

# LimbPower Dance Resource



## Why you should consider taking up dancing

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**Dancing might seem daunting or even embarrassing to some people at first, however, 15% of respondents in the 2016 LimbPower Activity survey said they would be interested in taking part in dancing, which puts dancing at similar interest levels as the other physical activities such as running and going to the gym, [1]. That said, if some of us are a little daunted by dance, what is little known to the uninitiated is that once dance becomes a regular habit, it can be hugely liberating. Dance has many health benefits and can affect our entire well-being, so putting aside our inhibitions and hitting the dance floor could be well worth the effort.**

The survey also revealed age specific motivations for physical activity; for example, increasing confidence/self-esteem and socialising were amongst the top five motivations for those aged 36-54, whereas competition and improving skills and performance were ranked highly for those aged 36 and under. The wonderful thing

### Health Benefits of Regular Dancing

- Improved muscular strength, endurance and motor fitness
- Improved cardiovascular fitness
- Weight Loss/ management
- Stronger bones and supple joints
- Increased coordination, agility and flexibility
- Better posture
- Improved balance and spatial awareness
- Improved neurological functioning
- Improved psychological wellbeing
- Better social skills
- Greater self-esteem and confidence



Candoco Dance Company. Photography by Pedro Machado, 2015

about dancing is that it can be done both socially and competitively and is a great recreational choice, because anyone of any age can participate all year round, as it is usually an indoor activity. So let me break down some of the beneficial effects of dancing in such a way that is specific to amputation recovery and the outcomes of the 2016 Limbpower Physical Activity Survey.

### Dancing is Fun

Many people want their fitness activities to be fun and dancing can certainly deliver this on many different levels. The LimbPower

survey showed that 67% of respondents cited enjoyment and fun as the top motivational force for taking part in physical activity [1]. When dance and music are combined, we can improve our well-being and have fun while doing it. What can make it so much fun is learning alongside other people, obtaining a sense of mastery over the body, and moving to music. Once we lose the self-conscious observer inside of ourselves, we can feel liberated and joyful and this translates outside of the dance class as well. A loss of spontaneity can be an issue for some amputees, particularly with movement, so expanding our range

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Candoco Dance Company. Photography by Pedro Machado, 2015

of movement and abilities through regular dance classes can give some of that freedom of physical and personal expression back.

### **Dancing reduces Depression and Anxiety**

Unfortunately the incidence of depression and anxiety in amputees is much higher than the general population<sup>[2], [3]</sup>. Dancing has been shown to alleviate the symptoms

of depression and anxiety<sup>[4], [5]</sup>. One study on anxiety showed that music and exercise was far more effective when combined as dance activity<sup>[6]</sup>. Therapists who treat Post Traumatic Stress Disorder regularly recommend dancing, to use the body as an expressive vehicle and as an active resource to process sensations and feelings, helping to reset the nervous system<sup>[7], [8]</sup>. Treating complex psychological issues through dance therapy has become

much more widespread, both in the private and military sectors<sup>[9]</sup>, proving that dancing is a valuable tool in establishing a more embodied approach in the recovery of trauma. As well as reducing anxiety and treating trauma, Dance Therapy gave people an improved body image, as they increased their physical capabilities they came to see their bodies as being more beautiful<sup>[10]</sup>.

## Step Change Studios

Step Change Studios is a pioneering dance company committed to making dance accessible for everyone. They offer fun, engaging opportunities for disabled and non-disabled people to dance. They cater to all ages, abilities and needs. They provide regular classes; deliver dance in schools, colleges, social care, healthcare and community settings; and create imaginative bespoke dance projects and programmes. They want to support everyone to achieve their dancing ambitions – whether that is to dance for fun, to be active, to perform or compete. For further details:

w: [www.stepchangestudios.com](http://www.stepchangestudios.com)

tw: @Step\_Change

f: [www.facebook.com/stepchangestudios/](https://www.facebook.com/stepchangestudios/)

e: [contact@stepchangestudios.com](mailto:contact@stepchangestudios.com)

## Para Dance UK

Para Dance UK is the UK National Governing Body for Para Dance Sport and Inclusive Dance Professionals. We look to support the disability community to be active and engaged through dance in all its forms including Para Dance Sport and Inclusive Dance. We can provide training and links to a national network of local approved and accessible groups and organisations wanting to enable all of the community to be active, whether that is for fun, competing or to be creative. We want to show you that everyone can dance!

