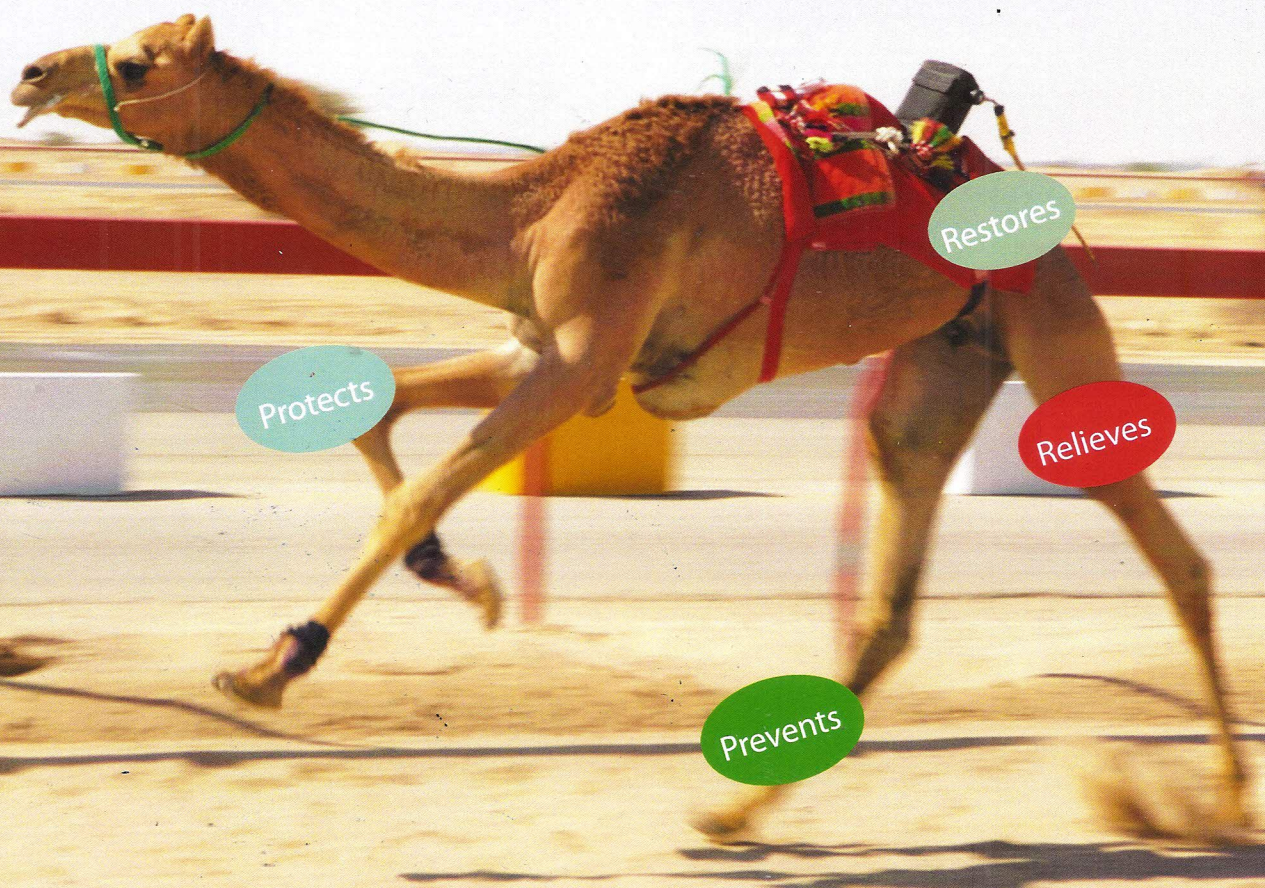


A revolutionary advancement in joint health.



4CYTE™
equine + camel

www.4cytevet.com

Look forward to life-long naturally healthy joints

4CYTE™ Equine & Camel is a unique advancement in joint treatment regime containing **Epiitalis®**. Indicated for use when treating mild to moderate OA, after joint damage or surgery. Even better, have the foresight to use it as a prophylactic in high-risk animals such as performance and athletic horses and camels at risk of joint disorders.

