

**Poster #1****Amanda Irish****Masters Candidate, Other****Human Physiology**

**Title of Research:** Evaluation of a Modified Paleolithic Dietary Intervention in the Treatment of Relapsing-Remitting Multiple Sclerosis

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**Introduction/Purpose:**

Improvements in fatigue and quality of life seen in Multiple Sclerosis (MS) patients adhering to a modified Paleolithic dietary intervention (MPDI), nutritional supplement, exercise, and neuromuscular electrical stimulation regime are hypothesized to be due primarily to the effect of diet. However, no research has been conducted evaluating the dietary intervention alone. The purpose of this research was to evaluate a MPDI in the treatment of Relapsing-Remitting MS (RRMS).

**Experimental Design:**

We evaluated effects of the MPDI in nine men and women (mean age: 36.0 yrs  $\pm$ 6.0) with neurologist-verified RRMS. Four subjects were randomized to a “usual care” (control) group and five were taught the MPDI and asked to follow it for three months.

**Results:**

Our preliminary results indicate trends for improved Fatigue Severity Scale (FSS,  $p=0.18$ ) and Multiple Sclerosis Quality of Life-54-Mental (MSQOL-M,  $p=0.16$ ) scores from baseline in MPDI subjects compared to controls at 3 months. Time to complete non-dominant hand 9-Hole Peg Test (9-HPT,  $p=0.11$ ), and 25-Foot Walk (25-FW,  $p=0.13$ ) decreased in MPDI subjects at 3 months compared to controls. Decreases in serum highly-sensitive C-Reactive Protein levels (hs-CRP,  $p=0.12$ ) were also observed in MPDI subjects at 3 months compared to controls.

**Conclusions:**

We expect these and other outcome measures to show statistical significance in the MPDI group versus controls as more subjects ( $n=20$ ) complete the intervention.