

Introduction

As a less than enthusiastic exerciser myself, I decided to create a subject classification for the health benefits of various kinds of low-impact exercise. This classification is directed at not only reluctant exercisers like me, but also the elderly, the infirm, or those living with disabilities. Those disabilities could be anything that prevents a person from high intensity exercises; for example, a chronic illness like COPD, or a physical disability such as being wheelchair bound. Additionally, most of these exercises require little preparation or equipment, making them ideal for busy young professionals, single parents, or anyone else constrained by time.

To begin, I listed the many benefits and advantages of low-impact exercises and then classified them as either a physical benefit, a mental benefit, or an additional advantage. Lastly, I listed the six most common types of low-impact exercises and underneath each I detailed which of the benefits and advantages were applicable. With this faceted classification, I want users to be able to choose a low-impact exercise to try based on its beneficial qualities.

It should also be noted that these are *potential* health benefits. As with most exercise programs, there are no guaranties, and users with health concerns should always talk to their doctor before starting a new exercise routine.

➤ Physical Benefits

- > Flexibility
- > Improves ailments like back or joint pain
- > Emphasis on strength and muscle tone
- > Increase endurance
- > Improves posture
- > Improves core strength
- > Improves cardio
- > Build muscle
- > Burn fat
- > Reduce risk of high blood pressure
- > Increase metabolism

➤ Mental Benefits

- > Lessens anxiety
- > Fun, improves your mood
- > Confidence-boosting
- > Mindfulness

➤ Additional Advantages

- > Gentle on your joints
- > Improves swimming skills
- > Easier for the elderly
- > Can be wheelchair/handicap friendly
- > Easier for those with chronic illnesses
- > Supplement physical therapy or rehab
- > Better sleep habits
- > Improved sense of balance
- > Requires little to no equipment/setup
- > Easy to do when pressed for time

➤ Types of Low-Impact Exercises & Their Benefits/Advantages

> Yoga

• Physical Benefits

- Flexibility
- Improves ailments like back or joint pain
- Improves posture
- Improves core strength
- Build muscle

- Reduce risk of high blood pressure

• Mental Benefits

- Lessens anxiety
- Mindfulness

• Additional Accommodations

- Gentle on your joints
- Easier for those with chronic illnesses

- Supplement physical therapy or rehab
- Better sleep habits
- Improved sense of balance

- Requires little to no equipment/setup
- Easy to do when pressed for time

> Zumba

- **Physical Benefits**

- Increase endurance
- Improves core strength
- Improves cardio
- Build muscle
- Burn fat
- Reduce risk of high blood pressure
- Increase metabolism

- **Mental Benefits**

- Fun, improves your mood
- Confidence-boosting

- **Additional Accommodations**

- Easier for those with chronic illnesses
- Better sleep habits
- Improved sense of balance
- Requires little to no equipment/setup
- Easy to do when pressed for time

> Water Aerobics

- **Physical Benefits**

- Improves ailments like back or joint pain
- Emphasis on strength and muscle tone
- Increase endurance
- Improves core strength
- Build muscle
- Burn fat
- Reduce risk of high blood pressure

- Increase metabolism

- **Mental Benefits**

- Confidence-boosting

- **Additional Accommodations**

- Gentle on your joints
- Improves swimming skills
- Easier for the elderly
- Can be wheelchair/handicap friendly
- Supplement physical therapy or rehab
- Better sleep habits

> Calisthenics

- **Physical Benefits**

- Emphasis on strength and muscle tone
- Increase endurance
- Improves core strength
- Improves cardio
- Build muscle
- Burn fat
- Reduce risk of high blood pressure

- Increase metabolism

- **Mental Benefits**

- Confidence-boosting

- **Additional Accommodations**

- Better sleep habits
- Improved sense of balance
- Requires little to no equipment/setup
- Easy to do when pressed for time

> Tai Chi

- **Physical Benefits**

- Improves ailments like back or joint pain

- Improves posture
- Improves core strength
- Build muscle

- Burn fat
- Reduce risk of high blood pressure
- Increase metabolism
- **Mental Benefits**
 - Lessens anxiety
 - Mindfulness
- **Additional Accommodations**
 - Gentle on your joints
 - Easier for the elderly
 - Easier for those with chronic illnesses
 - Better sleep habits
 - Improved sense of balance
 - Requires little to no equipment/setup
 - Easy to do when pressed for time

