



**OUR SCIENCE,  
YOUR SUCCESS**

# FOR-RECOVERY



**SUPPORT THE  
EQUINE ATHLETE  
WITH THE POWER  
OF UBIQUINOL  
COQ10**



**FOR-RECOVERY** 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-RECOVERY is the ideal support for the elite equine athlete during both pre-training and a busy racing or competition schedule, helping to maintain performance throughout the season.

## UBIQUINOL COQ10 – ESSENTIAL FOR LIFE

Horses have evolved over thousands of years as free ranging pasture grazers and can consume herbage, shown to contain Ubiquinol CoQ10, for 17 to 20 hours per day, Pasture grasses and legumes naturally contain Ubiquinol CoQ10 but modern day husbandry often sees horses stabled with limited pasture access. Add to this the rigours of a competitive lifestyle and elite equine athletes can experience a deficiency of Ubiquinol CoQ10.

## THE ROLE OF UBIQUINOL COQ10 IN THE BODY:

### 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.

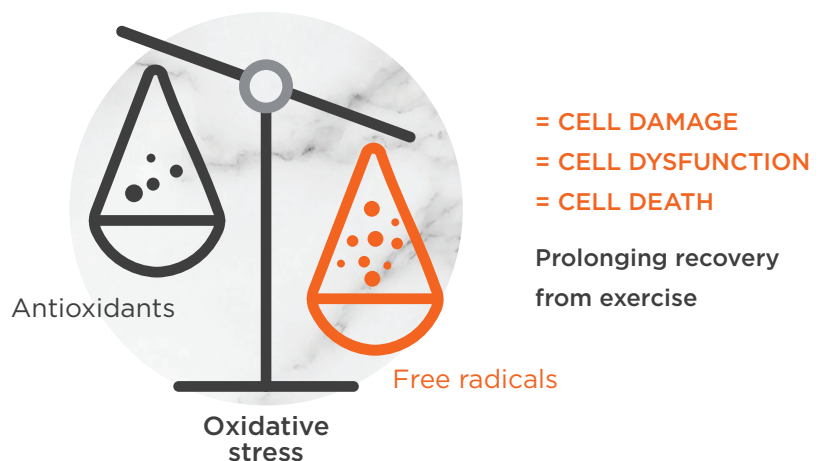
### CELLULAR ENERGY SYNTHESIS

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.

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

## 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. This prolongs recovery from exercise as cells are repaired and replaced, commonly seen as muscle fatigue and soreness.

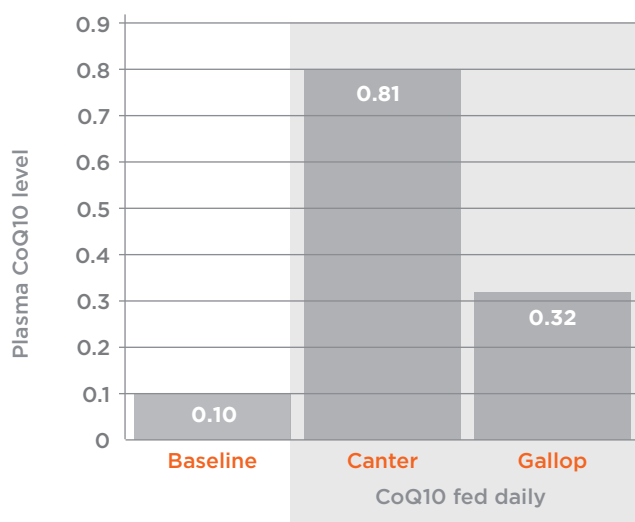


# THE NEED FOR UBIQUINOL COQ10

## EXERCISE

Strenuous (fast and/or prolonged) exercise during training and racing/competition requires more energy and generates higher levels of free radicals than when at rest. This can be further exacerbated by the pressures of travelling to competition or advancing age. This increases the risk of oxidative stress and uses up Ubiquinol CoQ10 stores quickly, prolonging post-exercise recovery as cells are repaired and replaced and Ubiquinol CoQ10 stores are replenished. Organs that have the highest requirement for Ubiquinol CoQ10 include the heart, muscles and lungs – all essential for performance.

FAST EXERCISE SIGNIFICANTLY REDUCES COQ10 IN HORSES<sup>1</sup> (ADAPTED FROM)



THE COMPETITIVE LIFESTYLE OF RACE AND PERFORMANCE HORSES MEANS THAT THEY HAVE A HIGHER REQUIREMENT FOR UBIQUINOL COQ10 THAN HORSES AT REST.

