Ingredients with metabolic action on the locomotor system focus on tendons

> De Moffarts B., Dupuis-Tricaud M-C., Crozet R. PAVESCO TWYDIL®

% in locomotor troubles: 46%

Mobilization Inflammation regulator (LAx4,...) Anti-protease (TIMP,...)

Breeding (selection management)

TENDON REMODELING

Warm-up

Training management

Shoeing and surfaces

Age and overweight Stress lesion Inflammation (PGE2,...) Protease and oxidative stress (MMP,...)

IMPORTANCE OF TRAINING



TENDON PHYSIOPATHOLOGY



MANAGEMENT OF ENZYMATIC STRESS:







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EFFET OF TWYDIL ARTRIDIL AND TWYDIL PMC







EXTRACELLULAR MATRIX ROLES:





Angiogene Proliferation Dedifferentiation Collagen production

Production of functional organ



Days after the culture begins

PGE2 LXA4 PMC IL1b ММР TIMP HEALTHY ACUTE TGF 🕇 IGF 🕇 IL6 FR2/ALX VGF 📌 PGE2 clearance CHRONIC SUB-ACUTE

OMEGA 3 FATTY ACIDS ROLES:



• Omega-3 fatty acid as C18.3n3 (alin.), C20.5n3 (EPA) and C22.6n3 (DHA) could improve :

LT5/LT4

Macrophage phagocytosis without increase of inflammation stimuli

Reduction of inflammation preferentially inhibit arachidonic pathway

Improve IL6 action Cell functionality

MODIFICATION OF OMEGA 3-OMEGA 6 RATIO

% W3/W6



EFFET OF TWYDIL OMEGADIL



EXTERNAL USE







Local action:

Promote blood circulation Antiphlogistic Anti-inflammatory

EFFET OF EXTERNAL USE PRODUCTS





DOES IT WORK?

Occurrence of locomotor troubles

TWYDIL PMC

Number of meters in race before the first lesion



Nielsen et al., 1993, A.J.Equine Vet. Sci.

Modelisation of the non-specific reinforcement of the locomotor system following incremental dose of TWYDIL PMC.

CONCLUSION AND USE:

COMPLEMENTATION IS GOOD AS AN AID TO USUAL TREATMENTS (PrP, stem cells,...)

IT IS ALSO IMPORTANT TO CONSIDER COMPLEMENTATION FOR PREVENTION AND AS AN INSURANCE

CRITICAL PERIODS :

•Breeding

•Increase of work load

• Rehabilitation

Prevention and aid to treatments