PeptAlde™
Spotlight: Peptides in Sports Nutrition

Physical exercise stress is known to stimulate inflammatory processes – a natural and necessary response to exercise-induced muscle damage. In the course of this, inflammation markers are relevant to regeneration after physical exercise, primarily to facilitate tissue regeneration. Since inflammation comes with discomfort, pain and restrain of physical activity, it is a key concern of active people. PeptAlde™ starts right here, since it is specifically designed to modulate inflammation.

PeptAlde™ contains a unique set of plant-based peptides to serve for physiological benefits – identified together with the start-up Nuritas by artificial intelligence (AI). A combination of innovative front-end technology with state-of-the-art industry scale-up unlocks these targeted peptides.

The exact mechanism of interaction is currently being researched. Preliminary data suggest the involvement of immune modulation pathways, including the cytokines TNF-α and IL-6, which modulate inflammation and are relevant in recovery from physical exercise.

Exercise induced inflammation may be mediated with PeptAlde™:

PeptAlde™ consists of **plant-based peptides**

All **20 amino acids** are contained

PeptAlde™ **mildly modulates inflammatory markers**, and contributes to the maintenance of muscle mass.
PeptAlde™ affects important markers for immune response and modulates inflammation in healthy adults

**TNF-α/IL-6 ratio**
- TNF-α is an important cytokine involved in the regulation of immune cells
- IL-6 is a multifunctional cytokine involved in many functions including recovery from sporting activities
- The temporary shift in the ratio indicates immune modulation by the peptides

![Graph showing TNF-α/IL-6 ratio over time](image)

**Peptides in PeptAlde™ show promising effects relevant to exercise physiology**

**In silico**
- Peptides interact with inflammatory makers and receptors
- Several mechanisms may act in concert

**In cell culture**
- Peptides suppressed TNF-α in simulated macrophages
- Peptides stimulated IL-6 in primary fibroblasts relevant to physical repair

**Clinical test**
- PeptAlde™ (20 g) mildly modulates inflammation markers
- Subsequent studies explore response under exercise stress

**PeptAlde™ meets the needs of the growing sports nutrition market**

Consumers understand the connection between sports, post-workout and inflammation. And they are actively looking for premium plant-based solutions to support the healthy body response. PeptAlde™ is an ideal companion for active people. It is produced from brown rice and its mild plant protein taste makes it an ideal fit for various sports nutrition formats.

**PeptAlde™ offers flexibility to suit your end formulation needs:**
- snack bars
- powders
- protein shakes
- emulsions
- shots

For information on claims intended to be used in product marketing in specific countries please contact your BASF representative. Trademark for PeptAlde™ applicable only in selected countries.

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