

SPECTRA EQUINE NEWS

PROFESSIONAL EDITION

Volume 5

THE LONG ROAD TO RUTIN FOR CAPILLARY SUPPORT IN HORSES

History of Rutin

In 1936, a Hungarian biochemist by the name of A. Szent-Gyorgyi discovered a substance that would restore weakened capillaries. He called the substance vitamin P and noted that the substance enhanced the function of vitamin C, improving absorption and protecting it against oxidation. Clinical studies showed that the material improved capillary fragility, but the action was due to an unknown substance within the crude mixture. After several years, U.S. government researcher, James F. Couch, reasoned that **Rutin**, a flavonol with a structure similar to quercitrin, should possess a vitamin P action, and that it could be the long-sought factor.

Four years of clinical testing substantiated that conclusion and **Rutin** became an established remedy for weakened capillaries.

Rutin finally hit the market in 1947 followed by various clinical investigations as to its use. One use was in patients suffering from high blood pressure, often a cause of rupture in weak capillaries. In 83% of patients treated with **Rutin**, no further rupture occurred. In another study, 36% of hypertension cases noted improvement. In addition, patients with unexplained bleeding from the lungs (not due to tuberculosis) had been relieved by **Rutin**.

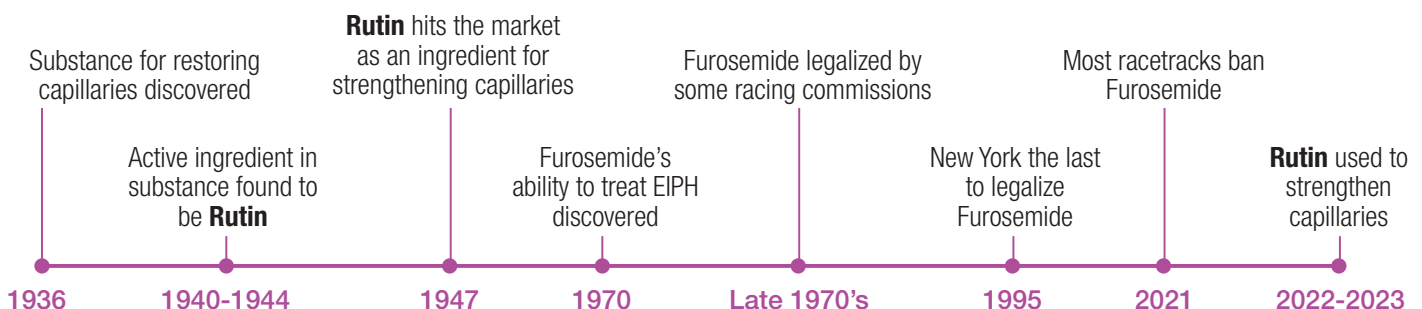
What is EIPH?

Exercise induced pulmonary hemorrhage (EIPH) is the result of high pressures on pulmonary capillary walls caused by large cardiac output associated with strenuous exercise for short periods of time. EIPH can be diagnosed by an endoscopic observation of blood in the airways 30 to 90 minutes after exercise. Modern treatment for EIPH in horses has consisted of the administration of Furosemide (aka Lasix®) four hours prior to exercise. However, Furosemide has been banned from use in most racing jurisdictions, and as such, there has been demand among trainers for an alternative to address this problem. Although it cannot be claimed to be a solution to EIPH, with its long standing and clinically studied use in restoring the strength of capillary walls when they become weakened, the flavonoid **Rutin** provides a natural means of protection for race horses and other horses under the stress of intense work.



A Long Time Coming

87 years after its discovery, the flavonoid **Rutin** has found a place in protecting and strengthening capillaries in performance horses.



The Effect of Flavonoids

Flavonoids are important to blood vessel health. They regulate capillary permeability, thereby stopping fluid, protein and blood cells from seeping out, while still allowing oxygen, carbon dioxide and other nutrients to pass through. Flavonoids can

also protect against high blood pressure and improve circulation by relaxing the smooth muscle of the cardiovascular system. Flavonoids have both antioxidant and anti-inflammatory effects.

Benefits of Rutin

- Restores weakened capillaries
- Overall blood vessel health
- Improves circulation
- Helps prevent extra high blood pressure
- Antioxidant
- Anti-Inflammatory
- Clinically studied
- Non-GMO
- Plant derived
- HISA Compliant

DURUTIN[®]

EQUINE CAPILLARY SUPPORT – WITH RUTIN

WITH
EASY-FILL
Syringe Adapter Bottle

DURUTIN, a nutraceutical by Spectra Animal Health, is formulated with natural human food grade Rutin, Rose Hips (source of Vitamin C & various flavonoids), Vitamin B6 and Folic Acid as well as various herbal extracts, including Garlic, known for its vasorelaxant effect (relaxes smooth muscle cells within walls). These key nutrients and herbs are combined in an apple cider vinegar base.

- Rich in bioflavonoids, including Rutin and Rose Hips
- Support for weakened capillaries and overall blood vessel health
- Contains ingredients to improve circulation
- Antioxidant and anti-inflammatory
- 100% human food grade ingredients
- Contains clinically studied ingredients
- USEF, FEI & HISA Compliant

Directions:

This product will settle. Shake well before using.

Feed 2 oz. (60ml) daily by mouth for the first 30 days. A syringe is included.

For race horses and other horses under the stress of intense work, continue at 2oz. (60ml) daily by mouth.

Maintenance: Feed 1oz. (30ml) daily by mouth.

Use product at least three weeks prior to performance. It is recommended that no bran be fed and that no fast work be carried out for the first three weeks.



How Supplied

Spectra Code	Size	# Days Supply
40326	32 oz. (0.945L)	16 to 32



Learn more at VetAffiliate.com/Durutin

Please call Spectra at 1-800-527-0375 for more information.



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