Key Active Ingredient: **Epiitalis®**

- A plant oil extract patented for its ability to proliferate chondrocyte cells for cartilage regeneration (fig 1).
- Epiitalis® actively stimulates the proliferation of chondrocytes and synoviocytes, which 'tips the balance' back in favour of the production of healthy cartilage instead of degeneration.
- Epiitalis is also patented for its ability to suppress central inflammatory mediator PGE₂.
- Has an enhanced synergistic effect with other active ingredients in reducing central inflammatory mediators.

Other key ingredients in 4CYTE™ are:

New Zealand Green Lipped Mussel – important source of PUFA's and amino acids which help regulate the chemical mediators in joints.

Marine Cartilage – natural source of the full range of glycosaminoglycans (GAGs)-Glucosamine, Chondroitin, Keratin and Heparin sulphates and hyaluronic acid essential for healthy synovial fluid and cartilage.

Abalone – source of Omega-3 PUFA's that may help decrease Nitric oxide production thereby maintaining chondrocyte and cartilage health.

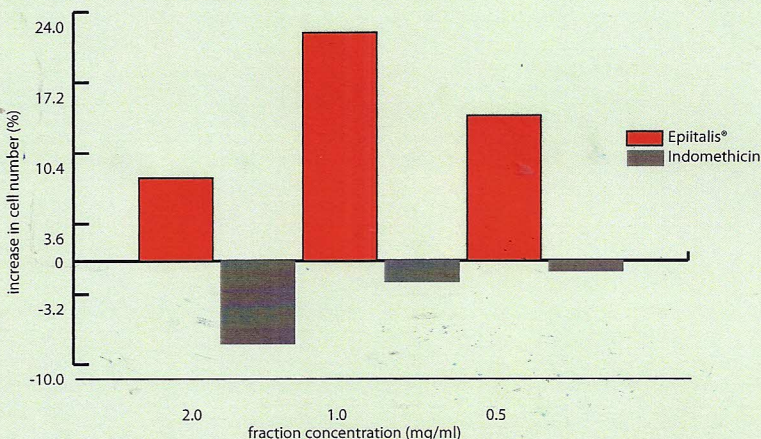


Fig 1- Equine Chondrocyte Proliferation

When chondrocytes were incubated with Epiitalis® they produced a concentration-dependant increase in proliferation. Indomethacin however, showed a trend towards inhibiting chondrocyte proliferation.

Chondrocytes are the central regulators of joint health responsible for the destruction of old/damaged cartilage.

- Red = Cell cytoskeleton
- Green = Cell nucleus

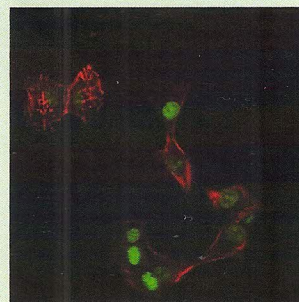


Fig 2 - Equine Chondrocytes

Restores

Proven chondrocyte proliferation for the promotion of cartilage regeneration. Unique advancement in joint treatment.

4CYTE™ Equine & Camel is the only product available with the inclusion of 'Epiitalis®' - patented for its ability to stimulate chondrocyte (fig 1) proliferation in the presence of inflammation.

Prevents

Proven prevention of joint degradation.

Prophylactic^{2,3,4} use of 4CYTE™ Equine & Camel reduces the central inflammatory mediators (PGE₂) responsible for the cycle of joint inflammation and degradation.

Protects

Proven protection and promotion of healthy cartilage.^{1,2,3}

4CYTE™ Equine & Camel provides a full range of naturally occurring GAGs and Omega-3 fatty acids essential for the production of cartilage. 4CYTE™ provides a proven increase in chondrocyte viability.

