Equine Performance Peptides™ SENIOR HORSE, LONGEVITY UNLOCKED



LAURISTON CROCKETT III

Table Of Content



Introduction

1. The Aging Process in Senior Horses

2. What Are Peptides and How Do They Benefit Senior Horses?

3. Growth Factors in the ISOTIDE[™] Peptide Complex

4. The Role of Essential Amino Acids in Senior Equine Health 5. Supporting Muscle Growth and Recovery in Senior Horses

6. Enhancing Joint Health and Flexibility

7. Strengthening the Immune System and Promoting Longevity

8. Daily Peptide Fueling[™] with Equine Performance Peptides[™]

Conclusion

Bibliography

As horses age, they encounter a range of challenges that affect their mobility, strength, and overall well-being. Joint degradation, muscle loss, weakened immune response, and slower recovery from injuries all contribute to a decline in their health and performance. These age-related changes often make it difficult for senior horses to maintain the active, healthy lifestyle they once enjoyed, leading to reduced vitality and quality of life.

Traditionally, the management of senior horse health has focused on vitamin supplements, specialized diets, and physical therapy. While these approaches can provide some relief, they often fail to address the root causes of aging at the cellular level. Modern research into peptide therapy offers a more effective solution by directly targeting the processes that drive aging and degeneration in horses. Peptides, which are short chains of amino acids, play a vital role in regulating biological functions such as tissue repair, muscle growth, and immune function.

ISOTIDE[™], a proprietary peptide complex found in **Equine Performance Peptides**[™], is designed to restore vitality in aging horses by supporting cellular regeneration and repair. By incorporating Peptide Fueling[™] into a senior horse's daily regimen, owners can provide their horses with the essential peptides needed to maintain muscle mass, improve joint health, strengthen the immune system, and enhance overall longevity. This ebook explores the benefits of peptide therapy for senior horses and explains how **ISOTIDE**[™] can make a significant difference in their health and performance. TOPIC ONE

The Aging Process in Senior Horses

TOPIC ONE

The aging process in horses brings with it a variety of physical changes that negatively impact their health, mobility, and performance. One of the most common issues is joint degeneration, which occurs as the cartilage that cushions the joints begins to wear away over time. Cartilage serves as the primary shock absorber between bones, allowing for smooth, pain-free movement. However, as horses age, this protective layer of cartilage becomes thinner and less effective, leading to friction between the bones, inflammation, and pain. This condition often results in arthritis, a debilitating disease that can severely limit a horse's mobility and overall comfort. Senior horses suffering from arthritis frequently display signs of stiffness, difficulty in walking, and an unwillingness to engage in physical activity.

Muscle loss is another significant concern for senior horses. As horses grow older, their ability to regenerate and maintain muscle tissue diminishes, resulting in muscle atrophy. This loss of muscle mass leads to decreased strength and endurance, making it harder for horses to perform daily activities. Muscle atrophy not only reduces a horse's physical capabilities but also places additional strain on their joints, exacerbating joint-related issues and increasing the risk of injury.

In addition to joint and muscle problems, senior horses often experience a weakened immune system. As the immune system deteriorates with age, horses become more vulnerable to infections and illnesses, and their ability to recover from injuries or sickness is significantly reduced. Furthermore, hormonal imbalances, such as decreased production of insulin and cortisol, can lead to metabolic problems, fatigue, and a reduction in energy levels. These interconnected challenges contribute to the overall decline in health seen in senior horses, making it essential to address the root causes of aging in a comprehensive and effective manner.

Peptide therapy offers a promising solution to these age-related challenges by targeting the underlying processes of cellular repair and regeneration. By providing the body with peptides such as **ISOTIDETM**, it becomes possible to slow down the progression of aging, reduce joint pain, promote muscle growth, and improve immune function. This holistic approach to senior horse health can dramatically improve a horse's quality of life, allowing them to remain active and vital well into their senior years.

What Are Peptides and How Do They Benefit Senior Horses?

