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7. Tamburlini N. L’importanza innovativa nell’uso del MAP per il controllo biologico del peso. La Medicina Biologica; 1:4-10, 1997.


MAP™ can substitute dietary proteins in a safer and nutritionally more efficient way

MAP™ is a dietary protein substitute that provides the MAP Master Amino Acid Pattern® (U.S. Patent No. 5,132,113) a unique pattern of essential amino acids in a highly purified, free, crystalline form. After oral ingestion, MAP™ is rapidly utilized. MAP™ does not require the aid of peptidases and therefore, it is absorbed, within 23 minutes, through the first 100 cm of functional small intestine. MAP™ does not provide any fecal residue. MAP™ is amphoteric. MAP™ is supplied in capsules of 1,000 mg for oral administration. Each tablet of MAP™ contains only the active ingredient MAP™. MAP™ contains no inactive ingredients.

COMPOSITION

MAP™ contains the MAP Master Amino Acid Pattern® (U.S. Patent No. 5,132,113) a unique pattern of essential amino acids in a highly purified, free, crystalline form.

CLINICAL STUDIES

The results of comparative, double-blind, triple and quintuple crossover Net Nitrogen Utilization (NNU) clinical studies have shown that the subjects, while taking MAP™, as a dietary proteins substitute, achieved a body’s 99% NNU. This means that 99% of MAP’s constituent amino acids followed the anabolic pathway, thus acting as precursor of body’s protein synthesis (BPS). By comparison, dietary proteins only provide between 16 to 48% NNU. Hence, MAP™ is more nutritious than dietary proteins. This has been confirmed by the fact that during the studies, each subject body’s nitrogen balance was maintained in equilibrium by taking MAP™, as a sole and total substitute of dietary proteins, in a dosage of only 400 mg/kg/day, which provided less than 2 kcal/kg/day (1 g MAP™ = 0.04 kcal). The studies results have also shown that 1% of MAP’s constituent amino acids followed the catabolic pathway, thus releasing only 1% of nitrogen catabolites (NC) and energy. By comparison dietary proteins release between 52% to 84% nitrogen catabolites and energy. This fact evidences that MAP™ is safer than dietary proteins, and that provides the lowest amount of energy in comparison to any dietary protein.

MAP™ is indicated as a safe and effective substitute for dietary proteins.

MAP™ vs. Dietary Proteins & Protein Supplements

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>MAP™</th>
<th>Dietary Proteins</th>
<th>Protein Supplements</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNU for BPS</td>
<td>99%</td>
<td>32% (average)</td>
<td>16% (average)</td>
</tr>
<tr>
<td>Digestion Time</td>
<td>23 min</td>
<td>3-6 hours (6-12 times longer)</td>
<td>3-6 hours (6-12 times longer)</td>
</tr>
<tr>
<td>BPS/Time (NNU/min)</td>
<td>99% NNU/23 min</td>
<td>24-48 times lower</td>
<td>48-96 times lower</td>
</tr>
<tr>
<td>Released Nitrogen Catabolites</td>
<td>1%</td>
<td>68% (average)</td>
<td>84% (average)</td>
</tr>
<tr>
<td>Energy</td>
<td>0.04 kcal/g</td>
<td>4 kcal/g</td>
<td>4 kcal/g</td>
</tr>
<tr>
<td>Fecal residue</td>
<td>Absent</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>Contraindications</td>
<td>None</td>
<td>Renal Failure or Hepatic Failure</td>
<td>Renal Failure or Hepatic Failure</td>
</tr>
<tr>
<td>Adverse Reactions</td>
<td>None</td>
<td>Food Sensitivities</td>
<td>Food Sensitivities</td>
</tr>
<tr>
<td>Refrigeration</td>
<td>Not Needed</td>
<td>Needed</td>
<td>N/A</td>
</tr>
</tbody>
</table>

INDICATIONS & USAGE

MAP™ should be administered with food. MAP™ in a dosage of 400 mg/kg/day has been shown to be adequate, as a sole and total substitute of dietary proteins, to maintain the body’s nitrogen balance in equilibrium. To calculate the MAP™ dosage necessary to substitute dietary proteins, apply the following:

MAP™ dosage = \((\text{Dietary Proteins} \times 0.4)\) g

For instance, to calculate the dosage of MAP™ necessary to substitute 10 g of dietary proteins, proceed as follows:

1. MAP™ dosage = \((10 \times 0.4)\) g
2. MAP™ dosage = \(4\) g

Therefore, 4 g of MAP™ provide a body’s protein synthesis equivalent to that provided by 10 g of high biological value dietary proteins.

SUPPLY INFORMATION

MAP™ is available in bottles of 120 tablets of 1,000 mg, for oral administration.