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Patients undergoing chemotherapy often face a challenge in maintaining weight and muscle. New research indicates that fish oil may help reduce muscle and weight loss in individuals undergoing chemotherapy treatment.

FISH OIL REDUCES MUSCLE LOSS FROM CHEMOTHERAPY

Unintended weight loss is a major cause of increased mortality and health problems in patients with advanced cancer. Muscle and weight loss caused by chemotherapy can greatly reduce quality of life and prevent patients from receiving further treatments.

New research published in the American Cancer Society journal *Cancer* shows a protective effect for fish oil against the loss of muscle tissue and weight that occurs during chemotherapy treatment.

Researchers conducted a clinical trial of lung cancer patients receiving their initial chemotherapy treatments. Forty patients completed the study; 16 were in the fish oil group (dose of 2.2 g of EPA/day) while 24 other patients received standard care (no fish oil). Skeletal muscle and adipose tissue were measured using computed tomography images at baseline and the end of treatment. Weight was measured and blood samples were analyzed at the beginning and throughout treatment. Average treatment time was 10 weeks.

While the group that received standard care (no fish oil) lost an average of 5 lbs, patients that received fish oil maintained their weight. Nearly 70% of those who supplemented with fish oil gained or maintained muscle, compared to only 29 percent of those who did not receive it. Patients whose EPA (from fish oil) levels increased the most had the most significant muscle gains. Those who did not receive fish oil lost an average of 2.2 lbs of muscle. Fat mass did not differ between groups.

These findings are significant since currently there are no effective treatments for cancer-related malnutrition.

Murphy, R. A., Mourtzakis, M., Chu, Q. S., Baracos, V. E., Reiman, T. and Mazurak, V. C., Nutritional intervention with fish oil provides a benefit over standard of care for weight and skeletal muscle mass in patients with nonsmall cell lung cancer receiving chemotherapy. Cancer, n/a. doi: 10.1002/cncr.25709