PROTOCOL FOR LIFE BALANCE®

Dietary Supplement Information
for Physicians with Naturokinetics®
PRODUCT CODE: P3374
CATEGORY: WOMEN'S HEALTH

Fem Libido™

TECHNICAL SUMMARY

Fem Libido™ features Libifem®, a proprietary fenugreek extract that works naturally with a woman's body to support and maintain a healthy quality of life.* Fenugreek (*Trigonella foenum-graecum)* is a plant from the Fabaceae family typically used as a food, and by traditional Ayurvedic and Chinese herbalists.

Biochemistry: Libifem® is a standardized alcoholic extract of the plant's seeds. It is a dry concentrate, 33:1 equivalent to 9.9 g dry herb, standardized to a minimum 50% saponin glycosides (furostanol and steroidal saponins) named Fenusides™. Saponins are the most abundant class of phytoconstituents present in fenugreek. Structurally saponins have a steroidal skeleton or a triterpenoid ring which is glycosylated with several sugar units. The majority of saponins isolated from fenugreek belong to the furostanol class, such as protodioscin. (Figure 1)

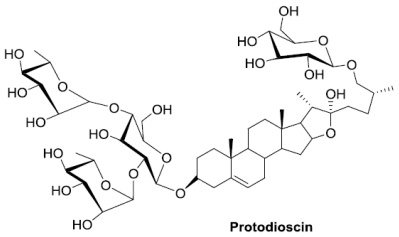

Figure 1: Protodioscin is an example of saponin glycoside.

Allergen and Additive Disclosure: Not manufactured with yeast, wheat, gluten, soy, corn, milk, egg, fish, shellfish or tree nut ingredients. Produced in a GMP facility that processes other ingredients containing these allergens. This product is tested to be free of adulterants such as PDE5 inhibitors, enhancement drugs, estradiol/estrogen and related steroids (HPLC-DAD-LC/MS screening).

Delivery Form: Vegetable capsules.

ROLE AS NUTRIENT/FUNCTION

The postulated mechanism of action of Libifem® is that it supports the activity of aromatase enzyme, which converts naturally occurring male steroid to female steroid compounds.* Some fenugreek extracts have also shown the ability to bind normal female steroid receptors.*

NATUROKINETICS®

Liberation: Dissolution data is not available. Fem Libido™ capsules pass standard disintegration test in water (< 60 min).

Absorption: Although no human pharmacokinetic data is available, fenugreek extract's absorption, metabolism, distribution and elimination have been studied in animal models.

Using this model, it was possible to determine that after a single oral administration of 200 mg/kg of a hydroalcoholic extract of fenugreek seeds, the C_{max} was 3.03 mcg/mL, the T_{max} was 72 hours and the half-life was 40.10 hours. Furastonol glycoside was detectable in the plasma as early as 30 minutes after ingestion.

Metabolism: The metabolic route of fenugreek's active compounds is still under investigation; however, laboratory data suggest that steroid saponins from fenugreek are partially hydrolyzed in the digestive tract to dioscin and diosgenin.

Distribution: 72 hours after a single oral administration of 200 mg/kg of a standardized hydroalcoholic extract of fenugreek seeds in animal models, furostanol glycoside was mainly found in the lungs, followed by the brain, indicating that furostanol glycoside is able to cross the blood-brain barrier.

Elimination: In the same study, it was demonstrated that furostanol glycoside is eliminated intact (unmetabolized) in both urine and feces.

Supplement Facts

Serving Size 1 Veg Capsule

Amount Per Serving	
Fenugreek Extract (Libifem®) (*Trigonella foenum-graecum*) (Seed) (min. 50% Fenuside™)	300 mg*
Maca (*Lepidium meyenii*) (Root)	125 mg*

* Daily Value not established.

Other ingredients: Cellulose (capsule), Stearic Acid (vegetable source) and Silica.

- **Female Sexual Health***
- **Promotes Drive for Intimacy***

SUGGESTED USAGE: Take 1 capsule twice daily, or as directed by your healthcare practitioner.

