Normal host-microbe interaction

Lumen

Outer mucus

Inner mucus

Epithelium

Epithelial cells

Apical side

Basal side

Strong tight junctions

Low LPS detection trough NOD1 and TLR 4

NOD 1

TLR 4

Luminal microbe and its MAMP

Outer mucosal microbe and its MAMP

Normal host-microbe interaction

High-fat diet

Prebiotic treatment

Impaired gut barrier function

Weaker tight junctions

High LPS detection trough NOD1 and TLR 4