> Pilates

- **Physical Benefits**
 - Flexibility
 - Improves ailments like back or joint pain
 - Emphasis on strength and muscle tone
 - Increase endurance
 - Improves posture
 - Improves core strength
 - Improves cardio
 - Build muscle
 - Burn fat
 - Reduce risk of high blood pressure
- Increase metabolism
- **Mental Benefits**
 - Confidence-boosting
- **Additional Accommodations**
 - Gentle on your joints
 - Easier for the elderly
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 - Supplement physical therapy or rehab
 - Better sleep habits
 - Improved sense of balance
 - Requires little to no equipment/setup

**The following diagrams illustrate the classification so that it is more easily understood.*



Diagram 1 – The Classifications



Diagram 2 – The Types of Low-Impact Exercises

Alphabetized Subjects

Additional Advantages: other reasons to participate in low-impact exercise rather than other types of physical activity, including lifestyle advantages and other perks.

Better sleep habits: the combination of physical exertion and health benefits from low-impact exercise results in more regular and deeper sleeping patterns.

Build muscle: the majority of exercises can help people increase or gain muscle mass.

Burn fat: physical activities increase the number of calories expended, decreasing the amount of fat the body retains and even reducing what is already present.

Calisthenics: a form of strength training that employs the use of body weight in a range of movements and requiring minimal equipment.

Can be wheelchair/handicap friendly: with certain adaptations and accommodations, many activities can be suitable for the wheelchair-bound and similarly handicapped population.

Supplement physical therapy or rehab: low-impact exercises can be a beneficial addition to an established regimen, though the appropriate medical professionals should be consulted first.

Confidence-boosting: physical activity provides a sense of accomplishment and in some cases can teach or reinforce skills such as swimming or dancing.

Easier for the elderly: low-impact exercises tend to be more simple and not as hard on the body, both of which can make this type of physical activity appealing to the older population.

Easier for those with chronic illnesses: people suffering from persistent issues such as arthritic joints or breathing difficulties such as COPD will have an easier time performing low-impact exercises that are easier on their body and typically have a softer approach to cardio.

Easy to do when pressed for time: these exercises generally can be performed in varying durations, meaning a person does not have to block out several hours from their weekly schedule to reap any of the listed benefits.

Emphasis on strength and muscle tone: these activities have a greater tendency than the others to increase a person's overall strength and muscle tone.

Flexibility: the range of motion a person has, typically in their limbs, or the elasticity of their muscles.

Fun, improves your general mood: certain forms of exercise are more enjoyable, especially when done with friends or other individuals who are also enjoying themselves while working out.

Gentle on your joints: low-impact exercises have the advantage of causing less damage to a person's joints in most cases, and some activities can be adapted to be even more gentle.

Improved sense of balance: being more physically active and increasing a person's level of fitness can enhance their coordination and balance.

Improves ailments like back or joint pain: physical exercise helps strengthen the muscles surrounding the spine and major joints, giving them better support, and decreasing pain.

Improves cardio: some low-impact exercises can have a positive effect on a person's cardiovascular health, while being less strenuous in other ways.

Improves core strength: physical activity generally helps strengthen a person's core, which is very beneficial in many ways.

Improves posture: any exercises that strengthen the back and core, also tends to have positive effects on a person's posture, further preventing back pain.

Improves swimming skills: generally, physical activity that takes place in the water will increase a person's swimming capabilities, even if it is only treading water, and it is also an important survival skill.

Increase endurance: anytime a person increases the amount of physical activity they do on a regular basis, there is a corresponding increase in their endurance, allowing them to do more than they previously could.

Increase metabolism: regular exercise typically increases a person's metabolic rate, allowing them to burn more calories and fat in a shorter amount of time, as well as decreasing the amount of extra fat the body would usually hold onto.

Lessens anxiety: exercise can lower a person's anxiety in a couple of ways. By practicing breath control and calming the mind, or through physical exertion that allows them to gain a sense of control.

Mental Benefits: physical activity can provide a variety of mental benefits in addition to the more obvious physical benefits, including lower anxiety levels, and increased mindfulness.

Mindfulness: some physical activities emphasize the mental components, working toward this therapeutic mental state that focuses on acknowledging and accepting one's own thoughts and feelings.

Physical Benefits: low-impact exercises can provide a person with numerous benefits to their body including, building muscle, burning fat, and increasing their metabolism.

Pilates: a form of exercise that strengthens muscles, improves flexibility and posture, and emphasis the core.

