Claims

1. Composition comprising the branched-chain amino acids (BCCAs) L-Leucine, L-Valine and L-Isoleucine in combination with the peptide L-Alanyl-L-alanine.
2. The composition according to claim 1, wherein the weight ratio L-Leucine: L-Valine: L-Isoleucine is between 2:1:1 and 8:1:1.
3. The composition according to claim 1 or claim 2, wherein the weight ratio L-Leucine: L-Valine: L-Isoleucine is 2:1:1 or 4:1:1 or 8:1:1.
4. The composition according to any one of claims 1 to 3, wherein the weight ratio L-Leucine: L-Valine: L-Isoleucine: L-Alanyl-L-alanine is between 2:1:1:1 to 2:1:1:3.6, preferably it is 2:1:1:2.5 or 2:1:1:2 .
5. The composition as claimed in any one of claims 1 to 4, which is a dietary supplement.
6. The composition according to any one of claims 1 to 4, which is a pharmaceutical composition.
7. The composition according to any one of claims 1 to 6, for oral administration.
8. The composition according to any one of claims 1 to 6, containing the following amounts of BCAAs and dipeptide per unit dose: between 0.6 and 1 g, preferably 0.8 g of L-Leucine, between 0.3 and 0.5 g, preferably 0.4 g of L-Isoleucine, between 0.3 and 0.5 g, preferably 0.4 g of L-Valine and from 0.5 g to 1.5 g, preferably 0.8 g of L-Alanyl-L-alanine.
9. Composition according to any one of claims 1 to 8, for use as a medicament.
10. Use of the composition according to any one of claims 1 to 8, in the manufacture of a medicament for the prevention, ameliorating and/or treatment of muscle wasting associated to:
    i. pathological conditions, preferably selected from the group consisting of neuromuscular degenerative disorders, such as muscular dystrophy or muscular atrophy; chronic obstructive pulmonary disorder; cancer-associated cachexia; diabetes; renal failure; cardiac failure; Cushing syndrome; sepsis; burn injuries; uremia; cirrhosis; and AIDS.
    ii. age-related condition, preferably sarcopenia; or
    iii. malnutrition, immobility or fasting.
11. Use of the composition according to any one of claims 1 to 8, to improve muscular performance and/or recovery, and/or to reduce muscular fatigue before, after or during physical exercise.