What Type of Dance Burns the Most Calories?

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## Acknowledgements

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# Purpose and Hypothesis

# Purpose

The purpose of my investigation is to determine what type of dance burns the most calories out of the 5 styles I perform.

## Hypothesis

If I practice 5 different styles of dance for one hour each, then I believe hip hop will burn the most calories because the movements are bigger and harder to portray.

# What Type of Dance Burns the Most Calories?

#### Maeve Breslin

What activity exerts both happiness and exercise? There is a hobby that millions of people do everyday to lose weight, have fun and get a good workout. Dance!

Dancing is one of the most loved art forms worldwide. This sport has been traced back to thousands of years ago and some have loved this piece of art so much that they have made it into an occupation. There are numerous amounts of dance types that are enjoyed around the world. However, the amount of calories each style burns is different.

History shows that dance was developed centuries ago. Dancing was seen as a form of entertainment and expression through the human body. Believe it or not, different styles of dance were established over a period of time. Some styles of dance have been around since the 15th century and others have only been around for 30 years.

The first certification of dance was close to 10,000 years ago where dancing was nothing compared to what it is now. In ancient Egypt dancing was performed at festivities after a well done hunt. During this time, dance was included in Egypt's culture. Dancing was very lively and vibrant at these events. Girls danced in skimpy outfits for the joy and celebration for the people. These events may have been just for fun at this phase but dancing was taken to a whole new level around the 15th century.

When most people think of dance, they imagine the pretty ballet shoes, elegant dancing and the flashing lights when the dancers enter the stage. For the most part this is true but ballet dancing is much more than this and has been for hundreds of years.

Ballet was established around the 15th century In Italy. Ballerinas put their mind and soul into their craft and they have performed at some lavish events. These performances included

weddings and other special occasions. One major event in this time period was dancing for the royal family. For example, both King Henry II and King Henry XIV contributed to help the ballet community become what it is today.

One of the most high energy dance styles is jazz. Jazz is a dance form created back in Africa, decades ago. This type of dance was used to demonstrate every body part. Most commonly, the ribcage and hips were used in the style of jazz. During the time from the 16th to the 19th century, African-American slaves danced with their whole bodies leaving caucasian people in shock. This continued over the course of many years until eventually white people discovered they were dancing along with the African-Americans. At the time, this was disgraceful but as years progressed, dancing became a sort of connection both whites and blacks shared.

Over time, dances done by the African slaves changed and were seen in different ways. For instance, some of these dances included the Lindy Hop, the Twist, Street Dancing and a more popular dance, the Charleston. Like a tree, jazz dance has many branches. These branches include Afro-jazz, modern jazz, ballet-jazz and many more combos like these. Here in the United States, one of those branches was interpreted into tap dancing.

Many can say they have been to a broadway show. Various broadway shows have included many styles of dance but a more popular style seen in these shows is tap dancing. This form of dance was interpreted from irish clogging and was introduced in the 19th century in the United States. At this time, tap shoes were very different from what they are today. For example, tap shoes had a wooden platform, unlike the metal base it has today. Tap dancing became familiar to more people after the Civil War ended. This started to bring other styles of dance together around the 20th century. Both caucasian and african americans tapped solely from each other due to the injustice whites gave to black people. Around 70 years ago, tap lost its popularity but not to worry because when the 80's arrived, tap returned to life in broadway shows.

Hip Hop is fairly one of the newest dance styles. This dance form was created in New York City around the 1960s and 70s. Many of the dancers who would perform this dance style weren't professional dancers, they just started dancing in the streets. When hip hop was established, it was looked at as if there were parts that were African dance. There isn't much history of hip hop though, since it only originated close to 50 years ago. Unlike jazz and ballet, hip hop is its own dance style making it the root of its kind.

Another dance style loved around the world is lyrical. Many non dancers don't know what lyrical is and the most easy way of explaining it is that it is a mixture of contemporary and ballet. This mixture of dance is relatively new so it's not a surprise many don't know about it. Lyrical was created in Russia in the early 20th century making the main portions of lyrical include flexibility, bendy backs and elegance of the arms. Lyrical gained familiarity with the media when it appeared on the television show *So You Think You Can Dance*.

Dance is not only a fun activity, it is proven to have greater benefits for people's wellbeing. For example, dance improves the heart and lungs. This is extremely important because these are the most substantial part of the human body. Without a healthy heart, there is a greater risk of dying at an early age. Dancing also boosts endurance and overall muscle strength.

These are very important because having good endurance is seen as a life-long skill. Besides these facts, dance also helps with maintaining body weight and stronger bones. Many strive to look fit and dance is the answer to this wish. Dance advances flexibility and balance, making dancers able to perform fluidly and gracefully.

Likewise, dance improves mentality and physical appearance. These are both very fundamental in the human body. Aside from these benefits, dance also boosts self-esteem. This makes people feel more confident in their own skin. Finally, dance also helps build better social skills. These are just some of the few ways dance improves the human body.

