


International Journal of Biological Sciences



Stomach	Small intestine	Large intestine
<ul style="list-style-type: none"> ↗ Maximal volume = Emptying time 	<ul style="list-style-type: none"> ↗ Length ↗ Permeability = Transit time 	<ul style="list-style-type: none"> ↗ Length, volume and surface ↗ Villi number and length ↗ Transit time ↘ Sodium absorption ↗ Permeability
Feces		
<ul style="list-style-type: none"> ↗ Faecal pH ↘ Faecal SCFA ↗ Faecal BCFA ↗ Total bile acids ↗ BA I / BA II ratio 		<p>Microbiota Variable composition</p> <ul style="list-style-type: none"> ↗ <i>Fusobacteria</i>

SMALL < 10 kg **MEDIUM** 10-30 kg **LARGE** > 30 kg

Healthy adult dogs

Healthy adult dogs

< 10 kg 10-30 kg > 30 kg

SMALL **MEDIUM** **LARGE**

↘ BA I \ BA II ratio
↘ Total bile acids
↘ Faecal BCFA
↗ Faecal SCFA
↘ Faecal pH

↘ *Fusobacteria*
variable composition

Microbiota

COVER FEATURE: From Chihuahua to Saint-Bernard: how did digestion and microbiota evolve with dog sizes

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