

CALISTHENICS...YOU MEAN BODYWEIGHT

What are calisthenics and why you should use them in a workout plan.



Having fun while exercising

Okay, let's talk about my favorite type of exercise, bodyweight training or calisthenics. There are two reasons I love calisthenics: one, it can be both low impact and high impact; two, there are hundreds of movements that one can perform and it never gets dull. In this installation, we will discuss how calisthenic exercises, when programmed and used appropriately can be used to continue achieving any health and wellness goals. In addition, we will demonstrate how we as rehabilitation specialists make use of these various exercises to progress individuals through rehabilitation goals and can even promote injury prevention.

What's in this article:

- **WHAT ARE CALISTHENICS**
- **TYPES OF CALISTHENIC EXERCISE**
- **INJURY PREVENTION & REHABILITATION**
- **PROGRAMMING**



What are Calisthenics

What is it? Body weight training, otherwise known as calisthenics, is a means for us to continue to progress with our physical health and wellness goals that can use various apparatuses without the use of additional load or weights. It uses gross movement patterns from primary muscle groups to push, pull, crawl, squat, grip and roll in various methods. Some clinicians identify these movements as the most basic or primal patterns, meaning that these patterns have set the foundations for what clinicians and researchers have come to understand how human beings move today. With that being said you can see how these patterns can be utilized in any workout program.

Body weight training works like most other physical exercises. It promotes both cardiovascular and musculoskeletal benefits. The one aspect of body weight training that separates it from the more mainstream forms of physical activity is the ability to challenge your body in new and at times awkward positions. These new and awkward positions allow our bodies to be challenged through neuro proprioception or balance for short. This wakes up all sorts of motor sensory pathways that one would not normally use when following more conventional forms of physical activity. Body weight training, when programmed accordingly and utilized correctly, can also be used to recover from a previous workout cycle/program and even used for rehabilitation from an injury.

**Calisthenics -
systematic
rhythmic bodily
exercises
performed
usually without
apparatus**

*Merriam-Webster
Dictionary*

Types of Calisthenic Exercise

There are numerous types of body weight or calisthenic exercises, programs, methodology, and ideologies. The ones everyone has heard of are yoga, plyometrics, suspension training, agility training, and of course traditional calisthenic exercises.

- Yoga - There are numerous forms of yoga, but the principles are somewhat similar. Using your body's own mass we move through challenging positions that increase flexibility, strength, kinesthetic awareness, and balance. Choosing a different style of yoga while knowing your limits really breaks up the monotony of lifting weights and cardiovascular training. It also truly points out one's own weaknesses to be addressed.
- Suspension Training - Using things like bars (pull-ups and various gymnast bars) and straps hung from a door frame, wall or ceiling changes the body's position normally inverting or increasing/decreasing the angles of movement. This challenges the core musculature of the body (Trunk, Pelvis, Hips, Lumbar Spine, etc.) to create stability against gravity. Again breaking up the mundane day-to-day lifting and cardio strategies.
- Plyometrics - This is jumping. Right? Well, do not oversimplify it. We don't just do jumping jacks here, we can participate in burpees, broad jumps, and verticals and then add in equipment to make it more challenging.
- Agility Training - Everyone thinks they are fast, that's great. But can you articulate it? Slow it down, speed it up and change direction in the blink of an eye? These drills help athletes train for such movements. Let me tell you they are so fun to plug into an exercise program for just about anyone.

In addition to exercises and programs we also consider the skill and movement techniques in regards to timing and how to apply or resist gravity. Things like planking or controlled descents apply time under tension to make the workout more difficult and focus on eccentric and isometric strength of the muscles. Handstands and Single Leg activities focus on kinesthetic awareness and place our bodies in challenging positions in relation to gravity, also making the workout more fun and equally as difficult.