## SYNTHESIS IN THE BODY

The rate at which the horse produces Ubiquinol CoQ10 often cannot meet the demands of training and competition, prolonging post-exercise recovery.<sup>1</sup>



Performance horses need to have an adequate source of Ubiquinol CoQ10 in their diet to combat the potential damage as a result of oxidative stress and quickly replenish stores depleted by exercise.

# IN PERFORMANCE HORSES

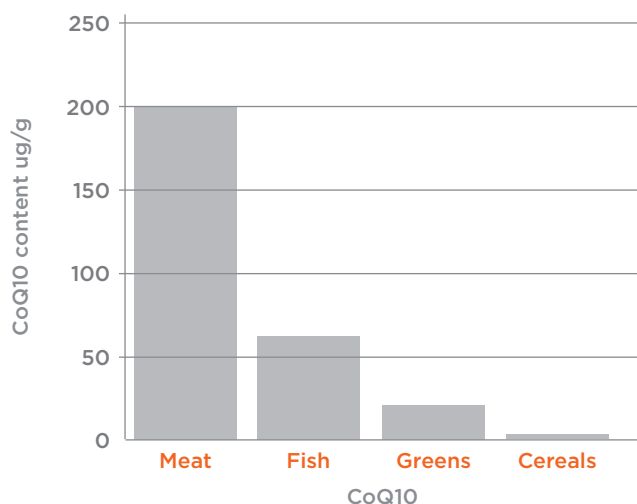
## DIET

The typical cereal based diet of performance horses does not contain Ubiquinol CoQ10 in sufficient levels to maintain optimal body function.

**FOR-RECOVERY provides Ubiquinol CoQ10 in a diet that is deficient for the needs of performance horses, protecting against the effects of oxidative stress that prolong recovery from exercise.**

This is important for racehorses that are likely to experience repeated situations where oxidative stress will occur, as a result of their competitive lifestyle. Whether it's a burst of power for racing or the stamina required for endurance, not allowing a horse to recover between bouts of strenuous exercise means that horse will not achieve their peak when they next exercise. Ubiquinol CoQ10 is an important part of post-exercise recovery, so rapidly replenishing stores is vital for maintained performance throughout the training and racing season.

COQ10 CONTENT IN VARIOUS FOOD SOURCES<sup>2</sup>



Cereals in general do not contain measurable CoQ10



# WHY FOR-RECOVERY?

## OUR SCIENCE YOUR SUCCESS:

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

### EFFECTIVE:

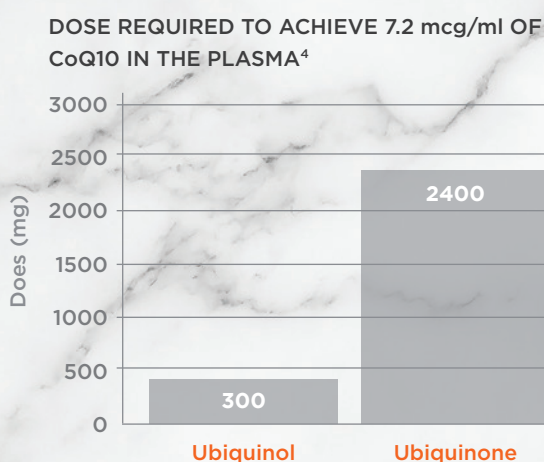
Feeding FOR-RECOVERY daily during training and racing/competition increases plasma and muscle levels of Ubiquinol CoQ10 in horses, ensuring that it is readily available, as it is needed. >83% horses at least doubled gluteal CoQ10 concentration with daily Ubiquinol CoQ10.<sup>3</sup>

### PROTECTED DELIVERY:

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

### DIRECT ABSORPTION:

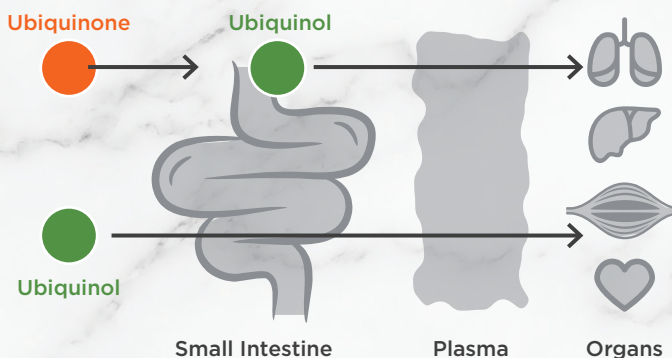
Absorbed unchanged into the circulation, FOR-RECOVERY raises the amount of CoQ10 in the blood up to eight times more efficiently than ubiquinone, which is found in other equine CoQ10 products.



