



STUDY PREVIEW

Professional and extreme athletes partake in rigorous training and conditioning in order to achieve lofty goals on an elite performance level. Rapid recovery and improved mental recovery are vital to this process, but is often elusive, as is raising the level of training at his level. Despite this level of training long term health and extended lifespan of this level of athletes does not surpass that of the average individual.

Several laboratory abnormalities are at risk in elite level athletes including;

- Oxidation and therefore Inflammation leading to pain, delayed recovery, tissue repair as well as decreased arterial health.

- Muscle breakdown and dehydration leading to altered renal health.

- Lipid abnormalities leading to altered cholesterol metabolism and long term cardiovascular health.

Omega 3 fatty acids have profound anti-inflammatory effect on a cellular level. Muscles and tendon repair as well as immune function improve with EPA and DHA found in omega 3 fatty acids. Improved mood, increased reactivity and mental performance, fat burning and muscle growth were noted as well.

The ingestion of fish does not allow for consistent EPA/DHA ingestion. Zack Snacks omega rounds allows the athlete to ingest a consistent amount of EPA and DHA regularly. This would optimize recovery and allow for improved function as well.

HYPOTHESIS:

Increasing Omega 3 levels in athletes will increase performance and recovery as well as decrease pain and adverse metabolic effects of extreme conditioning.

IMPLEMENTATION:

Regularly scheduled intake of Zack Snacks will increase Omega 3 levels and prevent the rise in markers of oxidation and inflammation associated with professional and elite athletes.

PLAN:

- Athletes will have baseline questionnaire, performance and lab testing, be omega 3 free/naive prior to training

- One half of the sample athletes will consume 4 Zack Snack Omega rounds per day

- Repeat testing of markers will be conducted 2, 4, and 6 week intervals.

Expected Outcomes:

The consumption of Zack Snacks will lead to an increase in Omega 3 fatty acid levels. This increase will lead to a decrease in systemic oxidation and inflammation and improvement of physical performance, metabolic markers of renal and vascular stress.