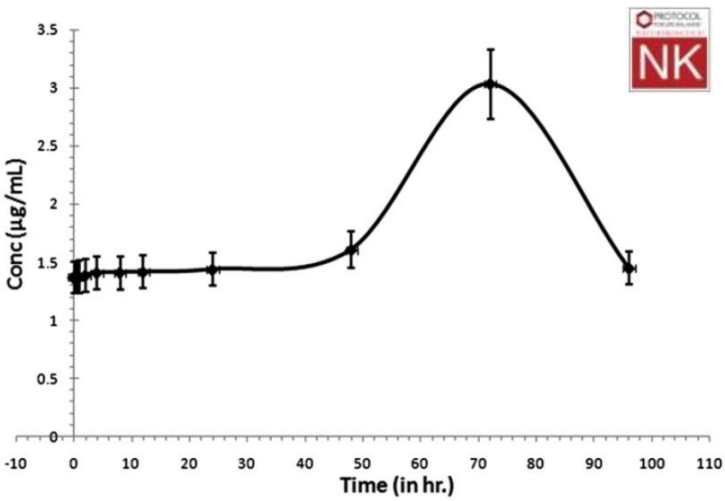

Figure 2: Mean plasma concentration–time profiles of furostanol glycoside in rats after receiving a single oral dose at a concentration of 200 mg/kg.

*These statements have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

CLINICAL VALIDATION

- In a double-blind, randomized, placebo-controlled study in 80 middle-aged women receiving 600 mg/d Libifem® for two months, there was a significant positive impact on endocrine function support, as well as on sexual desire and arousal compared with the placebo group.

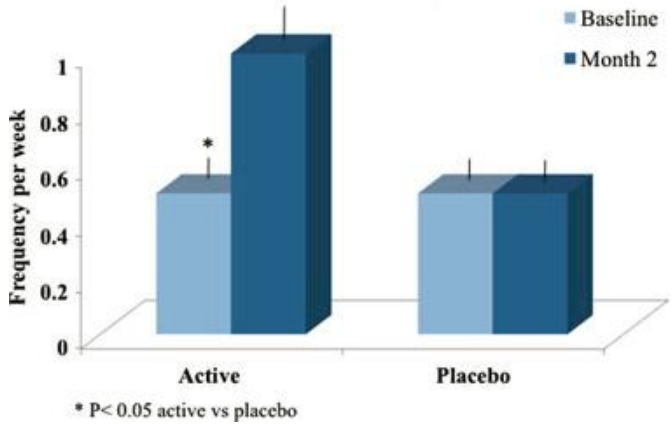

Figure 3. Frequency of sexual activity at baseline and month 2 in the Libifem® (Active) group and placebo group. * Δ sexual frequency, p<0.05 active versus placebo.

- In a double-blind, randomized, placebo-controlled study in 104 women experiencing menopausal symptoms receiving 600 mg/d Libifem® for 12 weeks, there was a significant positive impact on habitual menopausal symptoms, including hot flashes and night sweats. Women in the study also reported a positive impact on sexual life which was statistically significant versus placebo.

SAFETY INFORMATION

Tolerability: Fenugreek is generally well tolerated. Some individuals, especially those with known sensitivities to peanuts and chickpeas, may be at risk of developing allergic reactions to fenugreek seeds.

Contraindications: While fenugreek is generally regarded as safe, fenugreek supplementation is not recommended for pregnant or lactating women based on limited reproductive and developmental safety data.

INTERACTIONS

Drug Interactions: Fenugreek might interact with anti-diabetes medications, although no adverse cases were identified in the literature. Individuals taking anti-diabetic medications should consult a physician prior to taking fenugreek supplements.

Supplement Interactions: Fenugreek might have additive effects on glucose levels when used with supplements known to interact with glucose metabolism.

Interaction with Lab Tests: Fenugreek may affect results of serum glucose tests.

STORAGE

Store in a cool, dry, dark environment in original sealed container. Desiccant recommended. Protect from air, light and moisture.