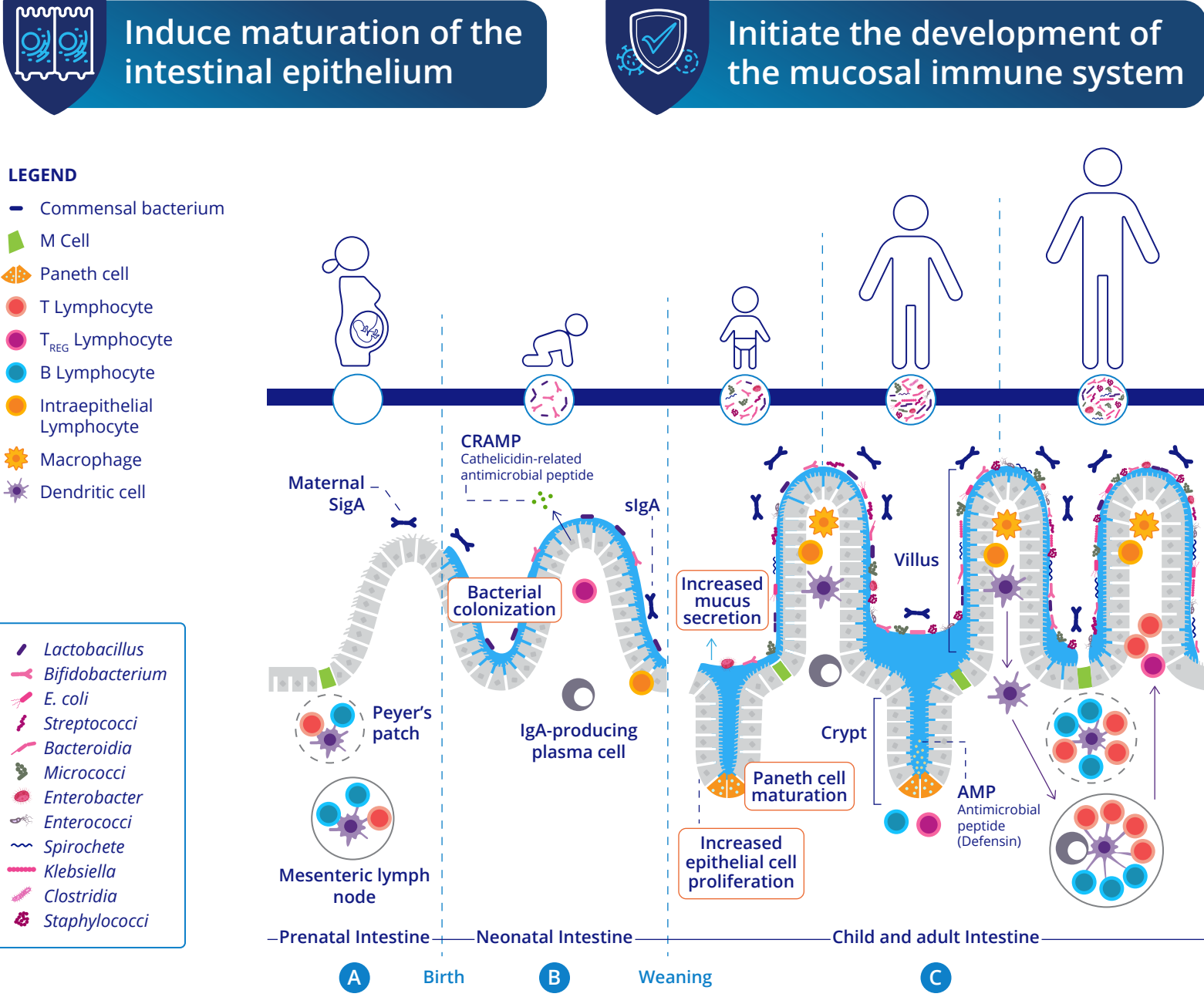


The Triad of Diet, Microbiota and Immunity

