



Supplemental Table S3. Synergistic activity of molecules on induction of antimicrobial peptides (AMPs). Examples of synergistic activity of micronutrients (vitamin D), nutrients and macronutrients (isoleucine, lactose, grains, butyrate (BA), and phenylbutyrate (PBA)), and proinflammatory cytokines (IL-1 β , TNF- α , and IFN- γ) on AMP transcription and expression.

Synergistic activity	AMP transcription and expression	Reference
Lactose, BA	Increased <i>CAMP</i> transcription	[72]
Lactose, PBA	Increased <i>CAMP</i> transcription	[72]
Lactose, PBA	Increased LL-37 expression in HT-29 cells	[86]
PBA, vitamin D3 ^a	Increased <i>CAMP</i> transcription and LL-37 expression	[87]
Cyclic AMP, BA	Increased avian beta-defensin (AvBD) 9 expression	[82]
Vitamin D3 ^a , IL13	IL13 induced vitamin D-dependent hCAP18/LL-37 expression	[221]
IL-1 β , TNF- α	Increased <i>DEFB4B</i> transcription	[98]
IL-1 β , IFN- γ	Increased <i>DEFB4B</i> and <i>DEFB103A</i> transcription	[98]
IFN- γ , TNF- α	Increased <i>DEFB103A</i> transcription	[98]
IL-1 α and Isoleucine	IL-1 α and isoleucine increased <i>DEFB4B</i> transcription in Caco2 cells	[77]
Grains, <i>Escherichia coli</i>	Amaranth, millet, soybean, and sesame flours boosted <i>DEFB4B</i> transcription with <i>E. coli</i>	[12]
^a 1,25-Dihydroxvitamin D3; 1,25(OH) ₂ D3		