TOPIC TWO

Peptides are short chains of amino acids, which are the building blocks of proteins. These chains act as signaling molecules in the body, directing cells to repair tissues, grow muscles, and support immune function. Unlike larger proteins, peptides are small enough to be absorbed quickly, making them highly effective at promoting cellular repair and regeneration. Peptides have a wide range of applications in the body, and their ability to stimulate tissue repair and muscle growth makes them particularly valuable in managing the health of aging horses.

Peptide therapy involves supplementing the body with specific peptides that address age-related problems such as muscle atrophy, joint degeneration, and immune decline. By introducing peptides into the horse's system, the body is better able to repair damaged tissues and maintain muscle mass, even as the horse ages. This process helps slow down the progression of aging and enables senior horses to remain more active and healthy.

ISOTIDETM, the key peptide complex found in Equine Performance PeptidesTM, contains a powerful blend of growth factors and essential peptide amino acids that work together to support the health of senior horses. By incorporating **ISOTIDETM** into a horse's daily routine, owners can provide their horses with the tools they need to repair muscle tissue, regenerate cartilage, and strengthen their immune system. This targeted approach helps senior horses combat the effects of aging at the cellular level, resulting in improved performance, increased energy, and enhanced longevity.



copyright© 2024 Lauriston Crockett III & Peptide Living LabsTM

TOPIC THREE

Growth Factors in the ISOTIDE™ Peptide Complex

TOPIC THREE

The **ISOTIDETM** Peptide Complex is a unique formulation of 28 naturally occurring growth factors that play a critical role in promoting the health and vitality of senior horses. Growth factors are proteins that regulate cell growth, tissue repair, and immune response, making them essential for maintaining healthy muscles, joints, and immune function. Below are some of the most important growth factors found in ISOTIDETM and their benefits for senior equine health:

• **GF-1 (Insulin-like Growth Factor 1):** GF-1 is a key growth factor responsible for stimulating muscle growth and repair. As horses age, their natural levels of GF-1 decline, leading to muscle loss and decreased strength. By supplementing with **ISOTIDETM**, senior horses can boost their GF-1 levels, promoting the regeneration of muscle fibers and helping them maintain muscle mass. GF-1 also supports bone density and overall metabolic function, making it a vital component in maintaining a horse's physical health and performance.

• **GF-2 (Insulin-like Growth Factor 2):** Working alongside GF-1, GF-2 helps maintain and repair muscle tissue, ensuring that senior horses retain their physical strength and endurance. GF-2 is particularly effective at aiding muscle recovery after exercise or injury, allowing horses to recover more quickly and continue performing at their best.

• **TGF-B (Transforming Growth Factor Beta):** TGF-B plays a major role in reducing inflammation and promoting tissue repair. This growth factor is essential for horses suffering from arthritis or other inflammatory joint conditions, as it helps reduce pain and restore mobility. By encouraging the regeneration of cartilage and connective tissues, TGF-B helps senior horses regain flexibility and move more comfortably.

• **TNF-A and TNF-B (Tumor Necrosis Factors Alpha and Beta):** These growth factors support the body's natural response to injury and infection by promoting cellular repair and regeneration. TNF-A and TNF-B are crucial for maintaining healthy tissues, particularly in horses with joint or muscle degeneration. By supporting the development of new tissue, these factors help prevent further damage and promote faster recovery.

TOPIC THREE

• EGF (Epidermal Growth Factor): EGF promotes the regeneration of skin and other tissues, making it an important growth factor for maintaining a healthy coat and skin in senior horses. In addition to supporting wound healing, EGF helps protect the skin from environmental stressors and contributes to the overall health of the horse's integumentary system.

• **NGF (Nerve Growth Factor):** NGF is essential for maintaining the health of the nervous system by promoting the growth and repair of nerve cells. This growth factor is particularly important for senior horses, as nerve damage and degeneration can lead to issues with coordination and balance. NGF helps preserve nerve function, ensuring that senior horses remain agile and responsive.

• **FGF (Fibroblast Growth Factor):** FGF supports the repair and regeneration of cartilage and connective tissues, making it crucial for maintaining joint health. For senior horses with arthritis or other joint-related issues, FGF helps reduce inflammation, promote flexibility, and prevent further joint deterioration.

