



Inner peace
Outer strength

- ✓
STRESS MANAGEMENT
- ✓
CLINICALLY PROVEN
- ✓
NATURAL INGREDIENT
- ✓
REGULATORY APPROVED



Lactium

Lactium[®], a natural & unique health ingredient for stress management

Lactium[®] is a **milk protein hydrolysate** which contains a **bioactive decapeptide** called **α -casozepine**, produced from a milk protein thanks to a food grade tryptic hydrolysis.

It is the result of **more than 10 years of research and development**.







Lactium[®] decreases stress-related symptoms in humans but also in companion animals. It is already available in several pet food and pet care products on the market.

Are companion animals stressed too?

They are sometimes! And as in humans, it is a matter of good balance between natural stress that helps them react to life's challenges and excessive stress which triggers disorders or aggravates existing conditions.

For instance, stress has been seen to have an impact on:



-  **Skin health** (e.g. pruritus)
-  **Eating disorders**, resulting in weight loss or gain
-  **Urination disorders** (e.g. Feline Low Urinary Tract Disease)
-  **Gastro-intestinal disorders** (e.g. diarrheas)
-  **Immunity reduction**
-  **Adaptation difficulties**, resulting in behavior disorders (e.g. destructive to self or close environment)

Lactium[®], a food grade and clean label ingredient for numerous applications



Food grade ingredient

recognized by authorities in different countries (Europe, US, China...).



Clear and clean labelling

"milk protein hydrolysate" (Europe, China) or "casein hydrolysate" (US).



Easy incorporation

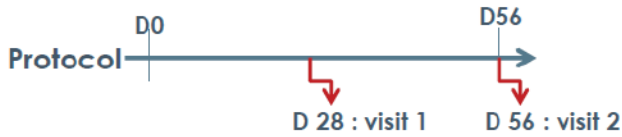
in wet food, dry food or dietary supplements, thanks to high functional properties. Proven efficacy after extrusion.

Scientifically proven effectiveness



Clinical study on 38 privately owned anxious dogs*:

- 15 mg/kg** per day of Lactium® vs. positive control (selegiline) during 56 days. Selegiline is a medical compound used in behavioral disorders' treatment.
- Measure of EDED score (emotional disorders evaluation in dogs), a higher score meaning higher anxiety. In addition, pet owners assess their dog's health and welfare.



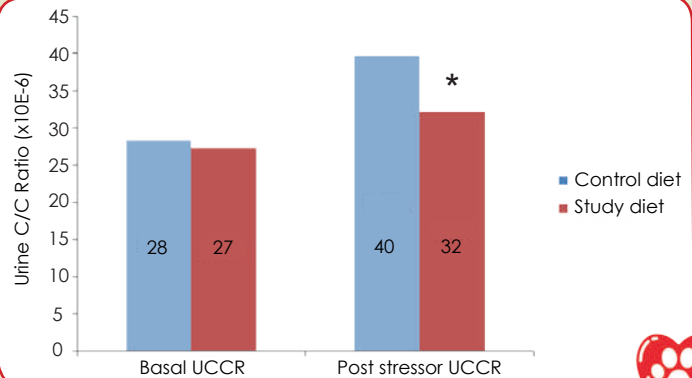
Results: No different results between the two compounds ($P = 0.73$):

- EDED score's decrease is observed
- Owner's assessment results are equivalent and improvement of health and welfare is noted.

Lactium® reduces the anxiety symptoms for dogs.

Clinical study on 28 privately owned anxious dogs**:

- 20 mg/kg** per day of Lactium® + L-Tryptophan vs. placebo group during 8 weeks.
- Measure of cortisol levels in dogs' urine using the urinary cortisol-to-creatinine ratio (UCCR). An important ratio means an important level of cortisol.



Mean of UCCR in control diet and study diet fed dogs.
 $p = 0.04$ Post stressor UCCR control VS post stressor UCCR study group.

Results: The increase of the cortisol level induced by a stress factor (visit to the veterinary practice) is significantly lower in the study group compared to the control.

Study diet decreases the secretion of cortisol after a stressful event, thus can reduce stress-related symptoms in dogs.

Clinical study on 34 privately owned anxious cats* :

- 15mg/kg** per day of Lactium® vs. placebo group during 56 days.
- Overall anxiety score was measured by veterinary behaviorists.



Study provided significant results in the management of anxiety in cats.

Lactium®

A unique bioactive

An innovation born from more than 10 years of research

Clinically proven efficacy on stress management and its symptoms

Without side effects

* Beata C. et al., 2007. Journal of Veterinary Behavior.

** Kato M. et al., 2012. Journal of Veterinary Behavior.

For more information about Lactium®
www.lactium.com



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