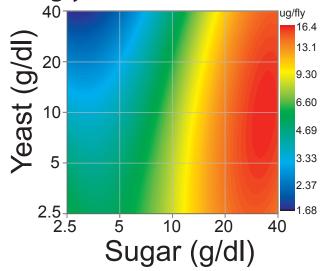
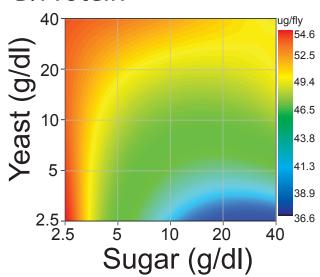
## Figure S1

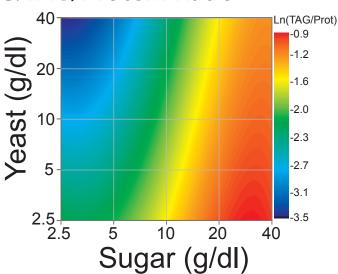




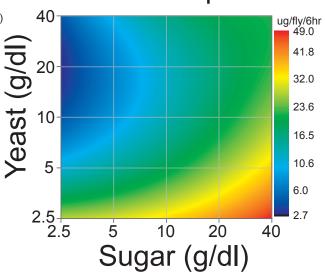
#### B. Protein



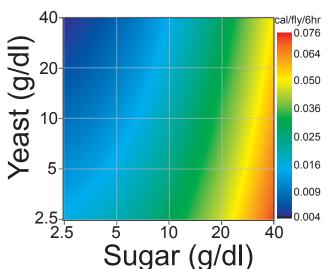
#### C.TAG/Protein Ratio



D. Food Consumption



### E. Calorie Intake



# yw Males Diet Response Surface Plots of Physiology & Behavior.

Each graph represents surface estimations obtained by combining the 25 nutrient treaments. Measures of whole fly triglyceride (A), protein (B) and scaled triglyceride (C) were obtained by performing colorometric assays on an aliquot of fly homogenates while food consumption (D) and estimated calorie intake (E) was determined using flies fed dye-labeled food. All experiments were performed twice with similar results obtained.