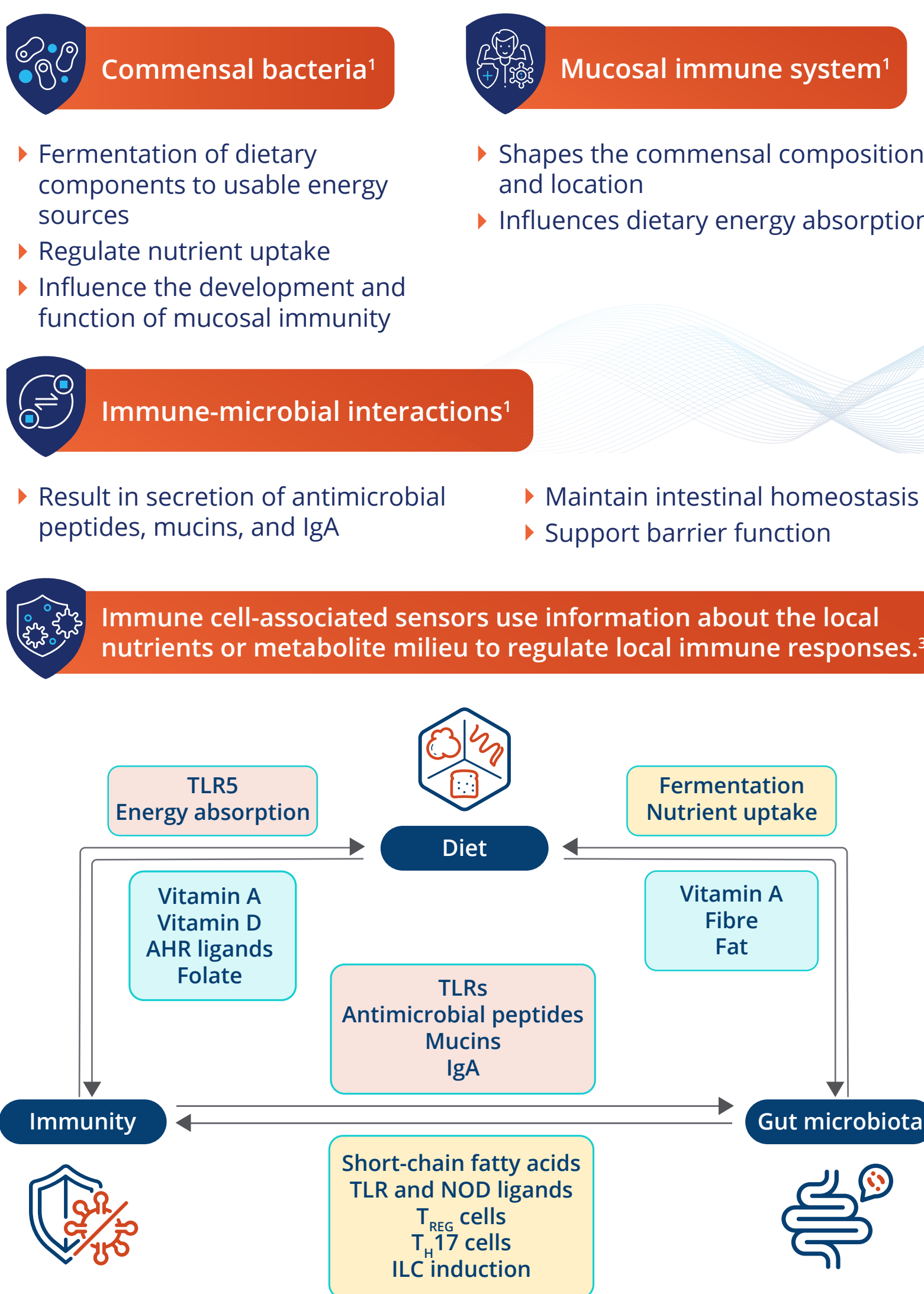


Changes in the intestinal immune system during development

