










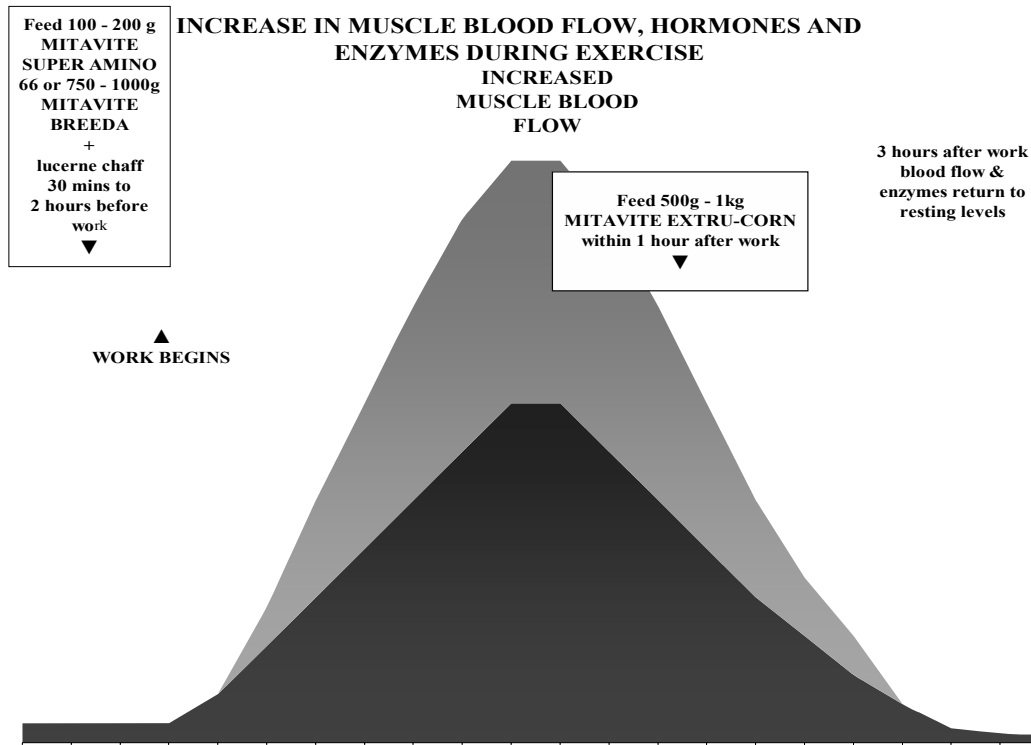
Mitavite®

STRATEGIC NUTRITION for RECOVERY using SUPER AMINO 66 + EXTRU-CORN

No matter how balanced the diet, exercise causes a disruption.....

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during exercise blood flow to the working muscles increases and the muscle is programmed to increase its nutrient uptake - if key nutrients are not immediately available, enzymes are released to breakdown other body tissues and 'donate' the amino acids, vitamins, minerals and anti-oxidants to the working muscles once these enzymes are triggered, tissue breakdown is irreversible - protein breakdown exceeds protein synthesis and tissue damage may persist for 3-5 days - longer in young horses.
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The thoroughbred racehorse needs key nutrients at higher levels as the muscles look for the nutritional support to adapt to work - by ensuring nutrients are available the nanosecond the muscle demands them, instead of a state of tissue breakdown we can transition the body to muscle building & the bone marrow to increase red cell production.
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..... some studies have concluded that racehorses don't need additional protein for elite performance – these studies overlook the significance of 'timing' and the amino acid profile of the protein. To appreciate how much the racehorse depends on the correct amino acids is to be aware of how dynamic the equine system is every second the bone marrow makes millions of red cells; every four days blood platelets and the lining of the gastrointestinal tract are replaced; every 10 days, most of the white blood cells are replaced - the number of new cells created in horses that are training and racing is huge.
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.... it is during recovery after work that protein will be working hardest - repairing rips and tears, increasing muscle fibre size, creating new blood capillaries.... the '**timing**' and **composition** of protein are the most important factors influencing muscle growth.
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STEP 1: MUSCLE BUILDING before work – SUPER AMINO 66 contains the combination of branched-chain and essential amino acids, vitamins, minerals and energy that has been shown to have a powerful, synergistic effect, stimulating the release of insulin (one of the most powerful anabolic hormones in the body) and increasing muscle building 3-fold over resting levels.
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STEP 2: MUSCLE REFUELLING after work – MITAVITE EXTRU-CORN Exercise drops muscle fuel by 20-40%. In the hours after exercise, muscle is primed to reload and refuel but the period of most rapid refuelling is the **first hour** after work.
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 Nutrient uptake immediately after exercise is 3 to 4-fold greater than at rest - feeding a highly digestible grain within 1 – 1 ½ hours after work allows rapid refuelling to be maintained for up to 8 hours & replenishes muscle fuel levels 2 ½ times more efficiently.

- 🐾 If the supplement is poorly digested or delayed several hours the rate of refuelling is reduced by up to 50%.
- 🐾 Rapid digestion of EXTRU-CORN maximises muscle glucose uptake. Although any grain can be fed to refuel, the effect is minor compared to that achieved with steam-extruded corn.



- 🐾 Standard diets and 2 meals a day fall a long way short of meeting the muscles requirements - clear cut and obvious differences occur between horses that receive strategic supplementation pre- and post-work and those on standard feeding programs.

100 – 200g of MITAVITE SUPER AMINO 66: ½ - 2 hours before work

- ▶ ensures key nutrients are available the instant the muscle demands them
- ▶ takes advantage of the increased shunting of nutrients into muscle cells that occurs during exercise.

500 – 1000 g of MITAVITE EXTRU-CORN: 1 – 2 hours after work

- ▶ increases glucose availability for refuelling
- ▶ takes advantage of the increased glucose uptake that occurs after exercise.

For more information on MITAVITE feeds or feeding horses please contact us on 1800 025487 or www.mitavite.com.au