

Strength Training Accelerates Gastrointestinal Transit Time In Middle-Aged and Older Men

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OBJECTIVES:

Seven healthy, untrained men aged 52-69 years were studied to determine the effects of a 13-week total body strength training program on gastrointestinal transit time (GITT). Whole bowel transit time and mouth-to-cecum transit time were recorded before and after the training program. Prior to training, subjects recorded their dietary intake for 5 days and then participated in the GITT tests. After the 13-week training program, subjects repeated the same previously recorded diet for 5 days before repeating the GITT tests.

RESULTS:

No significant changes in weight or aerobic capacity were observed as a result of training. There was a small but significant decrease in body fat, and the training resulted in an increase in upper body strength of $\approx 41\%$ and lower body strength of $\approx 45\%$. In addition, an increase of $\approx 38\%$ was observed in the peak torque of the knee extensors. The training program significantly accelerated whole bowel transit time (41 +/- 11 hours, versus 20 +/- 7 hours). There was no significant change in mouth-cecum transit time.

SUMMARY:

A strength training program can accelerate whole bowel transit time in previously sedentary middle-aged and older men with the primary effect appearing to be in the large intestines. It is widely acknowledged that accelerated whole bowel transit time has important implications for colon cancer prevention. For example increasing fiber in the diet as a way to accelerate transit time is well documented as a factor in colon cancer prevention. Since a large percentage of colon cancers occur in the descending portion of the large intestine the accelerated transit time through the large intestine demonstrated by this research is very positive.

KEISER PIECES USED:

Shoulder press, upper back, chest press, lat. pull down, triceps, lower back, abdominal, leg press, leg extension, hip abductor, hip adductor, leg curl.