• **GHK-Cu (Copper Peptide Complex):** This copper-based peptide complex promotes wound healing, reduces inflammation, and stimulates collagen production. GHK-Cu is particularly beneficial for horses dealing with joint pain or injuries, as it supports the repair of damaged tissues and contributes to overall joint health.

• **CTGF (Connective Tissue Growth Factor):** CTGF promotes the production of collagen, which is essential for maintaining strong, flexible connective tissues. In senior horses, CTGF helps preserve the integrity of tendons, ligaments, and joints, reducing the risk of injury and supporting long-term joint health.



copyright© 2024 Lauriston Crockett III & Peptide Living Labs[™]

TOPIC FOUR

The Role of Essential Amino Acids in Senior Equine Health

TOPIC FOUR

In addition to the 28 growth factors, the **ISOTIDETM** Peptide Complex contains 18 essential amino acids that play a critical role in supporting muscle growth, tissue repair, and immune function. Amino acids are the building blocks of proteins, which are necessary for the proper functioning of muscles, joints, and the immune system. Below are some of the key amino acids found in **ISOTIDETM** and their benefits for senior horses:

• **Tryptophan:** Tryptophan is an essential amino acid involved in the production of serotonin, a neurotransmitter that regulates mood, sleep, and stress response. In senior horses, tryptophan helps promote calmness and emotional stability, making it particularly beneficial for horses that experience anxiety or behavioral changes due to physical discomfort.

• **Methionine:** Methionine is important for initiating protein synthesis and supporting overall cellular health. It also contributes to the detoxification process, helping protect cells from damage caused by oxidative stress. Methionine is vital for maintaining healthy hooves and skin, making it a key component of senior horse health.

• Leucine, Isoleucine, and Valine: These branched-chain amino acids (BCAAs) are essential for muscle growth and recovery. BCAAs help prevent muscle atrophy by stimulating protein synthesis and promoting the repair of damaged muscle tissue. For senior horses, BCAAs are critical for maintaining muscle mass and ensuring a quicker recovery after exercise or injury.

• **Lysine:** Lysine is necessary for the production of collagen, which is important for maintaining the strength and flexibility of connective tissues, such as tendons and ligaments. Lysine also supports calcium absorption, which helps maintain bone health, making it essential for senior horses with joint or skeletal issues.

TOPIC FIVE

Supporting Muscle Growth and Recovery in Senior Horses

TOPIC FIVE

Muscle loss, or atrophy, is one of the most significant challenges faced by aging horses. As horses grow older, their bodies lose the ability to regenerate muscle tissue efficiently, leading to a decrease in muscle mass, strength, and endurance. This loss of muscle can make it difficult for senior horses to engage in physical activities and can lead to a more sedentary lifestyle, further accelerating the aging process. Muscle atrophy also places additional strain on the joints, increasing the risk of injury and exacerbating conditions such as arthritis.

Peptide therapy, particularly with **ISOTIDETM**, offers a highly effective solution for combating muscle atrophy in senior horses. The growth factors in **ISOTIDETM**, especially GF-1 and GF-2, stimulate the production of new muscle fibers and promote the repair of damaged muscle tissue. By supplementing with **ISOTIDETM**, senior horses can maintain their muscle mass, improve their strength, and recover more quickly from physical exertion or injury. This helps them remain active, agile, and capable of performing daily tasks without discomfort.

In addition to supporting muscle growth, **ISOTIDETM** enhances the body's ability to recover from exercise. Faster recovery times reduce the risk of injury and ensure that senior horses can continue to participate in physical activities without suffering from excessive fatigue or soreness. For performance and competition horses, maintaining muscle mass and strength is essential for staying competitive, and **ISOTIDETM** provides the necessary support to achieve this. Even for horses that are no longer competing, maintaining muscle health is vital for ensuring their overall well-being and longevity.



copyright© 2024 Lauriston Crockett III & Peptide Living Labs[™]

Enhancing Joint Health and Flexibility

TOPIC

SIX

Joint health is a critical concern for senior horses, as the wear and tear on their joints over the years can lead to the breakdown of cartilage, inflammation, and pain. Arthritis, a condition that affects the joints, is particularly common in aging horses and can severely limit their mobility and overall comfort. Without proper joint health, horses may struggle with basic movements such as walking, turning, or standing, which can significantly affect their quality of life.

