# Research Design Proposal

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**To:** The Smarter University Office of Sponsored Projects

**Proposal Submission Date:** January 15, 2013

**Proposed Study Commencement Date:** March 30, 2013

**Study Title:** Determining the Correlation between Runners and Vegetarian Diets

Many previous studies studied the health benefits of both eating a vegetarian diet and running. Many studies, like that of Williams and team, discuss the optimum diet for a runner, including a combination of carbohydrates and protein. Likewise, studies have demonstrated that a vegan diet or vegetarian diet leads to a leaner body mass as well as lower risk of heart disease, diabetes, cancer, and other preventable diseases. Furthermore, there are numerous studies indicating that running provides significant health benefits, including improving cardiovascular health. Johnson, et al, demonstrated the increased health of runners versus non-runners in their study. However, no research has been done to see what correlation there may be between runners and vegetarians or vegans.

This study will determine if those who choose to be healthy, either through eating a plant based diet or running regularly, also seek to improve their health through other positive lifestyle choices. Additionally, it will examine the vegan or vegetarian diet on runners to see if there is any benefit or harm.

There will be two levels to this study. First, an online survey will be sent out to both runners and vegetarian communities. The questionnaire will include questions about lifestyle choices, including exercise, diet, smoking, alcohol and stress. The answers to these surveys will be analyzed to see what kind of correlation can be seen between healthy lifestyle choices, including the percentage of people who choose healthy choices across the board. The second, more important part of the study will focus on 40 volunteers. Ten will be a control, neither eating a vegan diet nor running. Ten will eat a vegan or vegetarian diet, but not run. Ten will run, but not eat a vegetarian or vegan diet, and ten will do both. Over a two-year period, they will be tested to assess their health levels.

The significance of this study will allow doctors, nutritionists, physical therapists, trainers, and others learn how to encourage patients to be healthier through aiding in the understanding of why some people choose to lead healthy lifestyles while others do not. Furthermore, it will demonstrate the role nutrition and a vegetarian diet plays on health, especially for runners.