



**Additional file 1 – Calculated HCO<sub>3</sub><sup>-</sup> consumption for methane and acetate production**

Calculated HCO<sub>3</sub><sup>-</sup> utilization by hydrogenotrophic methanogens and hydrogenotrophic

homoacetogens at the end of the experiments in the absence or presence of HEPES (denoted as H

on the X-axis). A maximum of 1 mM HCO<sub>3</sub><sup>-</sup> was assumed as carryover from the 10% inoculum

culture, which was grown in 10 mM HCO<sub>3</sub><sup>-</sup> medium. The stoichiometric requirement for

methane is one HCO<sub>3</sub><sup>-</sup> and for acetate is two HCO<sub>3</sub><sup>-</sup>.