian Physiotherapy Association**


**American Physical Therapy Association**


**Chartered Society of Physiotherapy**


**Irish Society of Chartered Physiotherapists**

Information leaflets [www.iscp.ie/your-health/information-leaflets.html](http://www.iscp.ie/your-health/information-leaflets.html)

**Physiotherapy New Zealand**


**Canadian Physiotherapy Association**

The value of physiotherapy [www.physiotherapy.ca/Advocacy/Legislation/The-Value-of-Physiotherapy](http://www.physiotherapy.ca/Advocacy/Legislation/The-Value-of-Physiotherapy)

Visit www.wcpt.org/wptday for more information about World Physical Therapy Day and the resources available.

This booklet has been produced by:

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