



MAP® – Master Amino Acid Pattern®

Eight essential amino acids for a protein diet
Dietary nutrient

... a protein revolution

MAP® is a pure foodstuff and has a 100% pure, free crystalline amino acid content.

MAP® is developed from pulses (GM-free; non-gene-modified) and does not contain any additives or doping substances. It is not a drug and does not have any contraindications.

MAP® provides an optimal ratio of the eight essential amino acids L-Leucine, L-Valine, L-Isoleucine, L-Lysine, L-Phenylalanine, L-Threonine, L-Methionine and L-Tryptophan for the human dietary pattern.

MAP® achieves 99 % Net Nitrogen Utilization [NNU*].

As a consequence, MAP® forms just 1% nitrogen toxins (ammonia, urea).

MAP® is almost completely calorie free (just 0.4 kcal in 10 pellets). It introduces the same amount of actually anabolic utilisable amino acids to the body as 350g meat, fish or poultry.

MAP® is completely reabsorbed in the small intestine within 23 minutes. It is already split and does not require any proteolytic enzymes. The transition period of usual nutritional proteins into the body takes 5 to 13 times longer.

MAP® does not leave behind any digestive end products.

* NNU = Net Nitrogen Utilization = Protein nutritional value

Can MAP® reduce excess weight without endangering health?

Yes, the use of MAP® as dietary nutrition as part of a diet is a highly effective method in order to lose weight as quickly and healthily as possible. A 10 g dose of MAP® (ten pellets) provides the same amount of components for protein synthesis (99% Net Nitrogen Utilization) as 350 g meat, fish or poultry. It also has just 0.4 kcal and almost no nitrogen waste. Other natural food proteins produce up to 84% nitrogen waste (ammonia, urea). MAP® produces just 1% of the toxic degradation products. Due to this the liver and kidneys will not burden. As MAP® does not produce any digestive end products, it relieves the detoxifying organs kidneys and liver as well as the digestive organs, while supplying them with the highest quality protein. Relief of the detoxifying organs as well as the digestive organs contributes to the relief of the cardiovascular system. This is especially advantageous for people who are very overweight. The sensation of hunger is drastically reduced when taking MAP® as part of a diet. This is because protein saturation is given priority by the organism. The result is that weight loss can be maximised and the body weight such as skin and muscles are strengthened and tightened.

Why is MAP® recommended as part of a diet?

MAP® is recommended:

- to maximise weight loss.
- in order to strengthen and tighten body tissue (e.g. skin, muscles).
- to prevent symptoms such as a sensation of hunger or a feeling of faintness, headaches caused by ketoacidosis or a reduced libido.
- to prevent false weight loss (loss of lean cell mass) and as a consequence putting on weight once again (yo-yo effect).

Can the loss of lean body tissue or a lack of tightness in the skin be improved through the use of MAP®?

Yes, false nutrition leads to a negative nitrogen balance (protein deficiency) and as a result to a reduced protein synthesis. This causes a loss of lean body tissue (muscular mass, immune tissue, cell tissue, organ tissue) and also leads to a reduction in the tightness of the skin. That is why MAP® is especially recommended for the dietary plan of people who have noticed a loss of lean body tissue or a lack of tightness in the skin.

How does MAP® prevent weight being put on again after a diet (yo-yo effect)?

In many diets the protein intake is usually reduced, which causes a negative nitrogen balance (protein deficiency). This leads to a loss of lean body tissue and, as a consequence, to weight reduction which is unfortunately false. Instead of fat and water the body lives off its own cell tissue in order to supply itself with sugar (energy), a process known as gluconeogenesis. This

leads to a vicious circle as our lean body mass (primarily muscles) consumes caloric energy. If we exhaust this lean tissue our caloric basal metabolic rate is also lowered. Returning to normal eating habits at the end of a diet results in a surplus of calories which are not used, but which are stored as fat tissue. By taking MAP® as dietary nutrition the cannibalism of lean body tissue during a diet can be prevented. MAP® transforms body fat into muscles, which increases the caloric basal metabolic rate and helps to prevent a yo-yo effect in the long term.

