



# Bonafide®

NEW SCIENCE IN BONE INTEGRITY

## Bonafide® Explained

- The active ingredient in BONAFIDE is Quinacranone†, a water soluble, bio-available form of Vitamin K1 & K2.
- Vitamin K1 & K2 has a critical effect on the function of osteocalcin, the bone protein that binds the mineral and protein in bone together. Without sufficient vitamin K the binding process is incomplete and low density or defective bone and cartilage are produced.<sup>1</sup>
- Vitamin K1 & K2 is naturally available in fresh, growing green pasture but it is highly unstable, being degraded by UV light, wilting or "wintering off."<sup>2</sup>
- Horses that do not have constant access to high quality pasture are likely to be deficient in vitamin K, leading to a reduction in bone density and bone strength.
- Horses removed from vitamin K rich pasture and brought into a box/yard regime have demonstrated a reduction in bone density within 7-10 days.
- There is an established correlation between bone density and the incidence of OCDs and DODs in yearlings and DMD (shinsoreness) in 2 year olds.
- BONAFIDE is the first product to provide a stable, bio-available form of vitamin K1 & K2



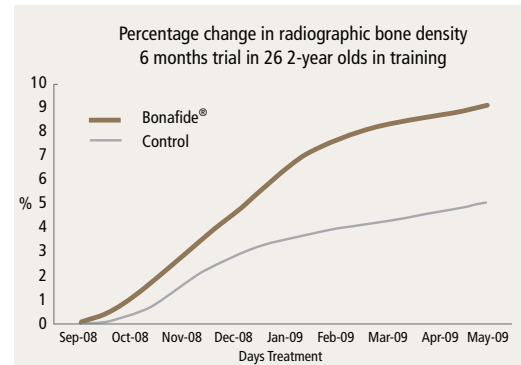
## Trial Results

A recent trial shows marked increases in bone density on BONAFIDE treated two year olds

26 two year old thoroughbred racehorses at commencement of training for racing were divided into two groups. One group "BONAFIDE" received 7mg vitamin K formulation each day in feed for six months. The other group ("Control") received an apparently identical powder containing no vitamin K.

Digital radiographs of the left third metacarpal bone and an adjacent aluminium step wedge were taken at various intervals. The radiographic density of the bone and the step wedge were measured and RBAE (radiographic bone aluminium equivalence) calculated.<sup>12</sup>

At each subsequent measurement the RBAE for each horse was compared to its initial RBAE and the percentage change recorded.



### Mean percentage change in RBAE over time

Days	12/09/08	14/10/08	31/12/08	2/02/09	8/05/09
BONAFIDE	0	1.04	4.54	7.68	9.05
Control	0	0.35	2.82	3.97	5.02

## Bonafide® is now available in selected Mitavite® feeds.

The MITAVITE range of super premium breeding and race feeds now contain BONAFIDE.

These include the market leading race feeds FORMULA 3 and XLR8 and our trusted breeding feeds BREEDA, PROMITA and YEARLING PREP.

