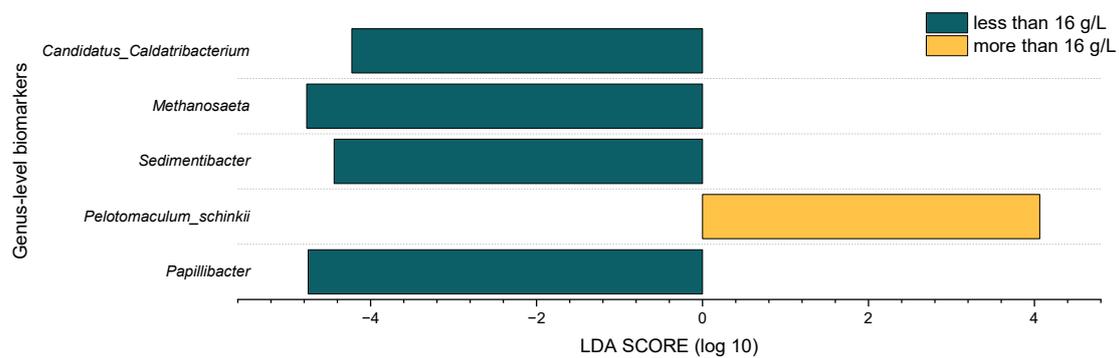


SUPPLEMENTARY DATA

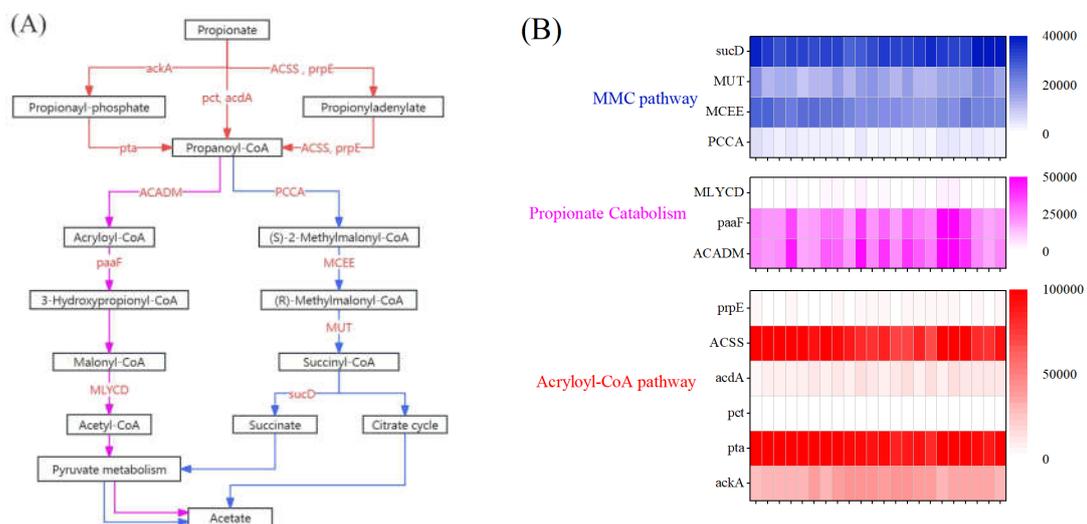
# Ordered changes in methane production function and metabolic pathway transition of methanogens under gradually increasing sodium propionate stress intensity

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**Figure S1.** Biomarkers of microorganisms at subordinate levels of high and low concentration levels of sodium propionate conditions during AD under relatively stringent conditions (LDA > 4.0).



**Figure S2.** (A) The networks of propionate metabolism and (B) absolute abundance of key genes during the operation of AD at different sodium propionate contents.