

[54] NUTRITIONAL COMPOSITION FOR ENHANCING SKELETAL MUSCLE ADAPTATION TO EXERCISE TRAINING

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[58] Field of Search ..... 514/561, 562, 567

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[57] ABSTRACT

A combination of amino acids (carnitine, glutamine, isoleucine, leucine and valine) provide diet supplements which employ branched amino acids (BAA) to promote muscle adaptation to strenuous exercise. The diet supplements provide the BAA substrate which is utilized at the expense of muscle mass as well as liver protein, stimulate muscle and liver protein synthesis, contribute amino groups for the synthesis of alanine and glutamine, encourage metabolism of pyruvate to alanine, rather than to lactate, and encourage proton efflux from muscle (via glutamine).

24 Claims, 1 Drawing Figure