

Supplementary 1. Effect of food matrices on the whole cell sensing systems and their response in the presence of QSMs (A) Whole cell biosensing system containing plasmid pSB406 for detection of short chain AHLs in beef suspension. (B) Whole cell biosensing system containing plasmid pSB1075 for detection of long chain AHLs in beef suspension. (C) V. harveyi MM32-based whole cell biosensing system for detection of AI-2 in beef suspension. (D) Whole cell biosensing system containing plasmid pSB406 for detection of long chain AHLs in beef suspension glasmid pSB406 for detection of short chain AHLs in skim milk. (E) Whole cell biosensing system containing plasmid pSB1075 for detection of long chain AHLs in skim milk. (F) *V. harveyi* MM32-based whole cell biosensing system for detection of AI-2 in skim milk. (G) Whole cell biosensing system containing plasmid pSB406 for detection of short chain AHLs in skim milk. (F) *V. harveyi* MM32-based whole cell biosensing system for detection of AI-2 in skim milk. (G) Whole cell biosensing system containing plasmid pSB406 for detection of short chain AHLs in beef suspension containing 1 × 10⁻⁶ M C-6 HSL. (H) Whole cell biosensing system containing plasmid pSB1075 for detection of long chain AHLs in beef suspension containing 1 × 10⁻⁶ M C-12 HSL. (I) *V. harveyi* MM32-based whole cell biosensing system for detection of AI-2 in beef suspension containing 1 × 10⁻⁶ M AI-2. Data shown are the average \pm one SEM (n=3).