

#### GOFOS™ A purified source of short-chain fructo-oligosaccharides

- A highly effective soluble prebiotic fiber the most widely studied functional fiber
- Non-Digestible Oligosaccharide (NDO)
  Belongs to the fructan group, contains fructose
- 3 Stimulates the rapid growth and high activity of beneficial bacteria in the gut
  - Lower dosages are needed compared to compared to chicory inulin and oligofructose

sc-FOS are naturally found in small amount in various natural foods: onion, garlic, banana, asparaguses etc.





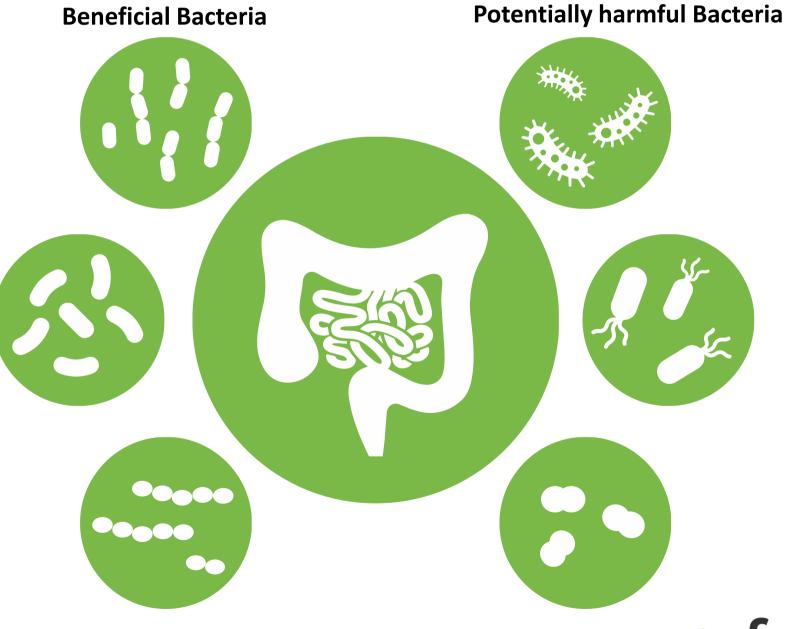


# **Gut Microbiota**

Gut microbiota contains thousands of bacteria species, both beneficial bacterial and potentially harmful bacteria!

Improve gut health is essential for animal performance, overall health, profitability, and well-being

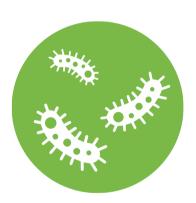
Prebiotics such as sc-FOS contribute greatly to a balanced microbiota and a robust immune system







## **Effects of sc-FOS on Intestinal Immunity**



Reduction of pathogenic bacteria\*



Enhanced production of bacteriocins



Reinforcement of the intestinal barrier



Proliferation of GALT components – a vital factor in immune response





<sup>\*</sup>Acidic Environment: Unfavorable environment for potential pathogens.

<sup>\*</sup>Competitive Environment: When *Bifidobacteria* increases, pathogens tend to decrease.

#### Health and productivity effects of sc-FOS in farm animals



- 1 Benefit gut beneficial microbial ecology
- 2 Increase production of SCFA and Lactic Acid in the gut
- 3 Decrease concertation of putrefactive compounds
- 4 Increase efficiency of nutrient absorption
- 5 Improves villus and microvillus health status
- 6 Limits growth of Salmonella, E.coli, Campylobacter
- 7 Enhances growth performance and feed efficiency
- 8 Improves diarrhea score and fecal consistency





# Recommended dosages for broilers and layers

BROILERS	sc-FOS inclusion (kg/MT feed)	Avg feed intake (kg/day)	Intake of sc-FOS (g/day)	Avg body weight (kg)	Daily Intake of sc-FOS (g/kg BW)
Prestarter 0-4 days	8	0.02	0.16	0.05	3.2
Starter 0-14 days	4	0.04	0.16	0.2	0.8
Grower 14-28 days	3	0.12	0.36	1	0.36
Finisher 28-42+ days	2	0.18	0.36	2.2	0.16

LAYERS & BREEDERS	sc-FOS inclusion (kg/MT feed)	Avg feed intake (kg/day)	Intake of sc-FOS (g/day)	Avg body weight (kg)	Daily Intake of sc-FOS (g/kg BW)
Development, up to 18 wks	1	0.12	0.12	1.25	0.1
Laying phase, 18-60+ wks	2	0.1	0.2	2.25	0.09
Breeder stock, all phases	3	0.15	0.45	2.5	0.18





# Recommended dosages for pigs

	sc-FOS inclusion (kg/MT feed)	Avg feed intake (kg/day)	Intake of sc-FOS (g/day)	Avg body weight (kg)	Daily Intake of sc-FOS (g/kg BW)
Milk replacer, powder	8	0.25	2	3.5	0.57
Electrolytes, powder	8	0.13	1	3.5	0.29
Creep feed, suckling piglets	8	0.13	1	3.5	0.29
Prestarter, weaning at 21 days	6	0.2	1	7	0.14
Prestarter, weaning at 28 days	4	0.38	1.5	8	0.19
Up to 12 kg body weight	3	0.5	1.5	10	0.15
Up to 30 kg	2	0.75	1.5	21	0.07
Up to 120+ kg	1	1.5	1.5	75	0.02



# Recommended dosage for calves

	sc-FOS inclusion (kg/MT dry feed)	Avg feed intake (kg/day)	Intake of sc-FOS (g/day)	Avg body weight (kg)	Daily Intake of sc-FOS (g/kg BW)	
Milk replacer (MR), powder	8	0.75	6	60	0.1	
Electrolytes, powder	8	0.25	2	60	0.03	
Starter feed, pre-weaning	8	0.75	6	60	0.1	
Starter feed, pre-weaning	4	0.75	3	60	0.05	(no sc-FOS in MR)
Up to 250 kg, grower feed	2	4	8	165	0.05	(with sc-FOS in MR)
Up to 500+, finisher feed	1	8	8	375	0.02	(WICH SC-FOS III WIK)





# Health effects in aquafeed

# Dosage: Fish 4 gr /kg feed Crustacean 4 gr / kg feed





- 1 | Helps control nitrogen waste
- 2 Enhances resistance to pathogens
- 3 Increases immune response





## Health effects of sc-FOS in dogs

Therapeutic dosage: 10 gr / kg feed

Preventive dosage : 5 gr / kg feed

Efficient from 2 weeks after supplementation



- 1 Benefits gut microbial ecology
- 2 Increases production of SCFA and lactic acid in the gut
- 3 Decreases concertation of putrefactive compounds
- 4 Improves stool odor and consistency
- **5** Enhances immune response and resistance to diseases
- 6 Increases Insulin sensitivity





#### **Health effects of sc-FOS in cats**

Therapeutic dosage: 10 gr / kg feed

Preventive dosage : 5 gr / kg feed

Efficient from 3 weeks after supplementation



- 1 Benefits gut microbial ecology
- 2 Increases production of SCFA and lactic acid in the gut
- **3** Enhances Immune response and resistance to diseases
- 4 Improves stool odor and consistency
- Secretion of nitrogen in feces instead in urine (important for normal kidney function)





#### **DISCLAIMER**

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