THE UNIVERSITY of EDINBURGH

News Release

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Study seeks to explore health benefits of vitamin D

Research is taking place to investigate the effects of vitamin D on the health of pet dogs.

Studies have begun to better understand how dogs acquire vitamin D, which has been linked to animal health and wellbeing. Researchers also hope to learn more about whether it has any benefits for animals recovering from surgery.

The research by the University of Edinburgh's Royal (Dick) School of Veterinary Studies aims to improve health outcomes for pets receiving veterinary care.

In the first of the studies, vets are assessing pet dogs that have had surgery to repair damage to their knee ligaments. All of the animals involved in the research have been injured spontaneously, typically while on a walk with their owners.

Previous studies have shown that animals with lower levels of vitamin D in their blood often show signs of increased inflammation.

Researchers will examine whether inflammation linked to reduced vitamin D can hamper dogs' recovery from surgery.

Blood samples will be taken before and after surgery to allow the team to measure vitamin D and any symptoms of inflammation.

The team will then monitors the dogs to see whether having higher levels of vitamin D before surgery has a positive effect on their recovery.

If a link is found, researchers will test if vitamin D supplements can help to lower inflammation and improve chances of better recovery from surgery.

In a separate study, vets will investigate how dogs acquire vitamin D in the first place. It is widely thought that dogs get most of their vitamin D from their diet.

The research will explore whether dogs can also produce vitamin D in their skin after exposure to the sun, in the same way that people do.

Scientists will take blood samples from pet dogs to examine whether levels of vitamin D fluctuate with the changing seasons.

The findings will help to determine whether dogs are getting enough vitamin D in their diet throughout the year.

All of the dogs taking part are owned by local people who have given permission for their pets to be studied and the research is tightly regulated.

Dr Richard Mellanby, Head of Veterinary Clinical Research and Companion Animal Sciences at the Royal (Dick) School of Veterinary Studies, said: "Vitamin D plays a vital role in bone health and there is growing evidence that it has other health benefits for people and animals. Our research aims to understand whether dogs' vitamin D levels fluctuate throughout the year, which is important for making sure we're feeding our pets the right diet.

"We're also interested in how vitamin D affects recovery after surgery and whether having less vitamin D is a cause or consequence of inflammation. Untangling this complex relationship will help us to devise new approaches to improve the welfare of animals after surgery."

For further information, please contact:
Jen Middleton, Press and PR Office; tel 0131 650 6514; email jen.middleton@ed.ac.uk