

FOR-REPRO





MAINTAIN OPTIMAL STALLION PERFORMANCE WITH THE POWER OF UBIQUINOL COQ10



FOR-REPRO Stallion provides horses with a quality source of Ubiquinol CoQ10, an essential feed element for normal body function. Utilising the natural antioxidant and energy production activity of Ubiquinol CoQ10, FOR-REPRO Stallion has been shown to improve multiple measures of stallion fertility, for optimal performance throughout the breeding season.

UBIQUINOL COQ10 - ESSENTIAL FOR LIFE

Horses have evolved over thousands of years as free ranging pasture grazers and can consume herbage for 17 to 20 hours per day. Pasture grasses and legumes naturally contain Ubiquinol CoQ10, so stallions managed with modern husbandry are likely receiving less than the necessary daily intake, particularly if they are actively and regularly engaged in an activity that utilises Ubiquinol CoQ10, like breeding.

THE ROLE OF UBIQUINOL COQ10 IN THE BODY - THE BODY'S FIRST CHOICE OF ANTIOXIDANT

NATURAL ANTIOXIDANT ACTION

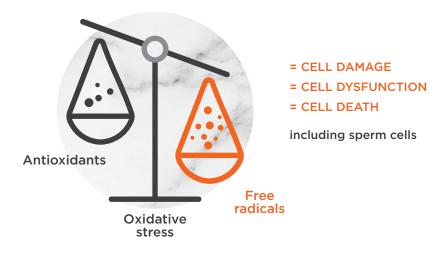
Ubiquinol CoQ10 acts directly as a front-line scavenger of potentially damaging free radicals (produced as a by-product of all cellular processes) but also aids in the regeneration of other antioxidants, such as Vitamin E.

CELLULAR ENERGY SYNTHESIS

ATP is the biological unit of energy and CoQ10 is the coenzyme (essential for enzyme function) for at least three steps of ATP production, making it essential for cellular energy synthesis. Without CoQ10, energy production is greatly diminished.

OXIDATIVE STRESS

Normal cellular processes, including energy production, produce highly reactive free radicals which can damage cells if they are not neutralised by antioxidants. When free radicals outnumber antioxidants, oxidative stress occurs, resulting in increased cellular damage that can cause cell dysfunction and cell death.



THE NEED FOR UBIQUINOL COQ10 IN STALLIONS

UBIQUINOL COQ10 IS PART OF THE NATURAL EQUINE DIET AND IS VITAL FOR NORMAL BODY FUNCTION, HAVING A NATURAL ANTIOXIDANT ACTION AND ESSENTIAL ROLE IN CELLULAR ENERGY PRODUCTION.

THE NATURE OF SPERM

ENERGETIC

Sperm cells are highly motile, requiring high rates of energy production. This also results in high levels of free radicals being generated, increasing the risk of oxidative stress.

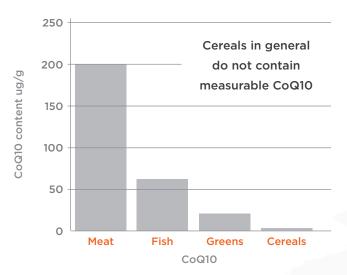
VULNERABLE

The structure of equine sperm cells makes them particularly susceptible to the damaging effects of oxidative stress.¹

FEEDING UBIQUINOL COQ10 DAILY, HELPS RESTORE THE BALANCE BETWEEN FREE RADICALS AND ANTIOXIDANTS, INCREASING PROGRESSIVE SPERM MOTILITY AND IMPROVING SEMEN QUALITY.⁴

DIET

The typical high cereal diet of breeding stallions will potentially not contain sufficient Ubiquinol CoQ10 levels to maintain optimal body function and fertility.







DAILY FEEDING OF FOR-REPRO STALLION ENSURES DEMANDS ARE MET FOR NORMAL BODY FUNCTION AND SEMEN QUALITY BY PROVIDING UBIQUINOL COQ10 IN A DIET THAT MAY BE DEFICIENT FOR THE NEEDS OF BREEDING STALLIONS.

WHICH STALLIONS?

Oxidative stress has been shown to impact semen quality, reducing motility, viability and fertility.^{2,3}

Stallions that will benefit the most from daily feeding of FOR-REPRO Stallion prior to and throughout the stud season include:

- Older, aging stallions those where a natural decline in fertility may be an issue or where the physical energy requirements for a busy covering schedule may be of concern
- Busy stallions those facing a full stud book for the season ahead
 - May also potentially minimise the number of cross covers required

THE DATA

Research in humans and a growing body of evidence in horses shows that feeding Ubiquinol CoQ10 is associated with increased progressive sperm motility and improved semen quality.^{2,4}

Data from various species shows that improving semen quality using CoQ10 increases the likelihood of pregnancy due to increased conception rates and decreased early foetal loss.³

Even the best semen collected for AI use decreases in quality following the cooling and freezing processes necessary for transportation. Feeding FOR-REPRO Stallion daily to breeding stallions significantly increased viability and progressive motility of sperm cells after cooling and thawing.^{4,6} These positive effects appear to last for the life of the sperm cells.⁴

FOR-REPRO Stallion is fully compliant with the FEI guidelines for Clean Sport and can be used in stallions competing throughout the season.