Relieves

Proven anti-inflammatory action and potential analgesia.^{2,3,4}

4CYTE™ Equine & Camel reduces the production of the central mediators of inflammation and pain - PGE₂ and nitric oxide (NO). 4CYTE™ use reduces inflammation in affected joints. (fig 3)

The Results - World Class Research

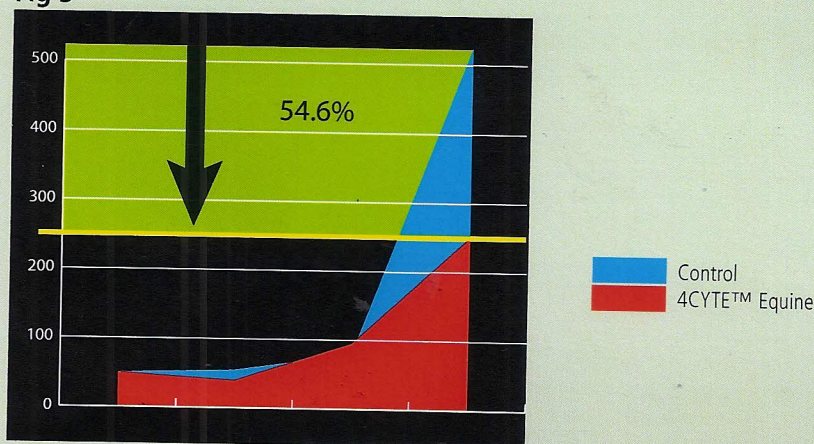
Increasingly, oral nutraceutical supplements are being used either in conjunction with traditional OA treatments or alone.³ However, there is considerable lack of scientific data evaluating their prophylactic use, which has meant some practitioners are reluctant to recommend them. With the launch of 4CYTE™ by Interpath there is now an oral nutraceutical joint supplement that is backed by world-class research and development, including several peer-reviewed papers, world conference proceedings and ongoing post-doctorate research. 4CYTE™ brings confidence to a new class of natural veterinary products.

Published Research

Key Findings 4CYTE™ Equine Trials In-Vivo³

- Intra-articular injection of the IL-1 caused increased concentration of synovial fluid PGE₂ and GAG consistent with inflammation and cartilage degradation associated with arthritis.
- Feeding of 4CYTE™ Equine inhibited the increase of PGE₂ (54.6% decrease) and GAG induced by the intra-articular injection of IL-1 highlighting 4CYTE™ Equine anti-inflammatory and chondroprotective properties as also demonstrated in in-vitro studies. (Fig 3)

Fig 3



- Feeding 4CYTE™ Equine lead to a decrease in the circumference of joints swollen by the intra-articular administration of IL-1 consistent with inhibition of increased joint effusion seen in cases of arthritis.

Safety

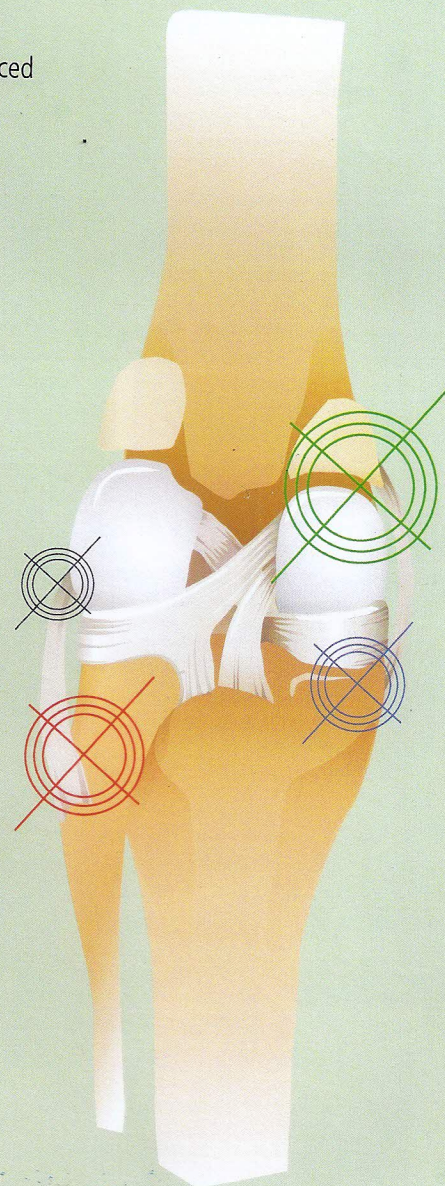
- No adverse effects were observed with feeding of 4CYTE™ Equine at 5 times the manufacturers recommendation for twelve weeks.^{3,5}

