

Investigating the Impact of Dynamic and Static Stretching on Swimming Performance  
By Haven Westra

**Introduction:** Collegiate swimming is a highly competitive sport, where fractions of a second often determine the winner of a race. In the world of swimming, any method or enhancement of training or racing will be utilized to its full potential. Swimmers use a variety of stretching methods to get ready for a practice or competition. It has been disputed by coaches and athletes if stretching, dynamic or static, will enhance athletic performance in swimmers. If stretching can improve athletic performance, then it is an inexpensive and easily accessible way to prepare the body for exercise. The purpose of this study is to determine if acute static or dynamic stretching improves performance prior to athletic testing in Division 3 Alma College swimmers. **Methods:** Study participants will complete a generic warm-up in the pool followed by a 15-minute dynamic, static, or controlled no-stretching routine. Three trials will be run to ensure each participant completes each routine. This will be followed by a performance test consisting of 3x100 yards freestyle sprint on a four-minute interval providing approximately three minutes of rest. The time to complete each repetition will be recorded by researchers and supplemented by subjective surveys. Based on previous researcher, it is hypothesized that dynamic stretching will result in faster 100-yard freestyle sprints and a decreased rate of fatigue. **Conclusion:** Findings from this study will allow researchers to suggest stretching routine types to Alma College swimmers to optimize swimming performance.