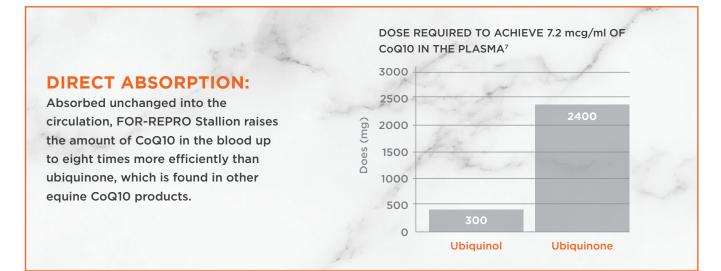
- Young unproven stallions first season sires where fertility status is unknown
- Stallions with known fertility issues
- Stallions who are also competing
- Shuttle stallions, moving between the northern and southern hemispheres
- Stallions whose semen is intended for AI use and whose quality may be adversely affected by the cooling and/or freezing processes that are necessary for transport

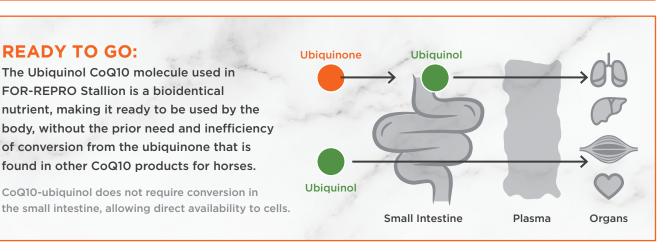
WHY FOR-REPRO STALLION? OUR SCIENCE YOUR SUCCESS:

THE MOST BIOAVAILABLE SOURCE OF COQ10, AN ESSENTIAL FEED ELEMENT FOR NORMAL BODY FUNCTION

PROTECTED DELIVERY:

The encapsulated Ubiquinol CoQ10 used in FOR-REPRO Stallion is protected through the GI tract until it reaches the small intestine, for optimal absorption.





GUARANTEED QUALITY, AVAILABLE EXCLUSIVELY FROM FORAN

CLOSE TO NATURE:

With its source of Ubiquinol CoQ10 patent protected, FOR-REPRO Stallion delivers consistently pure, bioidentical Ubiquinol CoQ10, for as close-to-nature provision of CoQ10, without feeding at pasture.

TOP STANDARDS:

FOR-REPRO Stallion is produced to GMP and Foran's own S.A.F.E scheme, ensuring the highest product quality, safety and adherence to global anti-doping regulations, as defined by leading regulatory bodies, in accordance to Clean Sport principles.

CONSISTENT AND FRESH:

Individual daily sachets allow easy administration, accurate dosing and consistent quality of FOR-REPRO Stallion, every day.

FEEDING DIRECTIONS:

For optimal results FOR-REPRO Stallion should be used for at least 21 days prior to the stud season as peak plasma levels of Ubiquinol CoQ10 occur within this time.



COQ10 IN BLOOD PRE AND POST 1G/DAY⁴

Feeding daily throughout the stud season is required, as discontinuation causes progressive decline in Ubiquinol CoQ10 levels.

1 sachet of FOR-REPRO Stallion (1g Ubiquinol CoQ10) should be fed daily, provided as a six-month supply for maintained stallion performance throughout the breeding season.

References:

- 1. Membrane Lipids of the Stallion Spermatozoon in Relation to Sperm Quality and Susceptibility to Lipid Peroxidation. Macias Garcia B. et al. Reprod Dom Anim 46: 141–148, 2011
- 2. Coenzyme Q10 and male infertility: a meta-analysis, Lafuente et al. J Assist Reprod Genet. Sep; 30(9): 1147-1156, 2013
- 3. Treatment with zinc, D-aspartate and coenzyme Q10 protects bull sperm against damage and improves their ability to support embryo development. R.Gualtieri et al. Theriogenology, Vol 82 Iss 4 592-598, Sep 2014
- 4. Effect of daily supplementation with ubiquinol on muscle coenzyme Q10 concentrations in Thoroughbred horses, Thueson E et al, Comparative Exercise Physiology, 2019; 15 (3): 219-226, 2019
- 5. The distribution and content of ubiquinone in foods. Kamei M et al. Int J Vitam Nutr Res. 56:57-63, 1986
- Coenzyme Q10 and α-Tocopherol prevent the lipid peroxidation of cooled equine semen. Nogueira et al. Reproduction in Domestic Animals, Oct 2015
- 7. Comparison study of plasma coenzyme Q10 levels in healthy subjects supplemented with ubiquinol versus ubiquinone. P Langsjoen & A Langsjoen. Clin Pharmacol Drug Dev. Jan;3(1):13-7, 2014

OUR SCIENCE, YOUR SUCCESS

Foran Equine

A division of Foran Healthcare, 2 Cherry Orchard Industrial Estate, Dublin 10, Ireland

T +353 (0)1 626 8058 E info@foranequine.com

UK - Commercial

Kirsty Durham t: +44 7860771072 e: kirsty.durham@foranequine.co.uk

Ireland & International - Technical

Kirsty McCann t:+353 879161712 e: kirstymccann@forans.com

UK & USA - Technical

Nichola Reynolds t: +44 7739 658469 e: nichola.reynolds@foranequine.co.uk

International - Commercial

Nicola Heyworth t: +44 7738497801 e: nicola.heyworth@forans.com