



# Fatigue in Individuals with Cerebral Palsy

## Introduction

Many individuals with cerebral palsy (CP) report being fatigued. Fatigue may be described as feeling exhausted, tired, weak, or lacking in energy and can affect how people think, learn, move and act. Because of the way CP affects the way people move, they may have to use 3 to 5 times more energy to perform the same amount of work as their peers in terms of effort, persistence, muscle control, and concentration. Fatigue may also present at a younger age. The type of CP can determine how fatiguing movement may affect the individual. People with bilateral CP may be more fatigued than those with unilateral CP. Pain and fatigue are often associated and are common predictors of how well people with CP do in school, in work, and participation in community living.

## Causes of Fatigue

Contributors to fatigue include disturbed sleep, higher level of muscle activity 'at rest', seizures, breathing problems, inadequate and unhealthy eating, dehydration, poor positioning, decreased physical fitness resulting in muscle weakness and limited endurance, recovery from surgery, too much daily physical activity, and an increased demand for energy needed to do things. Some medications have a sedating affect, contributing to the sensation of fatigue. Drowsiness is a commonly reported side effect of many oral drugs utilized in treating increased muscle tone such as spasticity or dystonia.

## Signs of fatigue you might notice include:

- Muscle aches
- Muscle cramps
- Problems with concentration
- Sleepiness
- Irritability
- Behavior problems
- Slowness of movement



## **What can be done to manage fatigue?**

Talk to your doctor to rule out other medical causes of fatigue such as diabetes, heart disease, thyroid disease and sleep apnea.

## **Energy conservation techniques:**

- Balance activity with planned rests
- Pace your activity
- Use proper positioning for tasks (height of the work surface, sit rather than stand, good support for positioning in wheelchair or bed)
- Use equipment to make activity easier and lessen fatigue (for example, use a wheeled cart to gather supplies)
- Remove barriers to moving around i.e. clear pathways, de-clutter rooms
- Use assistive technology, especially for mobility

## **Fitness and exercise to improve strength and endurance**

- Get moving by participating in social and recreational activities.
- Exercise improves the working efficiency of your heart, lungs, and muscles and can boost your energy. Yoga may be especially effective for increasing a person's sense of well-being and overall energy. Losing extra weight can also enhance energy levels and improve mood and quality of life

## **Proper nutrition and hydration**

- Eating small meals more frequently during the day may steady your blood sugar level
- Appropriate portion sizes and eating balanced meals can improve nutrition
- Keep hydrated by drinking water

## **References**

Brunton LK, Rice CL. Fatigue in cerebral palsy: a critical review. *Dev Neurorehabil.* 2012;15(1):54-62.

Hirsh AT, Gallegos JC, Gertz KJ, Engel JM, Jensen MP. Symptom burden in individuals with cerebral palsy. *J Rehabil Res Dev.* 2010;47(9):863-76.