

### **Overview/description**

Synbiotic Action: Combining Probiotic Bacteria and Prebiotic Fiber to Support Companion Animal Health

Educational objectives:

- Review importance of intestinal bacteria on gastrointestinal health
- Role of probiotics and prebiotics in companion animal health
- Defining synbiotics and their benefits
- Current research supporting benefits of Fortiflora SA

In this session, the importance of intestinal bacteria on maintenance of digestive health will be reviewed. The use of probiotics to modulate immune health and improve fecal quality and dietary modulation of intestinal bacteria using prebiotics and prebiotic fibers to maintain gastrointestinal health in dogs and cats will be evaluated. The benefits of synbiotics and current research supporting Fortiflora SA (Enterococcus faecium SF68 and psyllium) will be discussed.

### Speaker's bio and credentials



Julie K. Spears, PhD

Dr. Spears earned a Master of Science and Doctor of Philosophy in Companion Animal Nutrition from the University of Illinois at Urbana-Champaign. She joined Nestle Purina in 2005 as a research scientist and serves as an affiliate faculty member at the University of Alaska Fairbanks College of Natural Science and Mathematics and Department of Veterinary Medicine. She has been researching the impact of probiotic and prebiotic supplementation on the digestive health in dogs and cats for more than twenty years.

Julie has numerous publications in the field of companion animal nutrition and digestive health. Her current research interests include oral health, gastrointestinal and immune health, and early development.



#### Questionnaire

- 1. True or False. Bacteria begin colonizing the gut, in companion animals, within hours of birth.
  - o True
  - o False
- 2. Probiotics function by:
  - Creating a physical barrier to pathogen colonization
  - Competing with pathogens for nutrients
  - o Producing antimicrobial substances
  - All of the above
- 3. Which fact regarding Enterococcus faecium SF68 is false?
  - It is a lactic acid bacteria
  - It inhibits enteropathogens
  - o It has been used safely for years in humans and animals
  - It has begun to acquire virulence factors which makes its use questionable
- 4. Which of the following is not a feature of an effective prebiotic?
  - Contains live bacteria
  - o Resists digestion in the upper GI tract
  - o Can be used by bacteria
  - o Benefits the host
- 5. The 2009 Lappin study looked at the effect of *Enterococcus faecium* SF68® on cats with known Herpes virus. What were they measuring to assess if the probiotic was beneficial or not?
  - Incidences of conjunctivitis
  - o Fecal quality
  - Microbial diversity
  - o Sneezing
- 6. True or False. Psyllium can prevent both constipation and diarrhea.
  - o True
  - o False



### 7. Which statement regarding synbiotics is true?

- Synbiotics are combination of prebiotics and postbiotics
- o The active ingredients in synbiotics always work synergistically
- Each synbiotic must be tested to determine health benefits
- The field of synbiotic research is well established, with no recent development in veterinary medicine

# 8. Studies have shown all of the following regarding the combination of *E faecium* SF68® and psyllium, except:

- o They are readily fermented by bacteria in vitro
- o They improve microbial diversity in the GI tract
- o They improve fecal quality and reduce fecal quality variability
- All of the above are true

#### 9. The 2002 Weese et al. study concluded that many probiotics:

- o Had inaccurate labeling
- o Did not meet microflora level label guarantees
- o Had one or more organisms missing
- o had additional organisms
- All of the above

# 10. The synbiotic containing *Enterococcus faecium* SF68® and psyllium, has been shown to \_\_\_\_\_ in adult Alaskan Sled dogs:

- o Increase fecal volume
- o Increase defecation events
- Increase fecal quality
- o All of the above



PERSONAL INFORMATION:
First name:
Last name:
Type:
(Veterinarian, Technician)
Licence number:
Province where you practise:
Telephone:
Email:



## **CERTIFICATE OF COMPLETION**

### **Educational webcast**

Synbiotic Action: Combining Probiotic Bacteria and Prebiotic Fiber to Support Companion Animal Health

**Presented by** 

Julie K. Spears, PhD

This document confirms that

Dr. Lorem Ipsum

has viewed the above-mentioned webcast and has answered and submitted the questionnaire meant to evaluate the understanding of the content.

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