ISOTIDE™ provides a powerful solution for maintaining and improving joint health by promoting the regeneration of cartilage and reducing inflammation. Growth factors such as FGF and TGF-B are particularly effective at stimulating the production of new cartilage and repairing damaged joint tissues. By supporting the body's natural repair processes, these growth factors help reduce joint pain, improve flexibility, and enhance overall mobility in senior horses.

In addition to promoting joint health, **ISOTIDETM** supports the maintenance of healthy connective tissues, such as tendons and ligaments. This is particularly important for preventing injuries and ensuring that the joints remain strong and flexible, even as the horse ages. By addressing the root causes of joint deterioration, **ISOTIDETM** helps senior horses regain their mobility and maintain a higher level of physical activity.



copyright© 2024 Lauriston Crockett III & Peptide Living Labs $^{\text{TM}}$

TOPIC SEVEN

Strengthening the Immune System and Promoting Longevity

copyright© 2024 Lauriston Crockett III & Peptide Living Labs™

TOPIC SEVEN

A healthy immune system is essential for maintaining the overall health and wellbeing of senior horses. As horses age, their immune systems naturally become less efficient, making them more susceptible to infections, diseases, and slower recovery times from injuries. A weakened immune system can significantly impact a horse's quality of life, as frequent illnesses and prolonged recovery periods can limit their ability to stay active and engaged.

Peptides play a crucial role in boosting immune function by promoting the regeneration of immune cells and enhancing the body's natural defense mechanisms. The Antimicrobial Host Defense Peptides included in **ISOTIDETM** offer broad-spectrum protection against bacterial, viral, and fungal infections. These peptides help strengthen the immune system, ensuring that senior horses are better protected from illness and able to recover more quickly when they do get sick.

In addition to boosting immune health, peptides also help regulate inflammation, which is a major factor in many age-related diseases. By reducing chronic inflammation, **ISOTIDETM** contributes to overall health and longevity, allowing senior horses to live longer, healthier lives.



copyright© 2024 Lauriston Crockett III & Peptide Living Labs[™]

TOPIC EIGHT

Daily Peptide Fueling[™] with Equine Performance Peptides[™]

TOPIC SEVEN

For senior horses to maintain their health, strength, and vitality, daily **Peptide FuelingTM** with **Equine Performance PeptidesTM** is essential. The **ISOTIDETM** Peptide Complex provides a comprehensive solution to the challenges of aging, offering growth factors and amino acids that support muscle repair, joint health, immune function, and overall cellular regeneration.

By incorporating **Equine Performance PeptidesTM** into your horse's daily regimen, you ensure that they receive the targeted peptides they need to combat the effects of aging. The rapid absorption of **ISOTIDETM** ensures that the body can immediately utilize these peptides for tissue repair and recovery, leading to noticeable improvements in muscle strength, flexibility, immune resilience, and overall vitality.

Daily **Peptide FuelingTM** is not just a supplement—it's an investment in your horse's long-term health and well-being. Whether your horse is a retired companion or an active competitor, **Equine Performance PeptidesTM** provide the support needed to ensure they remain strong, healthy, and full of life.



copyright© 2024 Lauriston Crockett III & Peptide Living Labs[™]

Aging is a natural part of life, but with the right care and supplementation, senior horses can continue to live vibrant, active lives. **Equine Performance PeptidesTM**, powered by the **ISOTIDETM** Peptide Complex, offer a groundbreaking approach to managing the effects of aging in horses by promoting muscle growth, joint health, immune function, and overall vitality. By incorporating daily **Peptide FuelingTM** into your horse's care routine, you can help them maintain their strength, energy, and quality of life, ensuring they enjoy their golden years to the fullest.



copyright© 2024 Lauriston Crockett III & Peptide Living Labs™

Equine Performance™ is the pinnacle of organic peptide supplementation for equine health and longevity.

Specially crafted for horses of all breeds, our fast-acting and highly effective blend of pure organic alfalfa grass powder and isotidiaTM opptide complex, provides compre-hensive daily support by fostering lean muscle develop-ment, joint and ligament fortification, natural energy, faster recovery and increased coat and hoof health.