Many do wonder though, what is a calorie? Well according to verywellfit.com, "a calorie is the amount of heat needed to raise the temperature of one gram of water by one degrees celsius." There are many factors that go into calories. For instance, a calorie isn't really an object but a piece of measurement. This includes the amount of energy in food or drinks. Calories are needed to live and stay healthy but consuming too many can lead to weight gain.

For example, we need extra calories to store as body fat, but too many calories causes the body to gain weight. However, there are some fats that are good for the body like polyunsaturated fat which helps make a healthy heart. So, in order to lose weight, one has to eat less and burn more calories. One instance shows that different foods have different amounts of calories. If one eats two donuts and another eats a salad, there are obviously more calories in the donuts than the salad. Gaining weight begins when food with a lot of calories is eaten but the individual never burns them off. For example, to gain a pound, one must have eaten 3,500 calories and never burned them off. If someone eats 14 cookies with 250 calories each for themself, they can gain one pound if they never burn the calories off.

In conclusion, calories are very important for our body and physical health. Calories really do help especially in dance. Dancers spend hours burning off calories so they can be their healthiest possible. Whether it may be tap dancing, or classical ballet, burning calories is very beneficial in the long run.

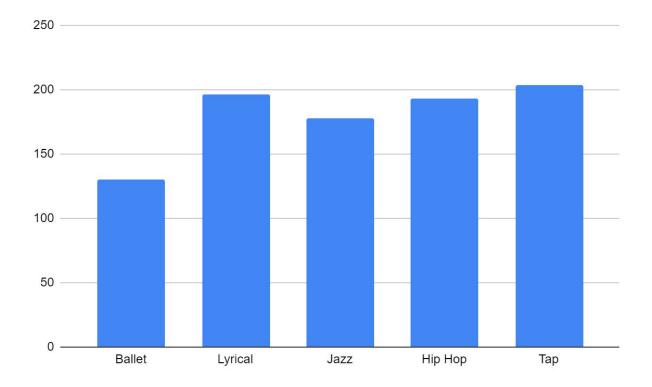
### Materials

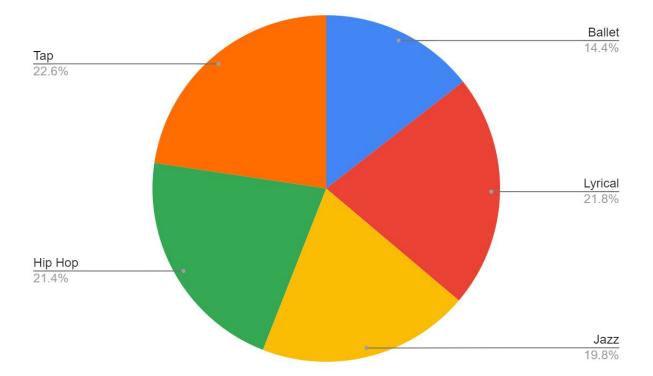
- Space to Dance
- Water and Water Bottle
- Dance Clothes/Sports Wear
- Piece of Paper (Keep for whole experiment)
- Pencil or Pen
- Dance Shoes (Specific for each style)
  - $\circ$   $\,$  Shoes for jazz, lyrical and hip hop may be done barefoot
  - tap shoes, ballet/pointe shoes, half soles, jazz shoes, gym shoes
- Hair tie
- Time (5 hours)
- Phone or Computer-with music
- Fitbit or Apple Watch

### Procedure

- 1. Put on clothes and shoes needed for the specific dance style.
- 2. Hydrate before you start by drinking lots of water.
- 3. Place your fitbit or Apple Watch on.
- 4. Set a timer for exactly 1 hour right after you put your watch on.
- 5. Begin dancing for 1 hour (between mini breaks make sure you are still moving or staying active for a correct result)
- 6. Once the timer goes off, take off your watch and relax.
- 7. Next, write down the amount of calories you had burned off (Example: Tap Dance: 357 calories). Do NOT round your amount of calories or else the experiment will not come out fully executed or completed.
- 8. Place your piece of paper somewhere you won't forget.
- 9. Repeat experiment for all 5 styles-jazz, lyrical, ballet, tap and hip hop
- 10. Once your experiment is completed, compare your results.
- 11. Finally write your conclusion on what style truly burned the most calories

# Data/Graphs





#### Conclusion

In the end, the experiment was completed and to a surprise the style that burned the most amount of calories was tap. I was pleased with the results because I would have never guessed that tap would burn the most calories. I believe that the reason this result came out the way it was was because in tap you are constantly moving your feet for an hour straight. At the end of the experiment my feet were very tired and I definitely felt as though I burned off a bunch of calories. The final result for tap calories burned was 204 calories. I am very happy with the ending result and this is an experiment that I would like to accomplish again.

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