

CONSENT FORM

The Effect of Exercise Order and Range of Motion on Gluteal Muscular Strength in a Daily Undulating Periodization (DUP) Training Protocol

You are invited to participate in a research study exploring how exercise order and range of motion affect gluteal muscle strength and hypertrophy within a 12-week training program. You were selected as a possible participant because you are between the ages of 18–35, have at least two years of resistance training experience, and are familiar with the hip thrust exercise. We ask that you read this form carefully and ask any questions you may have before agreeing to participate in the study.

This study is being conducted by Jaime Alnassim, a graduate student at Concordia University, St. Paul – Department of Kinesiology and Health Sciences.

Background Information

The purpose of this study is to determine whether a 12-week training protocol utilizing a Daily Undulating Periodization (DUP) framework significantly impacts gluteal muscle strength and hypertrophy. Specifically, the study will evaluate how the order of exercises, focusing on the hip thrust and MC Reverse Lunge, influences strength and muscle development in adults aged 18–35 years with prior resistance training experience. This research provides insights into optimizing exercise sequencing for improved training outcomes.

Procedures

If you agree to participate in this study, you will engage in the following procedures:

There will be two testing sessions—a pre-test at the beginning of the study and a post-test at the end of the 12-week program. These sessions will be conducted remotely, and participants will be guided on performing the necessary assessments, including a five-repetition maximum (5RM) test for gluteal strength and circumferential measurements to evaluate muscle hypertrophy. Participants will be provided with detailed instructions on how to collect and submit this data accurately.

At the start of the study, you will provide demographic information, including your age, height, weight, and exercise history, and complete a readiness for exercise screening. Following this, you will receive a comprehensive training program tailored to the study. This program will include four weekly training sessions over 12 weeks, focusing on two specific exercises: the hip thrust and the MC Reverse Lunge. Each session will follow a structured Daily Undulating Periodization (DUP) framework.

Participants will perform the exercises in a specific sequence based on their assigned group. Group A will complete the hip thrust first, followed by the MC Reverse Lunge, while Group B will

reverse this sequence. The program is designed to be flexible, allowing participants to complete the workouts at their local gym, with minimal equipment requirements.

Throughout the study, participants will maintain a digital workout log to track their progress. Weekly follow-ups will be conducted via email, text, or calls to ensure compliance, address any questions, and provide guidance as needed. The post-test at the end of the program will mirror the pre-test procedures to assess changes in strength and hypertrophy.

This study is designed to be completed remotely, offering flexibility and convenience to all participants while ensuring a rigorous and consistent approach to data collection and program adherence.

Risks and Benefits of Being in the Study

The risks associated with this study are minimal. Participants may experience mild muscle soreness or fatigue due to the resistance training exercises. There is also a slight risk of muscle strain if exercises are performed incorrectly. To minimize these risks, participants will receive detailed instructions on proper exercise form. They will be encouraged to contact the research team immediately if they experience any discomfort or injury during the study. Regular monitoring and feedback from the research team will help ensure participant safety throughout the program.

The potential benefits of participation include gaining insights into your own physical fitness, specifically gluteal strength and hypertrophy. You may experience improvements in muscle strength, endurance, and overall physical fitness due to the structured training program. Additionally, you will contribute to research that aims to advance the understanding of effective exercise sequencing, which could benefit the broader fitness and sports science community. While these benefits are not guaranteed, your participation will provide valuable data that may influence future strength training practices.

Compensation

We thank you for your participation in this study. You will not receive monetary compensation for your involvement. However, all materials necessary to complete the program, including training guides and digital resources, will be provided free of charge.

Confidentiality

The records of this study will be kept strictly confidential. In any report or publication resulting from this research, no identifying information will be included. Data collected will be anonymized and stored securely, accessible only to the research team. Any digital data will be encrypted and stored on password-protected devices to ensure participant privacy.

Voluntary Nature of the Study

Participation in this study is entirely voluntary. Your decision to participate or decline will not affect your current or future relationship with Concordia University, St. Paul, or the principal investigator. If you choose to participate, you may withdraw from the study at any time without any penalty or loss of benefits to which you are otherwise entitled.

Contacts and Questions

The researcher conducting this study is Jaime Alnassim. If you have any questions now or later, you are encouraged to contact Jaime at jaime@alnassim.com or 509-720-7580. You may also contact the faculty advisor, Stephanie Hamilton, at shamilton@csp.edu.

If you have questions or concerns regarding this study and would like to speak to someone other than the researchers, you are encouraged to contact the Chair of the Human Subjects Review Committee at Concordia University, St. Paul, at irb@csp.edu or 651-641-8723.

Statement of Consent

I have read the above information, asked any questions, and received satisfactory answers. By signing below, I agree to participate in this study.

Participant Signature: _____ **Date:** _____

Investigator Signature: _____ **Date:** _____