

Supplementary Table S1. Characteristics of food bacteria and archaea.

Species	Phylum	Gram-staining properties	Cell shape	Average cell size (μm wide and long)
<i>Escherichia coli</i>	Proteobacteria	negative	rod	1.0 - 3.0
<i>Bacteroides luti</i>	Bacteroidetes	negative	rod	0.5 - 1.4
<i>Bacteroides graminisolvens</i>	Bacteroidetes	negative	rod	0.5 - 2.9
<i>Propionibacterium acnes</i>	Actinobacteria	positive	rod	0.4 - 4.0
<i>Moorella thermoacetica</i>	Firmcutes	positive	rod	0.4 - 2.8
<i>Clostridium acetobutylicum</i>	Firmcutes	positive	rod	1.0 - 3.7
<i>Trichococcus flocculiformis</i>	Firmcutes	positive	filamentous	chains of coccoid cells (twenty to several hundred cells)
<i>Trichococcus flocculiformis -b</i>	Firmcutes	positive	coccus	2.3
<i>Methanospirillum hungatei</i>	<i>Euryarchaeota</i>	negative	curved rods	0.5 and 7.0 (form long chains of cells)
<i>Methanobacterium beijingense</i>	<i>Euryarchaeota</i>	negative	rod	0.5 - 5.0