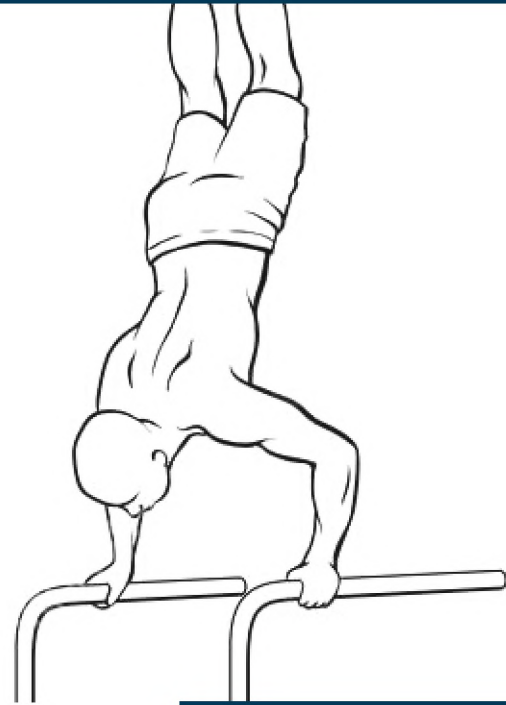
Injury Prevention & Rehabilitation

Bodyweight training in all of its forms can give us the time to safely progress into new ROMs, adequately challenge joint stability with time under tension, and practice balance (proprioception) by attempting a variety of motions in different anatomical planes. Confirming that the muscle's tendons and joints supporting ligaments are both elastic and reactive to the stresses we place on them without additional load is super important in rehabilitation. All of these characteristics support numerous injury prevention and rehabilitation strategies that we use in sports/athletics and physical therapy. A mobile, strong and balanced body is a healthy body all season long. Sometimes it is best to work with what you got when working towards getting bigger faster and stronger.

Programming

Across all physically challenging platforms, an experienced individual can plan for a brief or extended bodyweight cycle. As previously mentioned, these cycles can be used to recover from injury, to maintain a certain degree of fitness while the body recovers from previous demands of a weight training cycle(de-load/unloading cycle), or even be used to prepare for more intense demands. Let us not forget the importance of warming up and cooling down. Warmups use body weight to prepare the body's muscles for the activity by increasing tissue temperature, and blood flow and improving muscle elasticity. Cooldowns bring our body back to homeostasis by returning our physiological systems back to a resting state such as lower heart and respiration rates and returning tissues back to normal (daily) energy demands and mechanical stresses.

*"True enjoyment comes from
activity of the mind and
exercise of the body."-
anonymous*



Conclusion

Thank you for taking the time to read through this article. As I mentioned earlier, I truly enjoy calisthenics as they push me to learn new things and experience new challenges to overcome. We hope you found this article informative and are now more willing to explore different types of bodyweight exercise. Remember, calisthenic exercise can be fun and challenging for anyone at any skill level. Next time you are thinking of switching or changing your exercise routine, try incorporating some challenging calisthenics.

Calisthenics challenge us to explore new and interesting forms of movement.

Add some variety to your workout routine.

Try some today!



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References

Brown, L. E., & Ferrigno, V. A. (2005). *Training for Speed, Agility, and Quickness* (2nd ed.). Champaign, United States of America, Illinois: Human Kinetics.

Cook, G. (2010). *Movement*. Aptos, California, United States of American: On Target Publications.

Evangelista, A. L., & al, e. (2017, December). Effects of High-Intensity Calisthenic Training on Mood and Affective Responses. *Journal of Exercise Physiology* (online), 20(6), 15-23.

Hootman, J. M., Macera, C. A., Ainsworth, B. E., Martin, M., Addy, C. L., & Blair, S. N. (2001, August 01). Association among Physical Activity Level, Cardiorespiratory Fitness, and Risk of Musculoskeletal Injury. *American Journal of Epidemiology*, 154(3), 251-258.

Knapik, J. J., Hauret, K. G., Arnold, S., Canham-Chervak, M., Mansfield, A. J., Hoedebecke, E. L., & McMillan, D. (2003). Injury and Fitness Outcomes During Implementation of Physical Readiness Training. *International Journal of Sports Medicine*, 372-381.

Myers, T. W. (2021). *Anatomy Trains* (4th ed.). Elsevier Limited.

National Strength and Conditioning Association. (2008). *Essentials of Strength Training and Conditioning* (3rd ed.). (T. R. Baechle, & R. W. Earle, Eds.) Champaign, Illinois, United States of America: Human Kinetics.

Wilmore PhD, J. H., Costill PhD, D. L., & Kenney PhD, W. L. (2008). *Physiology and Sport and Exercise* (4th ed.). Champaign, Illinois, United States of America: Human Kinetics.