

# When should we stretch?

By Maggie Martin  
Tritt Elementary school

## Hypothesis

Stretching helps you with flexibility and joint range of motion. On the other hand, is it better to stretch before or after you do your active activity? Well, it depends on what activity you are doing because there are different kinds of stretching. And those different types of stretching are Dynamic Stretching, which is where you stretch for a long period of time like doing warmups, as where static stretching is where you stretch for a little less than a minute. So, if you did gymnastics, for example, you would do dynamic stretching, static stretching, then you would do your sport activity, and then back to static stretching, but if you were just going on a run, you would just have to do a quick dynamic stretch.

## Background Research

Since there is a lot of information on the internet and in the books. The bases of my research consist of reading several articles online and speaking with a variety of coach's and trainers.

## Procedures

I first thought about my research. I looked on the internet and found several good websites that talked mostly about stretching before and after you exercise and warming up vs stretching, so we could find out the differences. Then I interviewed people. Most of them were exercise coaches and sports coaches.

## Research Data

Stretching before doing an active activity.

- Stretching is important it helps flexibility.
- Static stretching vs dynamic stretching
- Dynamic stretching is warmups?
- Static stretching can weaken performance.
- Static stretching after exercise is beneficial but not necessary
- Stretching or flexibility should be part of a regular program
- Improves flexibility
- Some sports require more flexibility than others such as gymnastics
- There is no evidence that stretching prevents sores
- Some people think that stretching before exercise is not helpful
- Stretching before exercise is therefore is a matter of personal preference

Stretching after doing an active activity.

- There is some evidence that static stretching after exercising may increase power and speed, and reduce an injury
- If your muscles remain tight after a workout, stretching may increase the risk of a muscle injury.
- Stretching after an intense workout can cool your body down.
- If you stretch properly, you will likely notice that your energy level is steady and consistent.
- Stretching helps relax your mood and relieve stress.

Warmups vs Stretching.

- Warmups are where you are to elevate the core temperature and increase your blood flow.
- Stretching is where you increase flexibility and joint range of motion.
- It is good to warmup and stretch before you workout.
- We should be doing static stretching at least a couple times a day.

## Results

I did all the research and I asked people who do active activities some questions on the topic stretching. Therefore, with all this research and data I have collected it seems as though it is best to stretch before and after your activity, but it also depends on what active activity you are doing. For example, you shouldn't do the same stretch that you would do at gymnastics and do it at football because half of the stuff you would be doing just wouldn't make sense and wouldn't end up helping you. Lastly, there are two kinds of stretching which are dynamic which is like jumping jacks, sit ups, and push ups, and static which is like doing a stretch and holding it for like ten seconds. So, those are my results and what I ended up learning.

## Conclusion

I believe it is best for your body if you stretch before and after you exercise or play a sport, but it can also depend on what sport or exercise you are doing. The way that stretching helps your body is that it helps with flexibility and it can help cool you down after a rough day. If you have a rough day, I highly suggest that you take five or ten minutes to just cool down and stretch for a little bit. But I also believe that all the people I talked to would agree with me. In conclusion, I believe that stretching before and after will prevent injury's and help keep your body healthy and safe. Therefore, you should stretch before and after you do your active activities.

## References

### Websites:

NHS website, Disc-Me, Aaptiv, Atletico, WebMD.

### People:

Tommy Cho-karate teacher.

Coach Lara – gymnastics coach.

Mandy Mail – Orangetheory fitness coach.

Andrea Martin – Mother and exerciser

## Data Tables

Questions	Coach Lara	Master Cho	Coach Mandy	Mom (Andrea)
Do you Exercise or play a sport?	She said, both.	He said, exercise.	She said, exercise.	She said, exercise.
Do you stretch before or after you do your activity?	She also said both, but she also said it depends.	He said both.	She said, After.	She said, both.
How does it affect your body?	She said, "It allows me to warm up a bit. If I don't Stretch, I've found my delayed unset muscle soreness to be worse.	He said, "It makes you strong, and flexible.	She said, "I love stretching when my body is warm because I feel like I get a little more range of motion and it helps reduce my soreness"	She said, "I loosens muscles and stretches muscles to limit injuries.
What sport do you do?( or do you exercise)	She said Rock climbing, white water rafting, she also coaches gymnastics and teach yoga.	He said he did, Gracie Jujitsu, which is Karate, and he is an exercise coach.	She is a fitness coach for Orangetheory Fitness, and she takes a 1-hour HIIT class 5x a week as well a coach 20 classes per week which requires demoing the exercises.	She said, exercise.
Do you have any opinions on stretching?	She said, "I think it is important as a light warm up, but more important as a cool down when dealing with strength training- to reset the muscle relaxation length. It's also important to determine whether you need to be doing active stretches or passive stretches.	He said, "It is really good for you and everyone should do it"	She said, "I think Dynamic movement should be done before exercise while passive stretching should be done after an activity or exercise."	She said, "It is important"
Do you think stretching is important?	She said yes.	He said yes.	She said, yes.	She said, yes.