

Canton-S Females Diet Response Surface Plots of Physiology, Behavior, and Lifespan. 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. Mean Longevity (F) was calculated based on approximately 150 flies per treament.