

Figure S1. Nutrient Status Modulates the NLRP3 Inflammasome

(A) IL-1 β and (B) TNF- α release from primary PBMCs exposed to 3mM ATP (n=11). (C) Dissipation of difference in IL-1b release from monocytes (n=8) and PBMCs (n=11) (D) extracted from fasted and refed subjects following in-vitro priming with different doses of LPS. Statistical analyses were performed as paired two-tailed t-tests.

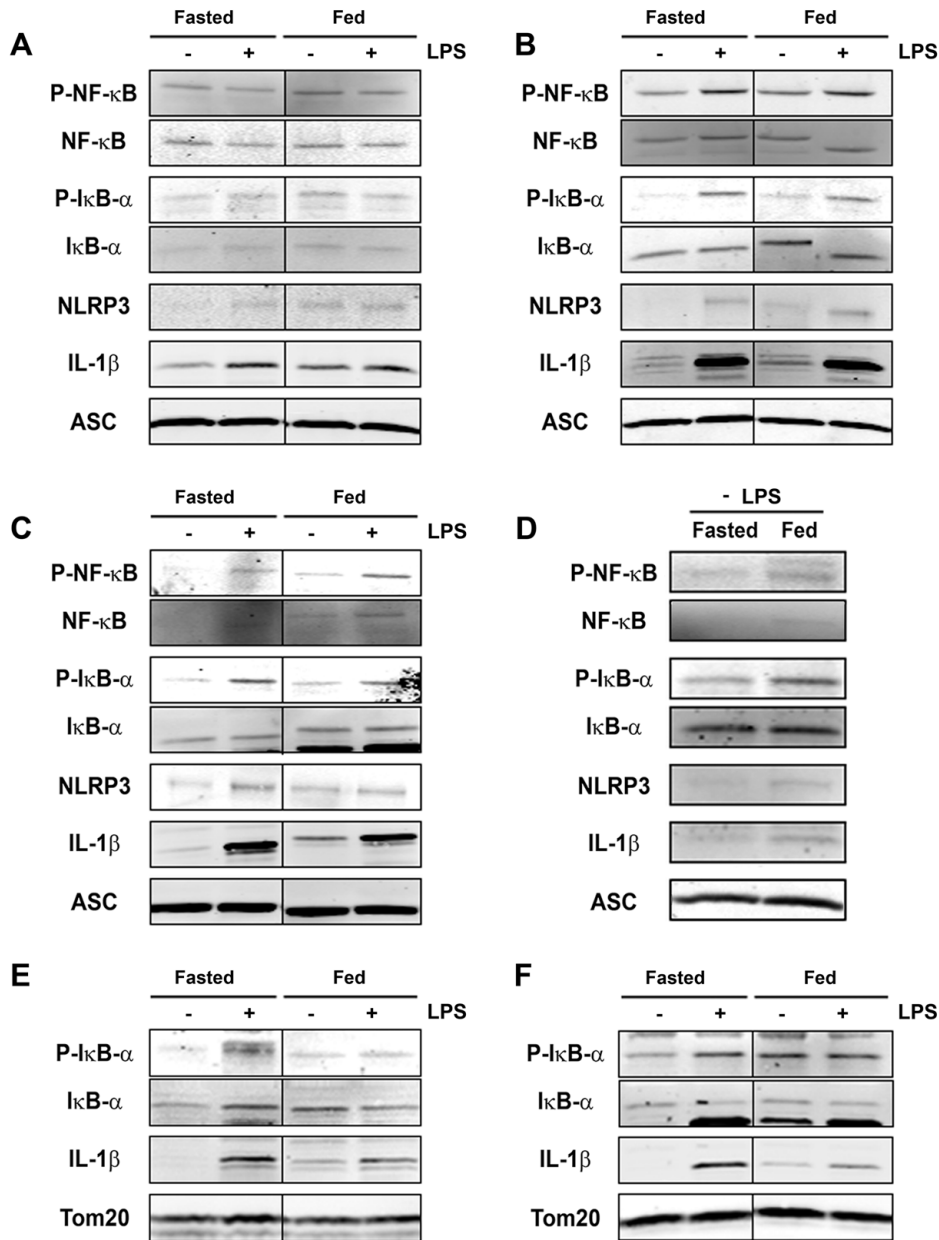


Figure S2. Refeeding Primes the NLRP3 inflammasome

(A through F) show individual immunoblots of subjects 2 through 7 showing the higher expression of phosphoprotein and canonical NLRP3 proteins in response to refeeding. Note, the different levels of these phospho- and NLRP3 proteins are negated by *ex-vivo* priming with LPS. Due to inadequate protein the LPS priming effect was not assayed in the subject represented by panel D. Also, in the experiments in panels E and F, P-NF-κB and NLRP3 were not detected due to low amount of sample.