### READY TO GO:

The Ubiquinol CoQ10 molecule used in FOR-RECOVERY is a bioidentical nutrient, making it ready to be used by the body, without the prior need and inefficiency of conversion from ubiquinone that is found in other CoQ10 products for horses.

CoQ10-ubiquinol does not require conversion in the small intestine, allowing direct availability to cells.



GUARANTEED QUALITY, AVAILABLE EXCLUSIVELY FROM FORAN

### CLOSE TO NATURE:

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

### TOP STANDARDS:

FOR-RECOVERY 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:

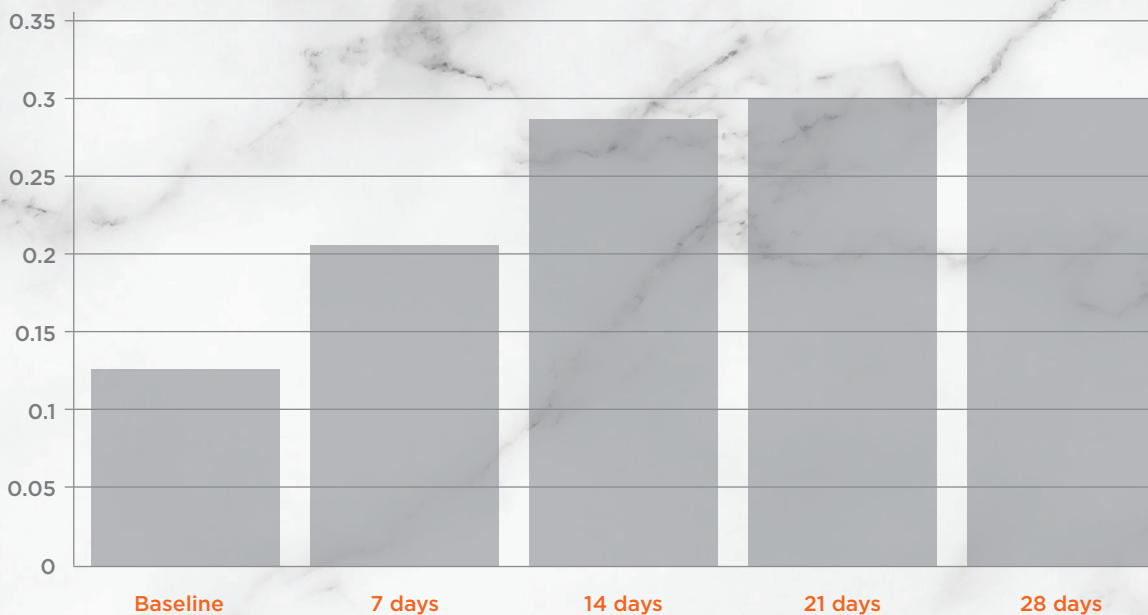
Individual daily sachets allow easy administration, accurate dosing and consistent quality of FOR-RECOVERY, every day.

## FEEDING DIRECTIONS:

FOR-RECOVERY delivers an essential feed element, Ubiquinol CoQ10, to complete the diet of horses with limited access to natural sources and that have a higher nutritional need for CoQ10 as a result of their competitive lifestyle.

FOR-RECOVERY should be used throughout the training and racing/competition period. Commence supplementation at least 21 days prior to when the need for Ubiquinol CoQ10 increases, to ensure there are peak plasma and skeletal muscle levels when required during training and racing/competition.

### COQ10 IN BLOOD PRE AND POST 1G/DAY<sup>3</sup>



2 sachets of FOR-RECOVERY (1g Ubiquinol CoQ10) should be fed daily for 10 days, then 1 sachet fed daily for maintenance

Ongoing daily feeding is required, as discontinuation causes progressive decline in Ubiquinol CoQ10 levels.

#### References:

1. Sinatra, et al (2014). Plasma Coenzyme Q10 and Tocopherols in Thoroughbred Race Horses: Effect of Coenzyme Q10 Supplementation and Exercise. *Journal of Equine Veterinary Science*. 34. 265-269. 10.1016/j.jevs.2013.06.001.
2. Kamei M, Fujita T, Kanbe T, Sasaki K, Oshiba K, Otani S, Matsui-Yuasa I, Morisawa S. The distribution and content of ubiquinone in foods. *Int J Vitam Nutr Res*. 1986;56:57-63.
3. 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
4. Comparison study of plasma coenzyme Q10 levels in healthy subjects supplemented with ubiquinol versus ubiquinone. P Langsjoen & A Langsjoen, 2014. *Clin Pharmacol Drug Dev*. Jan;3(1):13-7

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