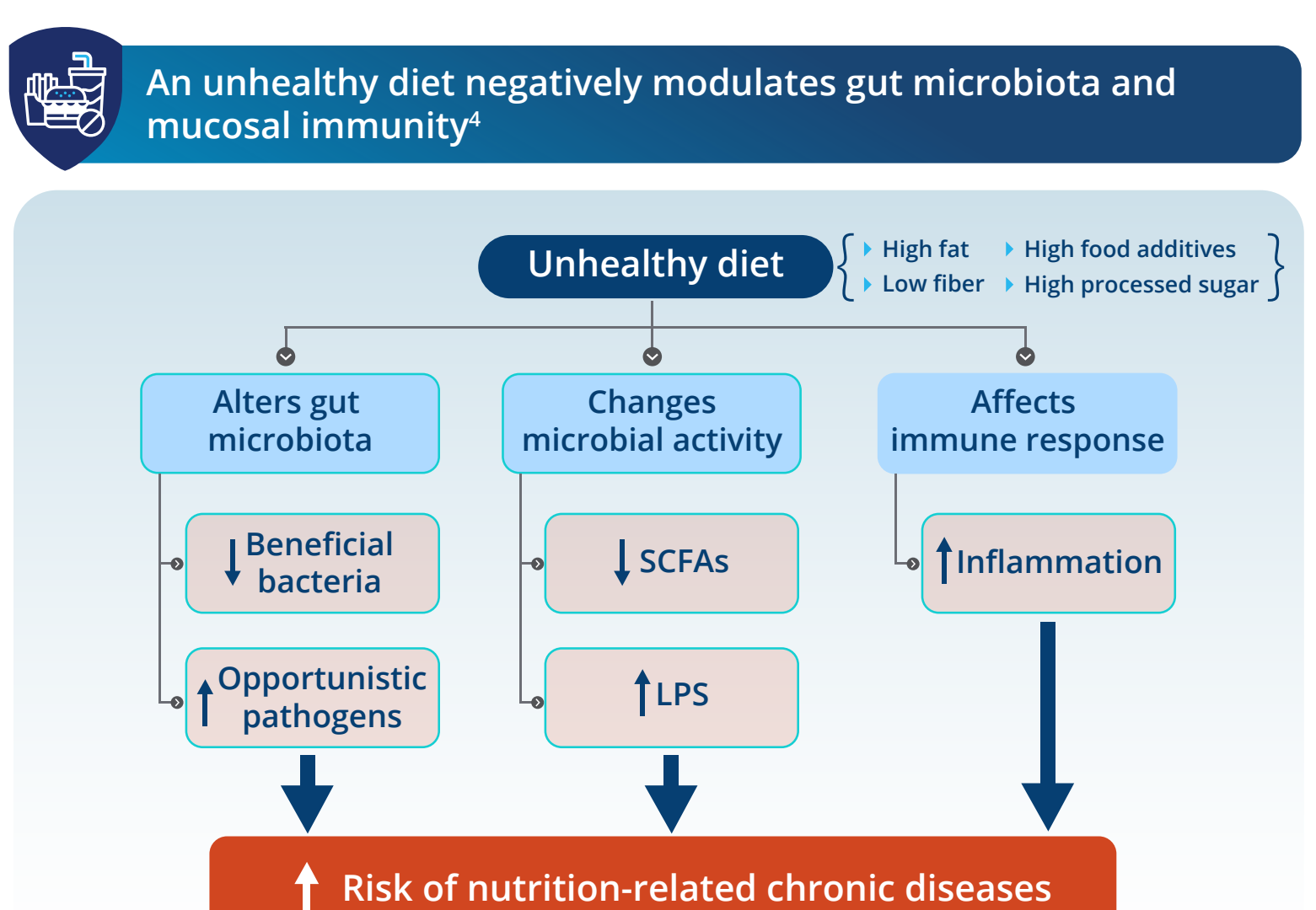
Intestinal microbial colonization and dietary components^{1,2}



