

GLOBAL NEWS

New Study Links Cat Hormones & Gut Microbiomes to Their Social Behavior

Plos One, August 1st 2022



Felines with lower cortisol, oxytocin and testosterone levels are more tolerant of other cats. A new study from researchers at Azabu University in Japan suggests that house cats' gut microbiomes and hormones like cortisol, oxytocin and testosterone may explain why some felines get along well with each other and others are more aloof. Researchers split 15 shelter cats into groups, placing five random cats in three 13-by-25-foot rooms for two weeks. Over this time period, they used video cameras to observe the cats' behavior, and they collected urine and feces to measure hormones and microbial species present. They found that cats with higher cortisol and testosterone concentrations exhibited fewer social behaviors like grooming, sharing food or sniffing, while those with lower amounts of cortisol and testosterone were more social. Additionally, cats with similar microbiomes had more frequent contact with each other, and cats with higher testosterone levels were more likely to try to escape, per the study.

Effect of environmental contaminants on the health of pet cats

Science Daily, July 26th 2022

This study evaluated serum metabolomics and thyroid homeostasis in relation to exposure to organohalogen contaminants in pet cats. There was a significant negative correlation between thyroid hormones and organohalogen compounds. This article reports the first time that monitoring studies have identified the different metabolic markers related to many metabolic pathways, which had a significant correlation with organohalogen contaminant levels. In particular, metabolic markers related to oxidative stress showed a strong association with PCBs. Companion animals are in close contact with human surroundings, and there is growing concern about the effects of harmful substances on the health of pet cats. This study investigated the potential health effects of organohalogen compounds on thyroid hormone homeostasis and metabolomics in pet cats in Japan. There was a significant negative correlation between concentrations of several contaminants, such as polychlorinated biphenyls, polybrominated diphenyl ethers, hydroxylated PCBs, hydroxylated PBDEs, and total THs in cat serum samples. These results suggested that exposure to OHCs causes a decrease in serum TH levels in pet cats. Pet cats have faced lifestyle challenges in recent years, due to the increase in type 2 diabetes and cardiogenic arterial thromboembolism. PCBs were associated with many metabolic pathways, including glutathione and purine metabolism. These results demonstrated that OHC exposure causes chronic oxidative stress in pet cats. PBDEs were positively associated with alanine, aspartate, and glutamate metabolism. Due to the chronic exposure of cats to mixtures of these contaminants, the combination of their respective metabolic pathways may have a synergistic effect.



VIVALDIS CORNER

Vivaldis launches Black Soldier Protein Powder for companion animals. Black soldier fly larvae have earned superfood designation making them an excellent choice for pets. With a high protein content, Black soldier protein powder is also balanced with adequate healthy fats, nutrients and essential amino acids and is hypoallergenic.



BLACK SOLDIER PROTEIN POWDER

Protein source of the future is here

Dosage

- Cat & small, medium dogs:** 1 scoop daily (5g)
- Puppies:** 2 scoops daily (10g)
- Large dogs:** 1.5 scoops daily (7.5g)
- Pregnancy & Recovery stage:** 2 scoops daily (10g)

BSF protein an 'easy swap' for other proteins in dog food

Pet Food Industry

With alternative proteins increasing in popularity in human foods, they are also gaining interest from consumers of pet food, and black soldier fly (BSF)-based ingredients are among the most popular. The Association of American Feed Control Officials (AAFCO) approved BSF protein for adult dog food and treats in August, BSF use in dog and cat food has already been approved by the European Food Safety Authority. BSF is a great alternative as a novel protein in hypoallergenic foods, and is a good alternative for pets that do have some food allergies, skin and coat concerns, etc. BSF ingredients have antimicrobial and prebiotic qualities, so they have added nutritional benefits for pets. Because of the lauric acid and the fat showing antimicrobial benefits, as well as the chitin that's coming out of the exoskeleton of the grub BSF shows prebiotic and antimicrobial benefits. BSF digestibility trials show 84.6% mean total digestibility. mean protein digestibility is even higher, at 85.4%, which is higher than some competing novel proteins. The palatability trial found that dogs' first approach when comparing a BSF diet and a plant protein-based diet was similar, but first taste for the BSF diet was 62% compared with 38% of the plant protein diet.

Stay connected with

[facebook.com/vivaldisanimalhealth](https://www.facebook.com/vivaldisanimalhealth) | [instagram.com/vivaldisanimalhealth](https://www.instagram.com/vivaldisanimalhealth) | [linkedin.com/company/vivaldisanimalhealth](https://www.linkedin.com/company/vivaldisanimalhealth)



Vivaldis Health & Foods Pvt. Ltd.

Office No. 803/804, Clover Hills Plaza, NIBM Road, Pune- 411048, Maharashtra, India.

Help-line No.: +91 7767922244 | Email : info@vivaldis.co.in | Website : www.vivaldis.co.in

1. <https://rb.gy/nwbf64> | 2. <https://rb.gy/axrpk7> | 3. <https://rb.gy/fcb6e>