

## Supplementary Figures

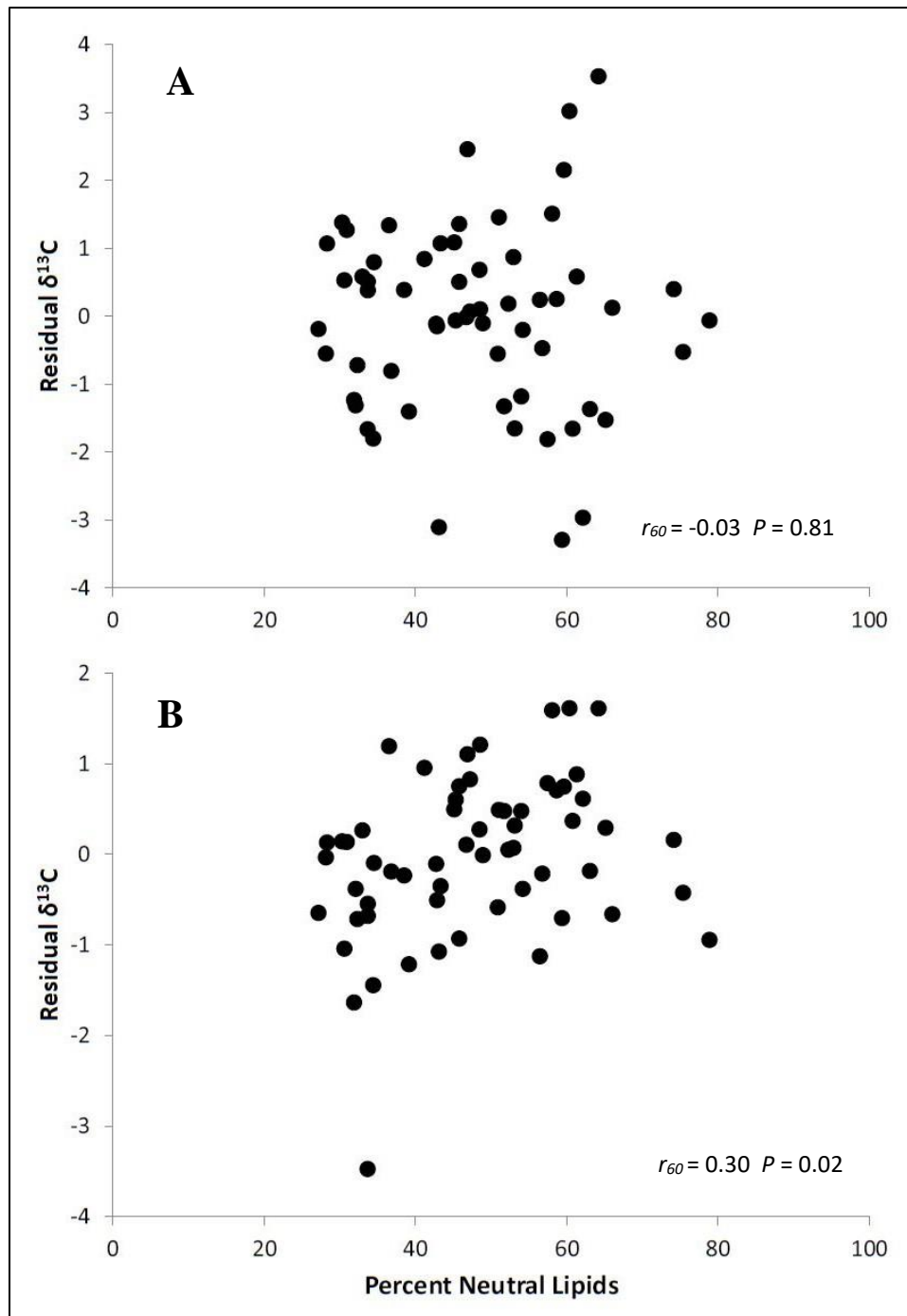


Fig. S1. The relationship between residual  $\delta^{13}\text{C}$  value of Zebra Finch muscle lipids in the (A) neutral and (B) polar fractions and the proportion of sample lipids located in the neutral fraction. Residuals were calculated from the best-fit nonlinear regression model for each fraction and proportion in the neutral fraction was calculated as a percent of total lipid content by mass. Each point represents an individual bird. There was a significant correlation for polar fraction residuals ( $r_{60} = 0.30$ ,  $P = 0.02$ ) but not neutral fraction residuals.