How long must MAP® be taken before the first results are noticeable?

You will notice the first results relatively quickly, depending on the nutritional level. These results become noticeable after one week of regular use, especially when used in conjunction with physical activity. Through regular training you will notice an increase in muscle power, muscle endurance and muscle density after a few weeks. Muscle volume (mass) is only built up, when you increase the training weights dynamically and progressively. In all other cases – e.g. when increasing the frequency of training with weights at the same level or when increasing endurance – your muscles will be firmer (denser). The results achieved with MAP® are the result of a natural physiological process: i.e. through improved protein synthesis.

What is the recommended daily dose of MAP® if the product is taken as a supplement to nutritional protein as part of a diet?

Take 8 to 10 pellets as a replacement for lunch or your evening meal – the evening is preferable as “slimming” is aided during the night when sleeping due to the increase in degradation processes – of course together with taking the necessary vitamins, mineral nutrients and trace elements. Furthermore, there should be a daily minimum intake of 500 g fresh fruit and vegetables (with the exception of bananas, kaki fruit and dry fruit. These fruits increase the glycemic load, i.e. they lead to an increase in insulin levels and the chance of renewed fat deposits). Please bear in mind the recommended minimum amount of essential sugars compared to extreme low carb diets. In the **dr.reinwald metabolic regulation®** particular emphasis is placed on a **balance of all vital substances**. The same applies to glyconutrients, which are essential for the supply to our brain. Although it makes up just 2% of the entire body mass, our brain requires 20% of energy through essential sugars. An omission of this nutrient supply leads to a reduction in memory performance and to concentration problems. In severe cases – for example, through long periods of fasting or forced starvation diets in order to achieve a certain competition weight – it could even result in cerebral shrinking processes, i.e. a reduction in cerebral mass.

For which other purposes can MAP® be used?

- Conversion of body fat into muscle based on physical activity
- Strengthening and tightening of skin and body tissue
- Maximisation of muscle strength, muscle density, muscle volume
- Maximisation of endurance performance
- Quicker recovery following physical activity and stress [= Nr. 1 protein killer]
- Protein supply for older people, pregnant women and breast feeding mothers, adolescents
- Sport or other physical exertion (e.g. work) as well as stress factors
- Vegetarian or vegan lifestyles
- Supplement in cases of intolerance or reduced absorption and utilisation of natural food protein
- Protein supply for simultaneous relief of the organism in case of illness, malfunction, health cures, etc.
- Building of lean body and tissue substance in cases of emaciation, accident rehabilitation, etc.

Which outstanding dietary characteristics does MAP® offer?

MAP® is almost completely calorie free (just 0.4 kcal in 10 pellets).

MAP® introduces the same amount of actually anabolic utilisable amino acids to the body as 350 g meat, fish or poultry.

MAP® causes a swift and qualitative saturation, as it is completely reabsorbed in the small intestine within 23 minutes. It is already split. The transition period of usual nutritional proteins into the body takes 5 to 13 times longer.

MAP® with just 1% it forms almost no nitrogen waste providing enormous relief for the metabolic organs. During a metabolic diet, the organs are increasingly available for the purification and cleaning tasks of pollutants and depots.

MAP® behaves in an amphoteric manner, which means it provides acid-base balance. As acids increasingly accumulate during metabolic processes as part of weight reduction and purification they can be buffered.

In conjunction with movement MAP® transforms body fat into muscles, which increases the caloric basal metabolic rate and helps to prevent a yo-yo effect in the long term.

For further interesting details about the most important nutritional component read the information leaflet “Basic knowledge protein”.

Further information about the uses of MAP® can be found at www.map-protein.com – under “Downloads”