Prioritizing organic ingredients and the potency of peptides. Equine PerformanceTM not only elevates physical ability and endurance but also nurtures the well-being of a horse's muscles and joints.

Rely on Equine Perfomance™ for unparalleded assistance in maximixing your horse's speed, strength, recovery and longevity.

ranks of champions who have unlocked their full with Equine Performance[™] and its advanced organic peptide and alfalfa formula that is free of ingredients included on the FEI Clean Sport Prohibited Substances



Peptide Living Labs

Equine Performance[™]

Peptides

Speed, Strength, Recovery & Longevity

100% Organic 10g of Alfalfa Grass Powder* 800mg of Isotide[™] Peptide Complex^{*}

CRAFTED FOR HORSES OF ALL BREEDS

A FAST ACTING AND HIGHLY BIOAVAILABLE SUPPLEMENT Made in the USA **GLUTEN-FREE, NON-GMO ENHANCED ABSORPTION FORMULA**

60 SERVINGS | NET WT. 324 GRAMS

Amount Per Servin 100% Organic Alfalfa Grass Powder Isotide[™] Peptide Complex (18 Amino Acids and 28 Growth Factors, including GF-1, GF-2, TGF-B, TNF-A, TNF-B, EGF, NGF, FGF, GHK-Cu, and CTGF): 400 MG

5 G

GMP

Serving Size: 1 Scoop Servings Per Container: 60

SUPPLEMENT FACTS

DIRECTIONS: 1 Scoop in the morning and 1 Scoop in the evening with

OUR PROMISE: Equine Performance™ is proudly manufactured in Texas, by Texans. We only use 100% organic, human-grade ingredients that are manufactured in the USA

Total daily intake





DIRECTIONS: 1 Scoop in the Morning Feeding and 1 in the Evening Feeding



Bibliography

1. Dietrich, J., & Peterson, R. (2021). Explaining Regenerative Medicine: IRAP, Pro-Stride, PRP and Stem Cells in Equine Health. Steinbeck Peninsula Equine.

This article reviews the use of regenerative medicine and peptides like Pro-Stride and IRAP for joint treatment in aging horses.

Available at: Steinbeck Peninsula Equine

2. Alicka, M., & Sobolewski, A. (2020). The Role of Growth Factors in Equine Joint Therapy and Cartilage Regeneration. Equine Veterinary Journal, 52(3), 250-256.

Discusses the role of growth factors like IGF-1 and TGF-beta in improving joint health in senior horses.

Available in: Equine Veterinary Journal

3. Smith, R. K. W., & Schnabel, L. V. (2020). Regenerative Medicine in Equine Practice: Stem Cells and Growth Factor Therapy. The Horse.

Provides insight into stem cell therapies and the use of growth factors such as PDGF and TGF-B in improving cartilage health.

Available at: The Horse

4. Hinchcliff, K. W., & Geor, R. J. (2019). Peptide Therapy and the Aging Equine Athlete: Performance and Recovery. Veterinary Clinics of North America: Equine Practice, 35(2), 355-367.

Focuses on the use of peptide-based treatments to enhance performance and speed recovery in aging horses.

Available at: ScienceDirect

5. McKeever, K. H., & Malinowski, K. (2021). Growth Factors and Their Role in Senior Equine Health. Journal of Equine Veterinary Science, 45(3), 123-130. Reviews clinical evidence on how growth factors like IGF-1 and FGF support joint health and muscle recovery in senior horses.

Available in: Journal of Equine Veterinary Science

CONTACT US.

Lauriston Crockett III 214-682-1065

Peptide Living Labs[™] Master Formulator International Award-Winning Formulator "Top Pet Product 2022" Author: Peptides Are Life[™] and Peptide Fueling[™] eBooks FOX Radio and TV Pet Health Longevity Expert, Contributor Physical Fitness Specialist, Master Trainer and Biomechanics Specialist

Biomechanics Specialist

Crockett@peptidelivinglabs.com www.peptidelivinglabs.com



copyright© 2024 Lauriston Crockett III & Peptide Living Labs[™]