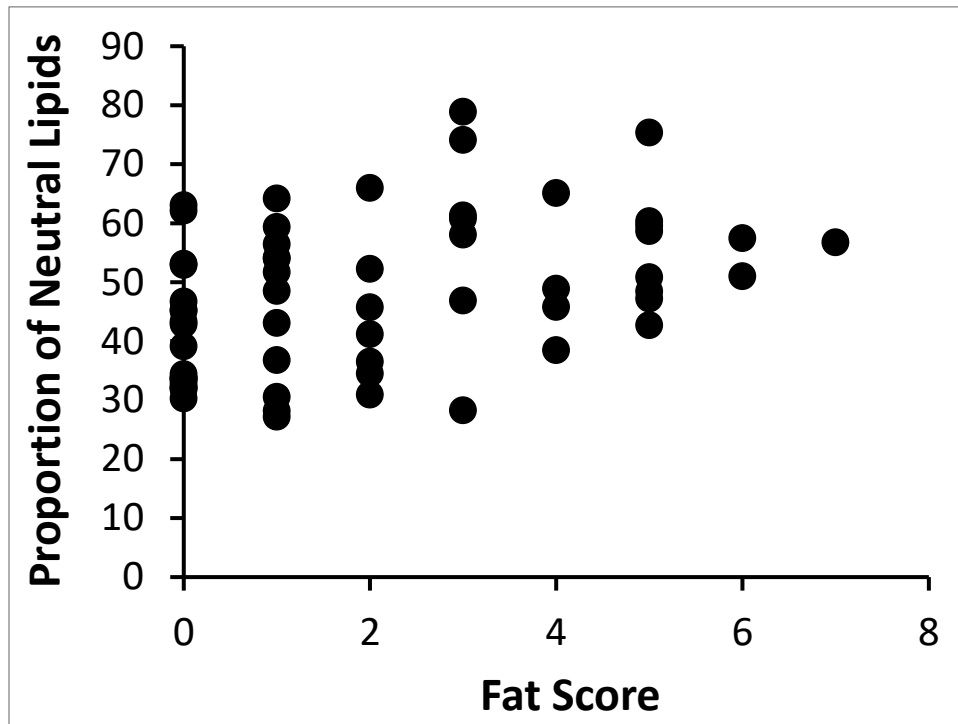


Fig. S2. There was a positive correlation between fat score and the proportion of total lipids extracted from Zebra Finch muscle samples located in the neutral fraction ( $r_{60} = 0.41$ ,  $P = 0.01$ ). Fat score was evaluated on a 0 to 7 scale, where 0 is no visible fat and 7 is complete coverage of the torso and abdomen with fat and proportion in the neutral fraction was calculated as a percent of total lipid content by mass. Each point represents an individual bird.

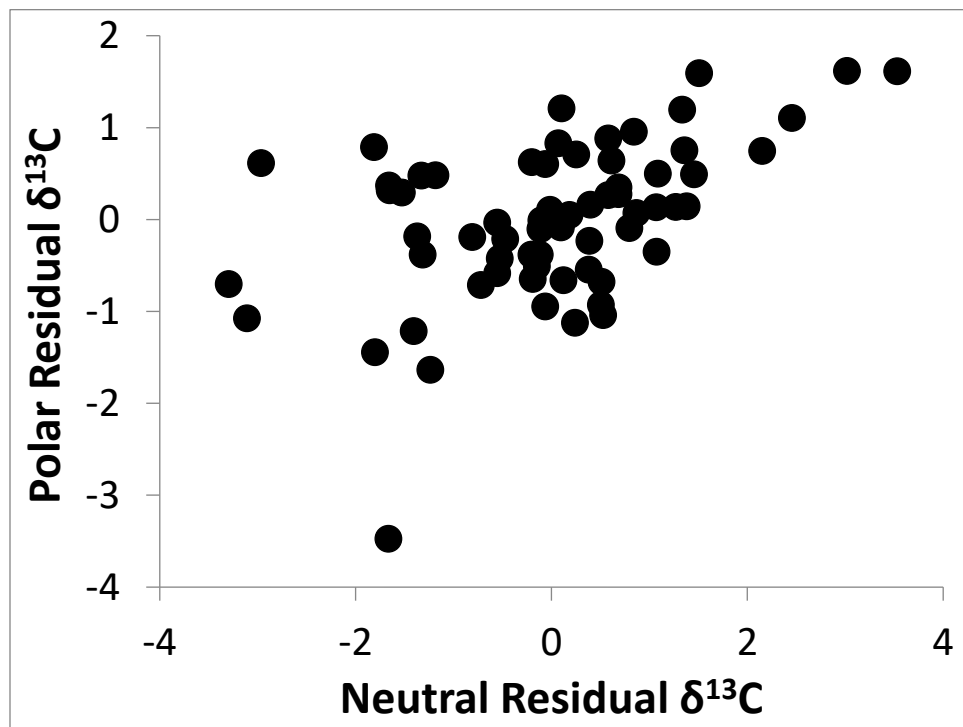


Fig. S3. The positive relationship between  $\delta^{13}\text{C}$  values calculated from the best-fit nonlinear regression models for neutral and polar fractions of lipids extracted from Zebra Finch muscle samples ( $r_{63} = 0.49$ ,  $P < 0.0001$ ). Each point represents an individual bird.