w: [www.wdsauk.co.uk](http://www.wdsauk.co.uk)

e: [info@wdsauk.co.uk](mailto:info@wdsauk.co.uk)

tw: @ParaDanceUK

## Candoco Dance Company

The company of disabled and non-disabled dancers, Candoco performs cutting edge contemporary dance throughout the UK and internationally. Candoco's youth company, Cando2, provides young dancers aged 13-25 with an opportunity to create and perform high quality dance with Candoco Artists and guest choreographers. For more information, visit:

w: [www.candoco.co.uk](http://www.candoco.co.uk)

Contact:

e: [info@candoco.co.uk](mailto:info@candoco.co.uk)

## Dancing is Highly Social

40% of respondents in the LimbPower survey said that they wanted to take part in activity for social reasons<sup>[1]</sup>. Several research studies that examined the effects of dancing on our social bonds discovered that dancing with others can promote affiliation, create and strengthen friendships and even help you attract a mate, or keep one due to something called synchronicity<sup>[11]</sup>. Synchronicity has been shown to deepen bonds by strengthening our emotional connections and that this scenario elevates our pain thresholds<sup>[12]</sup>. So, there is a great power in dancing if you combine the two previous benefits within a social setting, where achieving synchronicity with other people bonds us and expands our sense of self. Dancing also makes you more socially and emotionally intelligent, increasing your ability to read people's non verbal cues and meanings<sup>[13]</sup>. 55% of all human communication is body language, and if there is discrepancy with words, we default to reading bodily signals and tone of voice. Regular dance practice hones our non verbal skills, which in turn improves your social skills<sup>[14]</sup>.

## Dancing is all about Balance

If you're looking to improve your balance, this could well be the activity for you! Balancing yourself in one position may be easy, but balancing in the numerous types of positions involved in dancing is much more difficult. Dancing is just a series of balance tests and mastering them strengthens the stabiliser muscles and protects the core, quickening our reflexes and making us less prone to falls and injury. A recent study published in Cerebral Cortex indicates how this also improves our balance reflexes in the brain. The balance reflexes of dancers adapt with practice, allowing them to 'perform pirouettes at ease with little dizziness',<sup>[15]</sup>. We may not

## Some Popular Dance Styles

- **Ballet** – Mostly performed to classical music, focus is on strength, technique and flexibility.
- **Ballroom** – A number of partner dancing styles such as the waltz, swing, foxtrot, rumba and tango.
- **Belly Dancing** – A low impact fun way to exercise that will work a lot with your hips and torso.
- **Ceroc** – combines Salsa, Ballroom, Latin American, Hip Hop, street dance, Tango and Jive.
- **Contemporary** – Combines Lyrical, Modern and Jazz and allows for creative freedom.
- **Hip-Hop** – Urban style dance that can involve breaking, popping, locking and free-styling.
- **Jazz** – A high energy dance style involving kicks, leaps and turns to the beat of the music.
- **Line Dancing** – A repeated sequence of steps with a group of people in rows to Country music.
- **Pole Dancing** – Requires muscle endurance, coordination, and upper and lower body strength.
- **Salsa** – a mix of Caribbean, Latin American and African influences, usually a partner dance.
- **Square Dancing** – Folk Dancing where four couples dance in a square pattern, changing partners.
- **Tap Dancing** – Focuses on timings and beats.
- **Wheelchair Dancing** – for dancers with lower limb impairments, dancing is either with an able bodied dancer, or duo dance (two wheelchair users together), or dance groups<sup>[22]</sup>.

want to spin around like ballet dancers, but turns and spins will challenge those neurological systems. In fact, 17% of respondents in the 2016 LimbPower survey, particularly males, cited a fear of falling as an actual barrier to fitness<sup>[1]</sup>. Starting physical activity with dancing may well hold the key to opening up a broader spectrum of physical activities for amputees who have a fear of falling. A research study of Balance in Amputees published in 1991, highlighted the need for being absorbed in simultaneous thinking and doing exercises, which dance will do across a large spectrum of movements because it blends cognitive thought processes with muscle memory and 'proprioception' held in the cerebellum<sup>[16]</sup>. The researchers suggest that increasing automotive functioning in this way would also increase the ability for dual

activity, (yes, multi-tasking! – no men and multi-tasking jokes please, the facts are friendly), in other words balancing while focusing on other things.