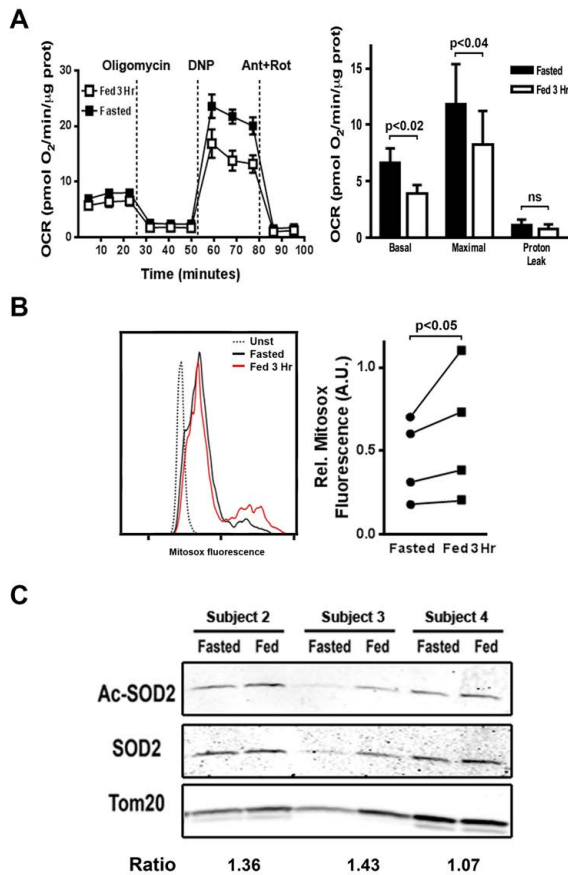


Figure S3. SIRT3 modulates the NLRP3 Inflammasome

(A) Mitochondrial oxygen consumption in PBMCs isolated in the fed and fasted states (n=5). Basal respiration was measured in nutrient supplemented media and maximal respiration in response to the uncoupling compound dinitrophenol. (B) Mitochondrial ROS levels in ATP-treated PBMCs in the fed and fasted states (n=4). Statistical analyses were performed as paired two-tailed t-tests. (C) Individual immunoblots from subjects 2 - 4 that were assayed for the effects of refeeding on SOD acetylation. The ratio of acetylation to total SOD2 levels comparing refeed to fasted samples is depicted for each subject under the immunoblot.

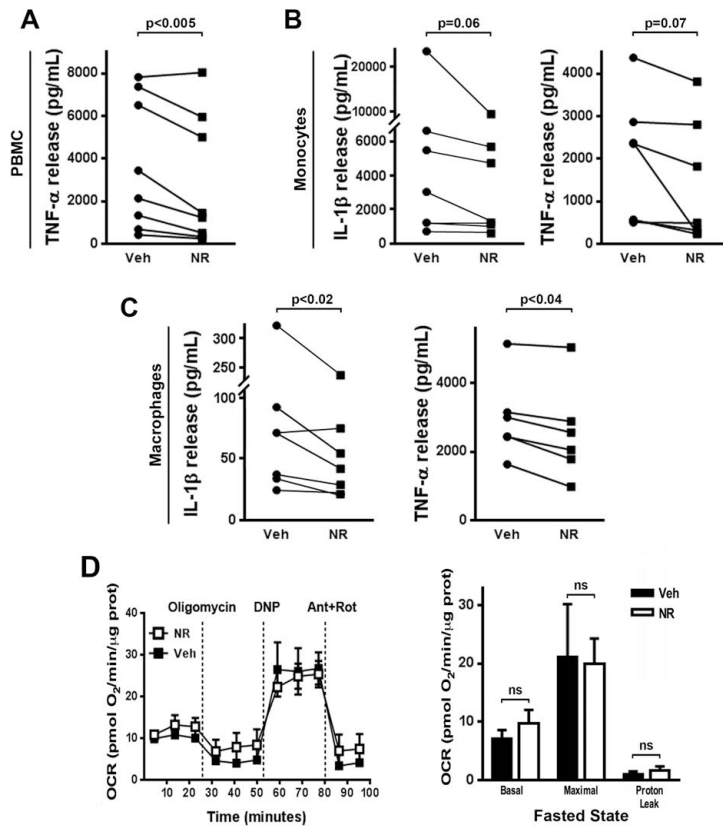


Figure S4. Nicotinamide Riboside decreases cytokine release in several human cell types.

(A) NR administration to PBMCs from healthy volunteers decreases TNF- α secretion (n=8). (B) NR administration to monocytes from healthy volunteers decreases IL-1 β and TNF- α secretion (n=8). (C) NR administration to human monocyte-derived macrophages from healthy volunteers decreases IL-1 β and TNF- α secretion (n=7). (D) NR effect on PBMCs extracted in the fasted state showing no change in maximal respiratory capacity (n=3). Statistical analyses were performed as paired two-tailed t-tests.