Use of a Canine Gastrointestinal Olfactory Stimulant in a Shelter Setting

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Abstract
A recent investigation linking olfactory triggers to a distinct reflex has highlighted the relationship between "sniffing" the ground and canine defecation. The work posited the question as to whether dogs ingesting adoption food would exhibit altered gastrointestinal timing and function in a shelter environment. In fact, this study has shown that olfactory triggers in a study using a canine model resulted in increased defecation rates. Further, use of an olfactory stimulant resulted in more rapid and predictable elimination behavior consistent with the RAIR or rectal distention in the absence of specific triggers. Whether living as pets or awaiting adoption at a shelter, many dogs have been observed to "sniff" for extended periods and seemingly ignore competing scents throughout their day. As a result, this study introduced the hypothesis that use of a stimulant solution formulated with such naturally occurring behavior links the canine's "sniff search" to act as a precursor to relief and further mandates shelter staff time limits the day: Larger dogs (n=4) were maintained outside in individual cages (~6 × 10') and smaller dogs (n=10) remained indoors in crates (~2 × 3').

Introduction
Dogs in the shelter system
According to the American Society for the Prevention of Cruelty to Animals (ASPCA), approximately 3-5 dogs enter US shelters every year, frequently overwhelming the infrastructure, resources and the staff working to care for them [1]. Of these, an estimated 1.6 million are adopted annually, and the costs associated (i.e., kenneling, toys, blankets, bowls, belts, leashes, etc.) to shelters often exceed available budgets [2]. Notably, this excludes veterinary care, which can range from hundreds of thousands to millions of dollars annually depending on the size of a facility: whereas, many sheltersGreat need for further research in this area.

Methods

The study methodology was a prospective comparison study including a control group and an intervention group. The control group consisted of 6 participants (3 male and 3 female) and the intervention group consisted of 8 participants (4 male and 4 female). Participants were recruited at the local animal shelter and the local veterinary clinic.

Enrollment

To be eligible for participation in the study, participants were required to be at least 18 years of age and have no history of gastrointestinal, psychiatric, or neurological disorders. Additionally, participants were required to be able to provide informed consent.

Study Procedures

The study procedures included a baseline assessment and a comparison of the baseline results after the intervention. Baseline assessment procedures included the completion of a questionnaire, a physical examination, and a gastrointestinal assessment. The gastrointestinal assessment included the collection of stool samples for examination and analysis.

Intervention

The intervention consisted of the administration of a gastrointestinal stimulant solution formulated with botanical scents. The solution was administered orally to participants in a manner consistent with the recommended dosage.

Outcome Measures

The primary outcome measure was the change in gastrointestinal function as measured by stool frequency and consistency. Additional outcome measures included changes in appetite, digestive symptoms, and overall quality of life.

Discussion

The results of the study indicated that the use of the gastrointestinal stimulant solution resulted in significant improvements in gastrointestinal function. Participants reported a decrease in stool frequency and an increase in stool consistency. Additionally, there were improvements in appetite, digestive symptoms, and overall quality of life.

Conclusion

The use of gastrointestinal stimulant solutions may provide a potential treatment option for individuals with gastrointestinal disorders. Further research is needed to determine the long-term effectiveness and safety of these solutions.

References


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