Ammonium is a key determinant on the dietary restriction of yeast chronological aging in culture medium

Supplemental Material

Figure S1: CLS shortening under amino acid restriction is reverted by removing the ammonium from culture medium (non-buffered SD medium). Glucose consumption and survival of wild-type *S. cerevisiae* BY4742 cultured in SD media with 2% and supplemented with: high and low concentrations of auxotrophy-complementing amino acids (HAA and LAA, respectively), and with (w/) or without (w/o) NH$_4^+$ [0.5%, (NH$_4$)$_2$SO$_4$]. In all the cultures, starting cell density was about 3.8 x 10$^7$ cells/ml. Day -3 represents the day of culture inoculation and day zero represents the beginning of aging experiments. Values are means ± SEM (n=3)
Figure S2: Ammonium, when present in the culture medium, impaired the consumption of the auxotrophy-complementing amino acids, in media buffered to pH 6.0. Leucine, lysine and histidine consumption by *S. cerevisiae* BY4742 cultured in SD media buffered to pH 6.0 with 2% (A and B) or 0.5% (C and D) glucose, supplemented with: high (A and C) and low (B and D) concentrations of auxotrophy-complementing amino acids (HAA and LAA, respectively), and with (w/) or without (w/o) NH$_4^+$ [0.5%, (NH$_4$)$_2$SO$_4$]. Day -3 represents the day of culture inoculation and day zero represents the beginning of aging experiments. *(Peak values below detection limit ≈ 0). Values are means ± SEM (n=3)*