



**MEDIA CONTACT:**

Crystal DeCotiis

[cdecotiis@association-partners.com](mailto:cdecotiis@association-partners.com)

908-359-9351

**Cats relax to the sound of music**

March 30, 2015 — It is widely accepted that, in humans, music confers numerous benefits. An extensive body of research indicates that these benefits extend even to patients under general anaesthesia, and include reduced perceived pain, anxiety and stress.

According to research\* published today in the Journal of Feline Medicine and Surgery by veterinary clinicians at the University of Lisbon and a clinic in the nearby town of Barreiro in Portugal, music is likewise beneficial for cats in the surgical environment. But not all music is equal in this respect – cats, it seems, benefit most from classical music.

Lead author, Miguel Carreira, explains: 'In the surgical theatres at the faculty where I teach and at the private veterinary medical centre where I spend my time operating, environmental music is always present, and is an important element in promoting a sense of wellbeing in the team, the animals, and their owners. Different music genres affect individuals in different ways. During consultations I have noticed, for example, that most cats like classical music, particularly George Handel compositions, and become more calm, confident and tolerant throughout the clinical evaluation. After reading about the influence of music on physiological parameters in humans, I decided to design a study protocol to investigate whether music could have any physiological effects on my surgical patients.'

The clinicians studied 12 female pet cats undergoing surgery for neutering, and recorded their respiratory rate and pupil diameter at various points to gauge their depth of anaesthesia. The cats, which had been fitted with headphones, were meanwhile exposed to 2 minutes of silence (as a control), followed randomly by 2 minutes each of Barber's 'Adagio for Strings (Opus 11)', Natalie Imbruglia's 'Thorn' and AC/DC's 'Thunderstruck'.

The results showed that the cats were in a more relaxed state (as determined by their lower values for respiratory rate and pupil diameter) under the influence of classical music, with the pop music producing intermediate values. By contrast, the heavy metal music produced the highest values, indicating 'a more stressful situation'. The clinicians conclude that the use of certain music genres in the surgical theatre may allow a decrease in the dose of anaesthetic agent required, in turn reducing the risk of undesirable side effects and thus promoting patient safety.

Dr Carreira and his colleagues plan to continue their studies by looking at the influence of music on other physiological parameters, including cortisol and catecholamines, in dogs as well as cats. In the

future, they hope to incorporate more sophisticated techniques, such as functional MRI and electroencephalography, into their investigations.

-----  
\*Mira F, Costa A, Mendes E, Azevedo P and Carreira LM. Influence of music and its genres on respiratory rate and pupil diameter variations in cats under general anaesthesia: contribution to promoting patient safety.

J Feline Med Surg. Epub ahead of print 30 March 2015.

DOI: 10.1177/1098612X15575778

The study can be read for free here:

<http://jfm.sagepub.com/content/early/2015/03/30/1098612X15575778.full.pdf+html>

###

**About The American Association of Feline Practitioners:**

The American Association of Feline Practitioners (AAFP) improves the health and welfare of cats by supporting high standards of practice, continuing education and scientific investigation. The AAFP has a long-standing reputation and track record in the veterinary community for facilitating high standards of practice and publishes guidelines for practice excellence which are available to veterinarians at the AAFP website. Over the years, the AAFP has encouraged veterinarians to continuously re-evaluate preconceived notions of practice strategies in an effort to advance the quality of feline medicine practiced. The Cat Friendly Practice program was created to improve the treatment, handling, and overall healthcare provided to cats. Its purpose is to equip veterinary practices with the tools, resources, and information to elevate the standard of care provided to cats. For more information, visit:

[www.catvets.com](http://www.catvets.com).

**About The Journal of Feline Medicine and Surgery:**

The *Journal of Feline Medicine and Surgery* is an international journal, and the official journal of both the [International Society of Feline Medicine](http://www.isfm.org) (ISFM) and the American Association of Feline Practitioners (AAFP) aimed at both practitioners and researchers with an interest in clinical veterinary healthcare of domestic cats. The journal is published monthly in two formats – 'Classic' editions (published in February, April, June, August, October and December) containing high-quality original papers on all aspects of feline medicine and surgery, including basic research relevant to clinical practice; and dedicated 'Clinical Practice' editions (published in January, March, May, July, September and November) primarily containing commissioned opinionated review articles providing state of the art information for feline clinicians, along with other relevant articles such as case reports. An international news section provides information about ISFM, AAFP and other feline veterinary meetings, society/association news, selected product and other developments, and relevant issues from other publications and meetings.