

Figure S1

Figure S1: Culture pH decreases with increasing bacterial density. Wild type bacteria were back-diluted into fresh THY medium with and without 10 mM arginine and grown at 37° C statically under anaerobic conditions. At the designated OD_{600} a 2-3 mL aliquot was removed, filter sterilized, and the pH measured using a pH meter.

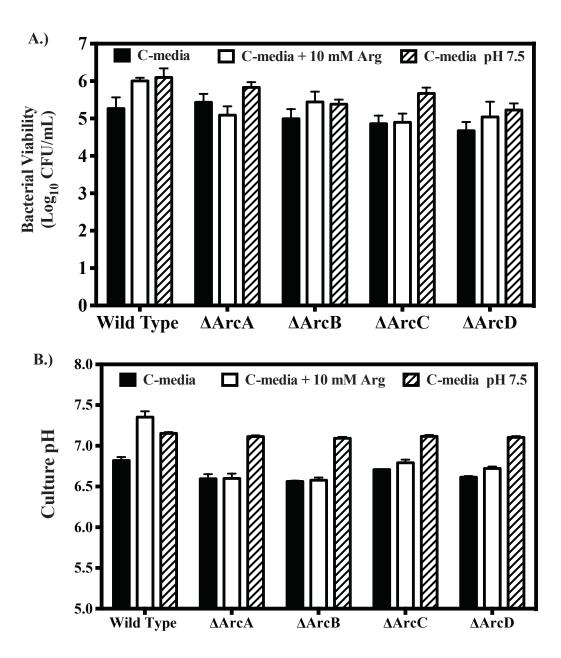


Figure S2

Figure S2: Decrease in bacterial CFUs over time is pH depdendent. Wild type bacteria and the indicated mutants were cultured in C-medium , C-medium + 10 mM Arginine, or C-medium + 100mM HEPES pH 7.5. Cultures were incubated as previously described for 6 days. Following this time period **A.**) bacterial viability and **B.**) the culture pH were measured as described in the published text.

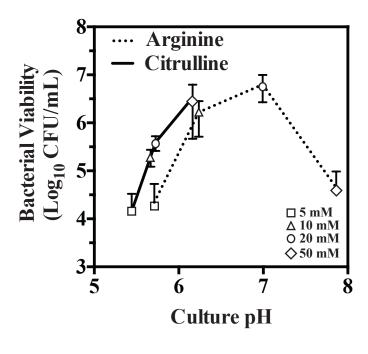


Figure S3 : Utilization of citrulline protects wild type bacteria at lower culture pH. Data illustrated in Figure 4 and Figure 5 was replotted with the bacterial viability as a function of culture pH. The designated symbols represent the final concentration of arginine or citrulline added to the media.

Figure S3