

Scientists develop new supplement for muscle rejuvenation

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While a number of isolated nutritional ingredients have been shown to fight sarcopenia, this is the first time such ingredients -- which include whey protein, creatine, vitamin D, calcium and fish oil - have been combined and tested for this purpose.

For the study, the research team recruited two groups of men aged 70 and older. One group took a protein-based, multi-ingredient nutritional supplement for six weeks without an exercise regimen, while the other group took a placebo. The objective was to evaluate whether daily consumption would result in gains in strength and lean body mass.

Following those six weeks, subjects continued to take the supplement (and placebo) while also undertaking a 12-week progressive exercise training program consisting of resistance and high-intensity interval training.

Most notable, the findings showed improvements in deteriorating muscle health and overall strength for participants both before and after the exercise regimen. In the first six weeks, the supplement resulted in 700 grams of gains in lean body mass - the same amount of muscle these men would normally have lost in a year. And when combined with exercise twice weekly, participants noticed greater strength gains- especially when compared with their placebo taking counterparts.

The research, which was supported by the Labarge Optimal Aging Initiative within the McMaster Institute for Research on Aging, comes at a time when demographic trends lean toward older Canadians as the largest percentage of our population. The authors hope that continued work will include older women and different populations that can benefit from a supplement aimed at improving muscle health.