Key Findings 4CYTE™ Equine Clinical Study⁴

- Dietary Nutraceutical significantly inhibits post-surgical synovial fluid PGE₂ in horses that have recently undergone osteochondral fragment excision. These data support the use of the product as a post-surgical strategy for reducing inflammatory and degenerative consequences of aberrantly elevated intra-articular PGE₂

Key Findings 4CYTE™ Cartilage Explant In-Vitro Study²

- Addition of IL-1 to cartilage explant cultures induces inflammation, degradation of cartilage matrix and death of chondrocytes.
- 4CYTE™ inhibits IL-1 induced inflammation in cartilage explant culture.
- 4CYTE™ prevents degradation of cartilage and death of chondrocytes induced by IL-1.
- 4CYTE™ increased cell viability in cartilage explant cultures.
- Pharmaceuticals such as indomethacin inhibit inflammation but do not protect against the adverse effects of cartilage degradation and chondrocyte death.



Formulation specific scientific support papers:

1. Pearson W, Orth MW, Karrow NA, et.al, Mol.nutr. Food Res 2007; 51(8):1020-1030
2. Pearson W, Orth MW, Karrow NA, et.al AJVR 2008; 69 (12): 1560-1568
3. Pearson W, et.al AJVR 2009 Vol 70 No.7

4. Pearson W, Cote N, and Desjardins M, in proceedings. Am Assoc Equine Pract 2012; 58:544
5. Lindinger, Chronic safety of the nutraceutical 2006
6. Patents pending USA-12/812482-12/812488

- Winner 2013/2014 Melbourne Metropolitan Training Premiership with 86 winners
- Winner 2013/2014 Australian Trainers Premiership with 253 winners
- Leading Country Trainer 2005 – 2014 with over 100 winners per year



I have been using 4CYTE™ Equine in a number of my horses after it was introduced to my stable by our veterinarians at Ballarat over 2 years ago. 4CYTE™ Equine was put forward as a joint health supplement with extensive scientific research to back up the product. I use 4CYTE™ Equine in the young horses to aid in preventing the onset of degenerative joint disease. In the older athletes 4CYTE™ Equine helps maintain joint health and is especially useful following joint surgeries. The level of scientific research behind 4CYTE™ Equine means what I am giving my horses is actually benefitting them. Many products claim various benefits but few have "in depth" research to back them up as is the case with 4CYTE™ Equine. 4CYTE™ Equine is a part of the daily regime for many of my horses, using it as a prevention against joint disorders as well as a treatment for any horses with signs of joint inflammation. I have not hesitation in recommending 4CYTE™ Equine and congratulate Interpath on this product.

Darren Weir Leading Country Trainer 2005 – 2014 with over 100 winners per year



I have numerous "over the counter" products presented to me, and rarely will I put them on my shelf for sale. 4CYTE™ is one of the very few "nutraceutical" products that has undergone extensive research to demonstrate there is an effect where it is needed in horses. I do believe 4CYTE™ will be permanent and long term addition to my pharmacy.

Dr Ian C Fulton, BVSc, MS, FACVSc



Moses has traditionally been difficult to keep going through a full season. 4CYTE™ Equine has been extremely beneficial not only for his joints but it also appeared to help his muscles and ligaments - he is very "playful" in the paddock and has in the past required numerous visits from the physio - not so after 4CYTE™!

Ms Laura Madden & Moses, 2012 NZ Amateur Showhunter of the Year winner

Suitable for Equine and Camels:

- Performance and athletic animals
- Pre and post operatively
- With pre-existing conditions

4CYTE™ Equine & Camel is a combination of Epiitalis® and marine concentrates in berry flavoured, convenient granules which are added once daily to food.

- Non swabable, so can be taken prior to performances/races
- Safe to take long term

DISCLAIMER: This brochure is intended for the veterinary professional. Information contained does not imply regulatory approval. Please refer to retail pack for country specific information.



Pack sizes may vary