

# STUDY FINDS THAT DANCE BURNS MORE CALORIES THAN CYCLING, RUNNING OR SWIMMING

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## DANCE BURNS MORE CALORIES THAN CYCLING, RUNNING OR SWIMMING

New research from the University of Brighton has found that certain styles of dance can burn more calories per hour than cycling, running, or swimming. Sport scientists from the University teamed up with dancers from City Academy to conduct the study and made a number of new discoveries about the physical and mental effects of dance.

Fifteen students between the ages 24 to 38 took part in a series of dance classes as scientists measured heart rate, distance covered, energy expended and psychological states.

Using the latest technology, researchers forensically analysed performance across 30-minute dance sessions of Ballet, Ballroom, Contemporary, Salsa, Street and Swing Dance.

Each jump, twist, spine curve, chest pop and plié was analysed as the dancers wore Catapult vests with accelerometers and heart rate monitors that also monitored energy expenditure. After each dance class, participants were asked to rate their psychological state of mind using a questionnaire that measures emotions.

The research project was led by Dr. Nick Smeeton and Dr. Gary Brickley from the Department of Sport and Exercise Science at the University of Brighton. Dr. Smeeton and Dr Brickley consult professional athletes including three medal-winning cyclists at the 2008 Beijing Paralympic Games.

To watch video please click here (<https://vimeo.com/cityacademy/review/149641081/fea8782ee9>)

### Calories burned

The scientists were surprised to discover that participants in the Contemporary, Street and Swing Dance classes burnt more calories than they would in a comparative period of time for running, swimming or cycling. In the 30min class, Swing Dancers burned an average of 293kcal as compared to 264kcal for running, 258kcal for football and 249kcal for swimming. To ensure accurate and comparable data, the participants' weight, age and general fitness were taken into account.

### Heart beats monitored

The heart rate monitors tracked the intensity of exercise in all six dance styles, as the scientist scrutinised the students' heart rates. They measured heart beats from high and severe to moderate and low intensity.

Results showed that all six dance styles involved periods of time spent in heart rate zones classed as 'high and severe intensity exercise'. Dr. Smeeton was particularly surprised to find that Ballet, which is often perceived as a light to mild intensity style, involved moments of severe intensity exercises throughout the session.

### Distance measured with accelerometer

The study also revealed findings on distance travelled in 30mins. Participants in the Street Dance

covered most ground with a distance that equates to a runner jogging for 3.6kms. Participants in the Contemporary and Ballet classes covered 1.6kms and 1.2kms respectively with results comparable to running on a treadmill for 10mins.

#### Emotional journey mapped

Reporting on the psychological report, Dr Smeeton says that, "Dance not only appears to increase positive and reduce negative emotions, which are typical effects of exercise, but we also found that dancing actually reduced feelings of fatigue too. People may be familiar with runners' high and there appears to be a similar effect after dancing too. We have seen that dancing improves your emotional state. Furthermore, it seems to have an energising effect. Add in the known benefits of social interaction you get whilst dancing and it becomes a powerful way to improve your health and well-being."

Shawna Cope, Head of Dance at City Academy says, "This research gives a fascinating insight into the various health and well-being benefits dance provides. Across the board we know that dance is a fun and sustainable way to keep fit and, best of all, it's accessible to everyone."

#### Notes to editors:

City Academy Ltd is a leading performing and creative arts academy in London. Classes in dance, acting, musical theatre, singing, filmmaking, comedy and much more run in over 40 central London venues.

The Department of Sport and Exercise Science at University of Brighton is a leading department in improving sports performance and exercise and health in the UK.

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#### Useful information:

University of Brighton:

<https://www.brighton.ac.uk/courses/study/sport-and-exercise-science-bsc-hons.aspx>

City Academy: <http://www.city-academy.com/Dance-Classes>