Reduce risk of high blood pressure: many of the benefits of physical activity collaborate to lower a person's blood pressure, lowering their risk of heart attack and stroke.

Requires little to no equipment/setup: these exercises generally need very few pieces of equipment, if any, and involve only a small amount of preparation.

Tai Chi: a form of exercise based in martial arts that is comprised of slow, exact movements and deep breaths, focuses on proper posture, and has various styles depending on the need.

Water aerobics: a typically group setting fitness activity taking place in the water that focuses on resistance training and endurance.

Yoga: a physical activity that primarily includes a flowing sequence of postures and usually incorporates breathing exercises, relaxation techniques, and meditation.

Zumba: a high energy, dance-based exercise typically done in a group or class with choreographed movements to upbeat music.

Critical Reflection

I chose this topic for my subject classification because since the pandemic started, my life has become much more sedentary. I sit at a desk and work on a computer for both my job and for graduate school, so the time I spend in one position is significant. But there is so little room in my schedule for exercise, and the high intensity workouts have never agreed with me. Thus, I have usually favored the type of workouts I have classified here. I was a kinesiology major at my undergraduate university and completed much of the coursework before eventually changing my major to English. Through my previous studies, I already had quite a bit of knowledge about general exercise activities and their benefits. And one of my previous jobs was as an assistant at a chiropractic office, and the physical health and lifestyles of the patients were always big topics during the treatment process. Many patients who were seeking chiropractic care often were not in the condition to immediately jump into intense physical activity, so the doctors often recommended things like yoga and Pilates to enhance their treatment plan. Between my personal experience and interest, I thought that this would be a worthwhile subject to classify.

At the outset, I was not sure what shape or format my classification would take, so I began by simply naming the popular forms of low-impact exercise. From there, I started listing the health benefits I could think of for each of them. I quickly realized that many of the benefits would be shared by the various physical activities, so I created another category called 'overlapping benefits.' Another stumbling block I came across was that I had limited myself by naming only health benefits. I wanted to add 'requires little to no equipment' as well as other similar entries, but they were not technically health related. To address this, I went back and changed the name I had typed at the top of the page from 'Low-Impact Exercises and Their Health Benefits' to 'Benefits and Advantages of Low-Impact Exercises.'

At this point in the process, I thought I was ready to consider what I had as a decent draft of the final product. But as I looked at my lists under each exercise category, I discovered that I had a couple of duplicate entries that were simply worded differently. Since they did not apply to all six types of physical activity, I could not place these entries under the 'overlapping' category. I was at a loss, so I reached out for help to solve this problem, and it revolutionized the structure of my classification.

Rather than grouping the benefits and advantages by which type of exercise they applied to, I first grouped them as physical benefits, mental benefits, or additional advantages. This eliminated my duplicate entries and allowed me to create a more clearly faceted classification. Below those newly defined categories, I then listed the types of exercises again and detailed which entries applied to each exercise. Finally, I created a couple of diagrams that provide an alternate view of the classification. All of these changes elicited the final name change for my working copy of the project to 'Reasons to Engage in Various Types of Low-Impact Exercises.' I have come to believe the title that you assign to your work has a demonstrative connection to the end result.

I see this final product being used in a couple of possible ways. It could be that there is a user looking for a new exercise program that would help lower their anxiety levels, strengthen

their core, and improve both their posture and balance. The information professional could then look at the second diagram I have included and discover that yoga or Tai Chi would be the optimal choices for the user. Alternately, a user could have been told by a medical professional or family member that exercise would be good for them, but they do not really know what they want to get out of the process. The user could use the first diagram to make this determination before preceding to the second diagram to find the best exercise for them.

I feel as though I learned a lot creating the alphabetical classification as well. Most of the benefits and advantages are self-explanatory or just needed a little clarification. I did have to look up a couple of the exercises because my understanding of them was rather vague, and I learned a bit about them as I did so. Additionally, as I was altering my classification, I also made some changes to the wording of some of the benefit entries. Primarily, the changes I made were to make the entries shorter and less specific. I felt this was prudent because it made the entries look cleaner and could open them up to be a bit more flexible. The presence of the alphabetical classification with the definitions also helped me to feel comfortable making those changes.

On the whole, I feel that my final product is satisfactory, but could undoubtedly be improved upon. It would not have been a bad idea for me to do more in depth research on the benefits and the exercises. I could also have tried different formats in my diagrams, such as flow charts or a branched diagram. With practice and experience I am confident that these kinds of projects will become easier for me and I will be better able to design the classification structures.