

## **Acute Effects of Vinyasa Flow Yoga on Lipid Profile and Fasting Glucose**

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### **ABSTRACT**

Dyslipidemia and hyperglycemia are modifiable risk factors for cardiovascular disease (CVD) which could be impacted by yoga. Short- and long-term interventional trials have demonstrated the efficacies of various styles of hatha yoga in improving both lipid profile and fasting glucose concentrations; however, the acute effects of hatha yoga on these measures are unknown. Vinyasa flow yoga is a style of hatha yoga characterized by continuous movement, smooth transitioning between postures, and a synchronization of breath and posture transitions. To date, it is unknown whether this style of yoga can alter lipid profile or glucose concentrations. **PURPOSE:** The purpose of this study was to evaluate the acute effects of a Vinyasa yoga session on lipid profile and fasting glucose concentrations in yoga practitioners with a minimum of 3 months of yoga practice experience. **METHODS:** Eighteen yoga practitioners (20 – 75) completed one 60-minute Vinyasa yoga DVD. Whole blood samples were obtained (after 8 hrs of fasting) and analyzed for total- and HDL-cholesterol, triglyceride, and glucose concentrations via reflectance photometry. Briefly, 35µL blood samples were applied to test cassette sampling wells and color changes of the reagent pads were converted to concentration values. LDL-cholesterol was calculated using the Friedewalde equation. **RESULTS:** After completion of the Vinyasa flow yoga session, no changes occurred in glucose ( $p = 0.398$ ) or total- ( $p=0.344$ ), HDL- ( $p = 0.806$ ), or LDL-cholesterol ( $p=0.685$ ). Triglyceride concentrations also remained the same after the session ( $p = 0.462$ ). **CONCLUSION:** These preliminary results suggest that engaging in vinyasa flow yoga for 1 hour does not induce beneficial changes in lipid profile and glucose concentrations. Further research is needed to determine the potential efficacy of yoga, an alternative exercise mode, in producing favorable changes in lipid profile, glucose and overall CVD risk profile.

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