## Dancing Makes you Smarter

If you want to stay a sharp cookie, dancing improves brain function on a variety of levels. In the past few decades since the invention of MRI scanning, neuroscience has been identifying the science behind the cognitive benefits of dancing. One study looked at how to improve the brain function of older adults, they studied the affects of white matter (WM) decline over a 6 month period. When comparing groups with regular walking activity, dance was the only activity that showed any improvement in white matter. Their findings suggest that 'combining physical, cognitive, and social



engagement (dance) may help maintain or improve WM health',<sup>[17]</sup>. A previous study spanning 21 years examined different activities such as tennis, golf, swimming bicycling, walking for exercise and dancing. Frequent dancing was the only physical activity to offer any protection against dementia, at 76% less incidence compared to the other groups,<sup>[18]</sup>. This was attributed to the split timing involved in decision making, for example, following a new choreography, or a partner, or perhaps improvising to music in the way that belly dancers do, where essentially the music leads the movements. The secret to obtaining these brain boosting benefits then, is to incorporate more split second decision-making in dancing. Instead of sticking to set steps and routines with the same partner, the trick is to constantly challenge your body and brain. Dancing is basically a body-mind connection that keeps the whole of us healthy, vital and fully alive. The more you dance, the smarter you will get<sup>[18]</sup>.

### Dancing Improves Our Motor Skills

No one should have two left feet, and if you think you do there is even more need to increase your body-mind coordination. The more connected we are on an embodied level, the better we function and the more skill and agility we have. Football trainers have known this for a long time which is why dance is part of their training regime. So how can dancing give them the edge and why do we as amputees need to take a leaf out of their book? This is because dancing encourages you to move quickly on your feet, change directions with greater balance, stability and uses a greater

range of motion. Footballers also know that dance helps them to deal with patterns, spacial issues and sequences, which are essential to football strategy. It also helps them with their flexibility which reduces the risk of injuries<sup>[19][20]</sup>. Dancers are more likely to land on bended knees and cushion their joints during dynamic or demanding movements, making us more aware of how we use our bodies. Ultimately dance stimulates a connection between your brain and your body that helps you do your best in all activities.

### How to Get Into Dance

So, now you know a bit more about some of the amazing benefits of dancing, wouldn't it be great to find a class that's right for you? Well the good news is these days you are spoilt for choice as to the style and kind of dancing you would like to do and the kind of dance you choose really depends on what benefits you want to get out of it and what is going to be accessible. You can dance in a group, with a partner or on your own. There are lots of different places where you can enjoy dancing, dance schools, social venues, community halls and even in your own home. If you prefer freestyle dancing rather than learning specific styles look out for 5 Rhythms, ecstatic dance, biodanza and contact Improvisation classes which will be more about personal expression and connection. If you want to use dance for healing trauma I'd strongly suggest you contact the Association of Dance Movement Psychotherapy UK,<sup>[21]</sup> so you can find a proper dance therapy group, run by someone with the appropriate qualifications to assist you.

### General Tips for Dancing

- See your doctor for a check up if you have a medical condition, are overweight, are over 40 years of age or are unfit.
- Call and chat to the teacher about your impairment and ask if you can go and watch a class to see if you are going to find it enjoyable/accessible.
- Try and find a teacher with a good amount of experience so they are more able to offer alternative movements for you if needed and that they can do so, professionally.
- Wear layers of clothing that you can take off as your body warms up and ensure you can move in your clothing freely.
- Do warm up stretches or activities before you begin a dance session. (A good teacher should lead you through a 5 minute pulse raiser followed by light stretches at the beginning of the class and longer stretches at the end of the class).
- Drink plenty of water before, during and after dancing.
- Keep your muscles warm both before and after the class.
- Rest between dance sessions.
- Wear professionally fitted shoes appropriate for your dance style. (I have personally found split sole sneakers to be most agreeable on my prosthesis for most dance styles).
- Sit and watch new dance moves first, this reduces the risk of injury and you will be able to ask the instructor for alternatives if you need them.
- Perform regular leg strengthening exercises
- Move as fluidly and gracefully as you can.

Step Change Studios, Wheelchair Dance Development Programme (photographer Mickael Marso Riviere)



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