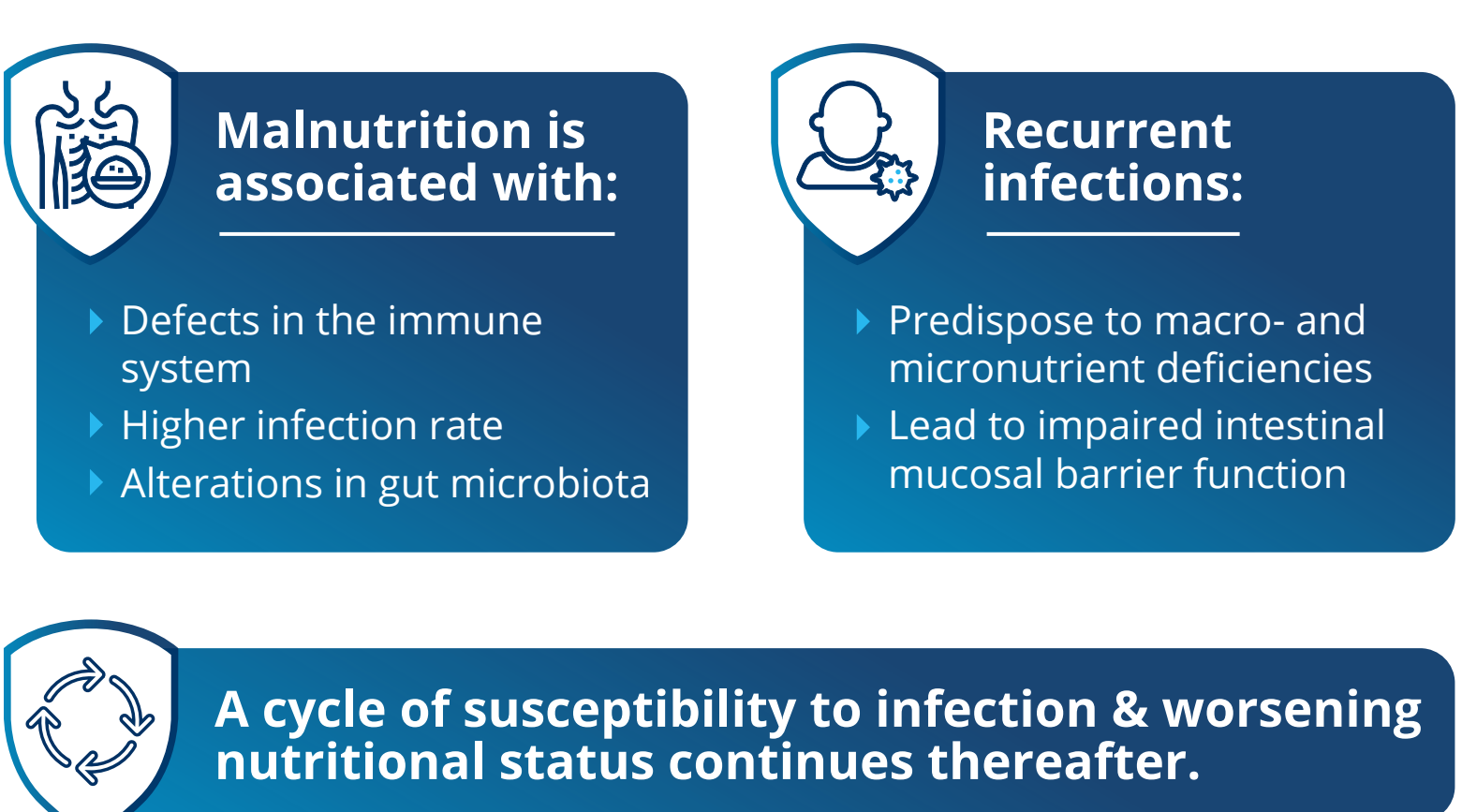
Bidirectional communication between diet, gut microbiota, and immunity



Impact of an unhealthy diet on gut microbiota and immune function



Malnutrition alters the gut microbiota and immunity³



Key takeaways

- ▶ The interaction of the gut microbiota, diet, and immune system is crucial in regulating intestinal homeostasis and barrier function.
- ▶ Any imbalance in the triad of gut microbiota, nutrient metabolism, and immune function can lead to undernutrition in children.

Abbreviations
 AHR: Aryl hydrocarbon receptor; IgA: Immunoglobulin A; LPS: Lipopolysaccharides; NOD: Nucleotide oligomerization domain; SCFAs: Short-chain fatty acids; sIgA: Secreted immunoglobulin A; T_H17 cell: Type 17 T helper cell; TLR: Toll-like receptor; T_{REG} cell: Regulatory T cell

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