D-PHENYLALANINE
for PAIN ENDURANCE

D-Phenylalanine helps increase endorphin production, which is associated with pain endurance.

Each capsule contains 500 mg. of pure D-Phenylalanine.

DIRECTIONS:
• For chronic pain, the initial dosage recommended is 3 capsules, T.L.D., on an empty stomach for 7-10 days, then reduce to 2 capsules T.L.D., or as needed. For acupuncture and dental procedures, take 2 grams (4 capsules) 1 hour prior to appointment.
• D-Phenylalanine may also be used along with other pain modalities to increase beneficial results.

RECOMMENDED TO ENHANCE STRUCTURE & FUNCTION RELATING TO NUTRITIONAL NEEDS AND DEFICIENCIES PERTAINING TO:
• Elevating endorphin levels associated with pain endurance.
• Chronic and persistent pain.
• Providing relief for discomfort from problems such as Arthritis, and other back and joint pains.
• Enhancing the effects and duration of acupuncture treatment.

WHAT IS D-PHENYLALANINE?
D-Phenylalanine is the Dextrorotatory form of the amino acid, Phenylalanine. The L-forms (Levorotatory) of amino acids are ones that are bioavailable and are for protein synthesis and regulatory functions. They are like mirror images of one another, however, D-Phenylalanine is not absorbed into the body, but acts as an inhibiting agent to the enzymes that are responsible for the breakdown of endorphins, which control pain perception.

WHAT ARE ENDORPHINS?
Endorphins (and enkephalins) are naturally occurring opiate-like peptides, which control pain perception and produce an analgesic effect. Their effects are only of a short duration because of metabolic enzymes, especially Carboxypeptidase A, which inhibit increased endorphin production. D-Phenylalanine prohibits these enzymes, allowing increased endorphin production, and prolonged and intensified analgesic affects.

HOW DOES D-PHENYLALANINE EFFECT PAIN?
Low levels of endorphins have been noted in those suffering from chronic pain, and supplementation with D-Phenylalanine helped to increase these levels. By prohibiting Carboxypeptidase A from preventing endorphin production, the body can continue to increase its own natural pain tolerance mechanism. In studies with chronic pain patients, the pain threshold has been enhanced and prolonged. This has been effected with various chronic pain conditions, including back pain.

D-PHENYLALANINE AND ACUPUNCTURE
Pre-administration of D-Phenylalanine enhances the effects of acupuncture on back and other pain. Up to 2 grams 1 hour prior to acupuncture treatment may result in more pain relief and for longer periods of time.

DENTAL PAIN
Two grams of D-Phenylalanine has been given 1 hour prior to dental extractions, increasing the pain threshold and for a prolonged period of time.
WHY NOT DLPA (A COMBINATION OF BOTH D-PHENYLALANINE AND L-PHENYLALANINE)?

- D-PHENYLALANINE is the form of Phenylalanine that effects endorphin production. L-Phenylalanine has other functions in the body. Concentrations of the pure D-Phenylalanine will assist in pain tolerance to those needing this function. By combining the two, the concentration of the effective form) of D-Phenylalanine would be less, and therefore more would be required to achieve results. The Third World Congress on Pain recommended D-Phenylalanine, and numerous medical studies have confirmed this recommendation. Some suggest that L-Phenylalanine will stimulate catecholamine production for those whose pain causes depression. Since L-Phenylalanine must convert to L-Tyrosine in the body in order to raise neurotransmitter levels, it would be best to take FTH L-Tyrosine Plus for this purpose.
- In addition, L-PHENYLALANINE is not recommended for those with elevated blood pressure levels, diabetes or pregnant women, and would not be the best choice for mood enhancement, or pain relief. D-Phenylalanine is the recommended form of Phenylalanine for chronic pain control.

WHAT ARE THE BENEFITS OF FTH D-PHENYLALANINE?

- The highest quality D-Phenylalanine is used.
- It is concentrated pure D-Phenylalanine, which assists in enabling increased endorphin production
- D-PHENYLALANINE is a safe alternative to opiates for chronic pain management, and will not upset the stomach as many long term "over-the-counter" drugs, such as aspirin and ibuprofen.
- It may, however, be used to increase the effects of drugs, such as aspirin, so that a lower dosage of a drug would be necessary to achieve relief.
- No adverse side effects have been noted with D-Phenylalanine.

REFERENCES

- Budd, Keith, "Use of D-Phenylalanine, an Enkephalinase Inhibitor, in the Treatment of Intractable Pain, Adv. In Pain Research and Therapy

*These statements have not been evaluated by the Food and Drug Administration. This information is not intended to diagnose, treat, cure or prevent any disease.