OREXIS

Feed supplement in form of syrup for enhancing appetite and digestion for cats and dogs

OREXIS (Ό-RE-XIS)
The name is inspired by the Greek word «ὄρεξις», which means «longing, appetite»
Liddell HG, Scott R. An Intermediate Greek-English Lexicon. Oxford: Clarendon Press; 1889.

A herb-infused syrup, based on the traditional herbal therapies of the Mediterranean region, intended to aid in restoring normal feeding patterns in healthy cats and dogs. In some cases, appetite can be shortly perturbed in otherwise healthy animals due to a change in their living conditions, a trip, a stay at the veterinary clinic, etc. In these cases, boosting the salivary and digestive fluids secretion can enhance appetite, restore eating habits and promote digestive comfort.

Gentian extract

Gentian tincture has been reported to elevates gastric secretion by up to 30% following the administration in dogs[1]. Work published in 1915 by Moorhead[2] revealed that a tincture of the herb gentian (*Gentiana lutea*) given by mouth or directly into the stomach of cachectic dogs caused a marked increase in appetite. Only when gentian was given by mouth (i.e., tasted) did it cause a marked increase in gastric secretion of acid and pepsin content, and this effect occurred only after normal feeding. These effects provide rational explanations for the traditional use of bitters for liver and digestive complaints, poor appetite, debility, and a wide range of other conditions. In horses it was always used as a powder, not a tincture, and was put into all formulas used for stimulating appetite[3]. Although this herb was found in many of the old formulas, it is not seen in many of the modern ones. It is an excellent tonic, especially for the digestive tract and for poor eaters.

Peppermint extract

Both ethnobotanical and pharmacological data are consistent with the traditional use of the plant *Mentha piperita* for stomach disorders[1]. This herb has been used extensively against colics in horses[4]. Milks[5] mentioned peppermint as a valuable veterinary carminative for the relief of colic and symptoms of flatulence. Peppermint oil and menthol have been shown to effectively stimulate choleretic activity (bile flow) and exert a relaxation effect on gastrointestinal (GI) tissue in animal studies[6].

Fennel extract

Fennel based on long tradition has long been used for the relief of pain associated with intestinal spasm[3] in animals. Fennel extract has been shown to increase gastric

acid secretion[7] and regulate the intestinal smooth muscle motility[8]. It also improves barrier function of the gastrointestinal tract[9].

Adding fennel seed powder to the diet of many farm animals (goats, calves, pigs, etc.) improved the feed intake and weight gain[10,11].

The main component of fennel essential oil is trans-anethole, which has shown appetite-enhancing effects[12].

Fenugreek extract

Fenugreek has been used traditionally as an appetite and flavor enhancer. In experiments performed to determine food consumption and motivation to eat as well as metabolic-endocrine changes in chronically treated rats[13], fenugreek extract significantly increased food intake and the motivation to eat.

Another interesting property is that of gastroprotection. In another study on rats[14], the soluble gel fraction was found to be more effective than omeprazole in preventing lesion formation from induced gastric ulcer. This is attributed to its antisecretory action and its effects on mucosal glycoproteins.

Seeds have been given to ruminants and poultry with diarrhea[15] with positive effects.

Ginger extract

Ginger has been used for colon health in pigs and pets in British Columbia, Canada[1].It has been traditionally used together with other remedies as a tonic and appetite stimulant in horses, and has been given with purgatives to suppress the spasms and "griping" that came with colics[16].

Its antiemetic (against vomiting) activity has been demonstrated in an *in vivo* study on dogs[17], where ginger administration significantly reduced the number of vomiting episodes at doses as low as 25mg/kg *per os*.

TESTIMONIALS[18]

Orexis has been evaluated in vivo on a 6 kg, 13-year-old female dog with anorexia and no other clinical or lab findings. Appetite was enhanced following 3-days treatment with Orexis. It took one week to fully restore appetite, then treatment was discontinued as appetite remained normal (veterinarian in the island of Crete, Greece)

References

1. Lans C, Turner N, Khan T, Brauer G. Ethnoveterinary medicines used to treat endoparasites and stomach problems in pigs and pets in British Columbia, Canada. *Vet Parasitol.* 2007 Sep 30;148(3-4):325-40.

2. Moorhead LD. Contributions to the physiology of the stomach. XXVIII. Further studies on the action of the bitter tonic on the secretion of gastric juice. J *Pharmacol Exp Ther* 1915; 7:577-589.
3. Wynn SG, Fougère B. *Veterinary Herbal Medicine*. Mosby Elsevier; 2007.
4. Beasley H. *The Druggist's General Receipt Book Comprising a Copious Veterinary Formulary*. 5th ed. London: John Churchill; 1861
5. Milks HJ. *Practical Veterinary Pharmacology, Materia Medica and Therapeutics.* Chicago, Ill: Alex Eger, Inc.; 1949.
6. McKay DL, Blumberg JB. A review of the bioactivity and potential health benefits of peppermint tea (*Mentha piperita* L.). *Phytother Res.* 2006 Aug;20(8):619-33.
7. Vasudevan K, Vembar S, Veeraraghavan K, Haranath PS. Influence of intragastric perfusion of aqueous spice extracts on acid secretion in anesthetized albino rats. *Indian J Gastroenterol.* 2000 Apr-Jun;19(2):53-6.
8. Forster H. [Spasmolytic effect of plant carminatives. Animal experiment studies]. *ZFA (Stuttgart)*. 1983;59(24):1327-1333.
9. Das B, Rabalais J, Kozan P, et al. The effect of a fennel seed extract on the STAT signaling and intestinal barrier function. Boone DL, ed. *PLoS ONE*. 2022;17(7):e0271045.
10. Kargar S., Nowroozinia F., Kanani M. Feeding fennel (*Foeniculum vulgare)* seed as potential appetite stimulant to newborn Holstein dairy calves: Effects on meal pattern, ingestive behavior, oro-sensorial preference, and feed sorting. *Anim. Feed Sci. Technol.* 2021; 278115009
11. Schöne F, Vetter A, Hartung H, Bergmann H, Biertümpfel A, Richter G, Müller S, Breitschuh G. Effects of essential oils from fennel (*Foeniculi aetheroleum*) and caraway (*Carvi aetheroleum*) in pigs. *J Anim Physiol Anim Nutr (Berl).* 2006 Dec;90(11-12):500-10.
12. Ogawa K, Ito M. Appetite-Enhancing Effects of Curry Oil. *Biol Pharm Bull.* 2016;39(9):1559-63.
13. Petit P, Sauvaire Y, Ponsin G, Manteghetti M, Fave A, Ribes G. Effects of a fenugreek seed extract on feeding behaviour in the rat: metabolic-endocrine correlates. *Pharmacol Biochem Behav.* 1993 Jun;45(2):369-74.
14. Pandian RS, Anuradha CV, Viswanathan P. Gastroprotective effect of fenugreek seeds (*Trigonella foenum graecum*) on experimental gastric ulcer in rats. *J Ethnopharmacol.* 2002 Aug;81(3):393-7
15. Williamson A, ed. *Major Herbs of Ayurveda.* London: Churchill Livingstone; 2002
16. Greig JR, Boddie GF. *Hoare's Veterinary Material Medica and Therapeutics*. London: Bailliere, Tindall and Cox; 1942

17. Sharma SS, Kochupillai V, Gupta SK, Seth SD, Gupta YK. Antiemetic efficacy of ginger (Zingiber officinale) against cisplatin-induced emesis in dogs. *J Ethnopharmacol.* 1997 Jul;57(2):93-6.
18. In HOUSE (Aenorasis) unpublished data