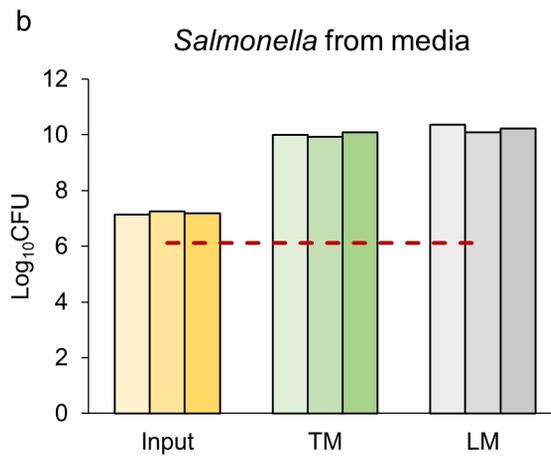
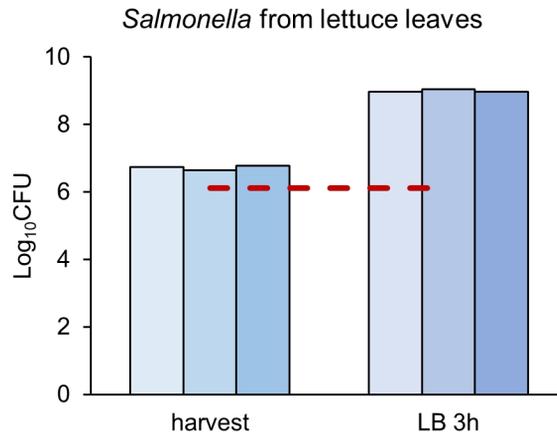


**Supplementary Fig. S1** Alpha-amino acid biosynthesis genes required for *S. Typhimurium* 14028s growth in leaf-mimicking media

*S. Typhimurium* 14028s Tn-Seq library [34] inoculated into TM and LM was sampled 24 hpi. Afterwards, DNA was extracted and sequenced. Values of log<sub>2</sub> fold change of genes were calculated using the TRANSIT Resampling and negatively selected genes (adjusted  $p < 0.05$ ) were determined. A negative value represents essentiality of a gene in the culturing condition. Genes contributing to leucine, lysine, proline, threonine, and cysteine biosynthesis in *S. Typhimurium* 14028s grown in TM and LM were shown.



**Supplementary Fig. S2** Numbers of *Salmonella* recovered from lettuce leaves and leaf-mimicking media

*S. Typhimurium* 14028s Tn-Seq library [34] was inoculated to lettuce leaves and were recovered, enumerated, and enriched in LB medium. The numbers of recovered *Salmonella* cells before and after 3 h population enrichment were determined (a). Inoculum was also incubated in the dialysis membrane bags surrounded by lettuce and tomato leaf-mimicking media (LM and TM, respectively). Afterwards, *Salmonella* sampled from LM and TM were enumerated (b). Three biological replicates under each conditions are indicated in gradient colors. Red dotted lines represent the complexity of *S. Typhimurium* 14028s Tn-Seq library [34].