Supplementary information

**Figure S1:** Effect of varying DMR hydrolysate concentrations on the growth (Data represents mean ± SD, n=3) of the *C. glutamicum* strain ATCC 13032.
Figure S2: Variations in dissolved oxygen, temperature, and pH with time in a bioreactor during anaerobic fermentation.
Figure S3: Mass distribution of amino acids for *C. glutamicum* grown in (A): [U-\textsuperscript{13}C] xylose in BTM2 media supplemented with BHI; B) BTM2 media supplemented with BHI but no extra sugars. Error bars indicate 2% technical error of instrument.