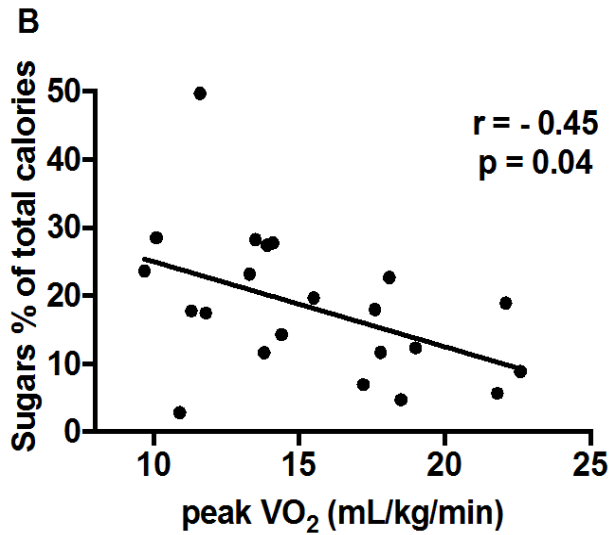
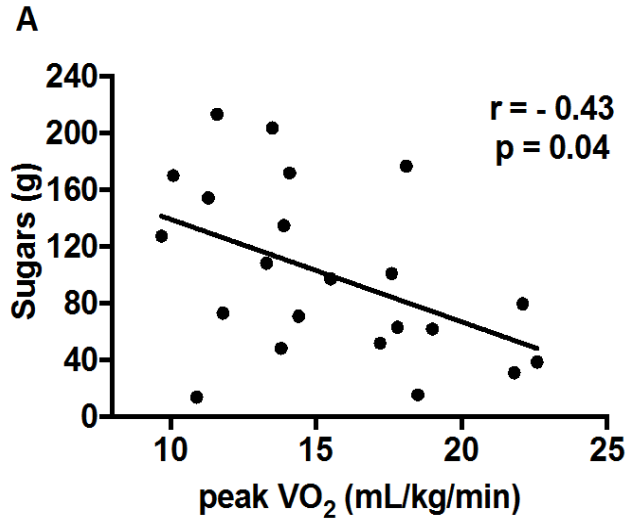
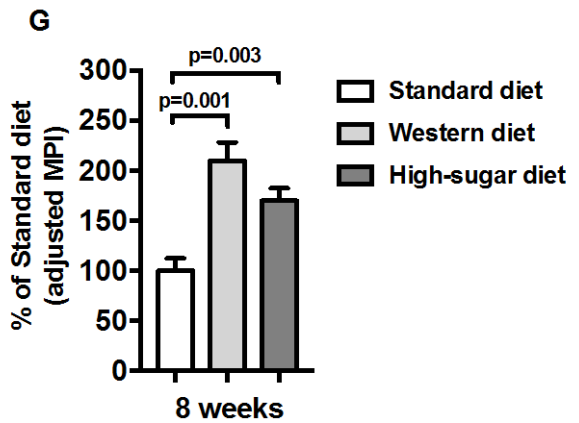
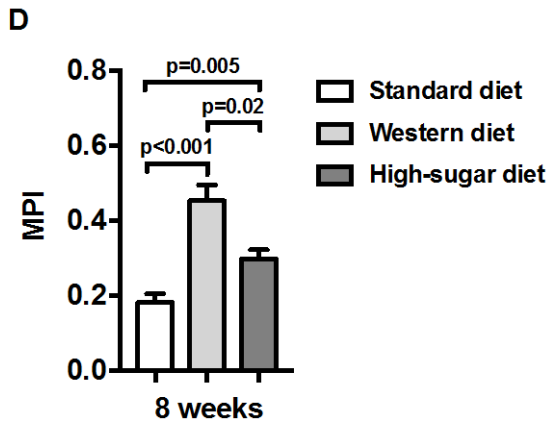
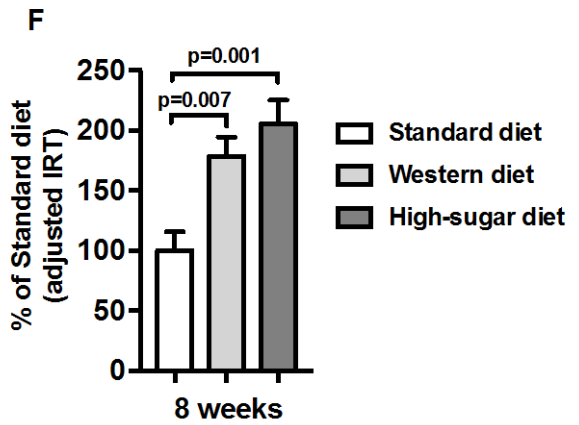
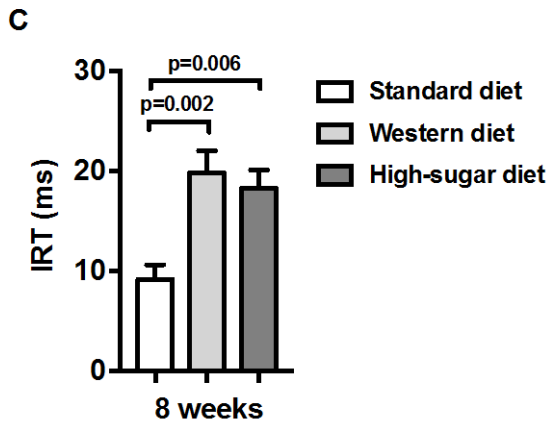
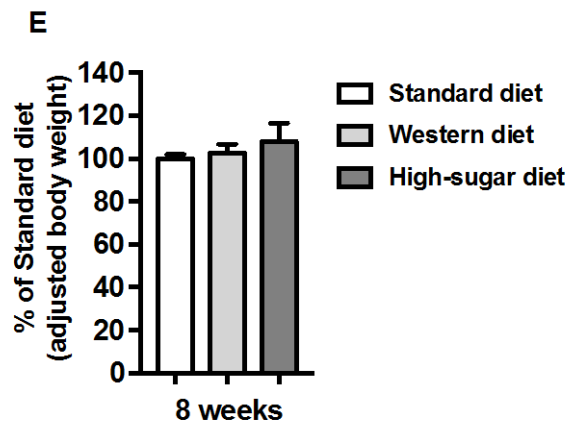
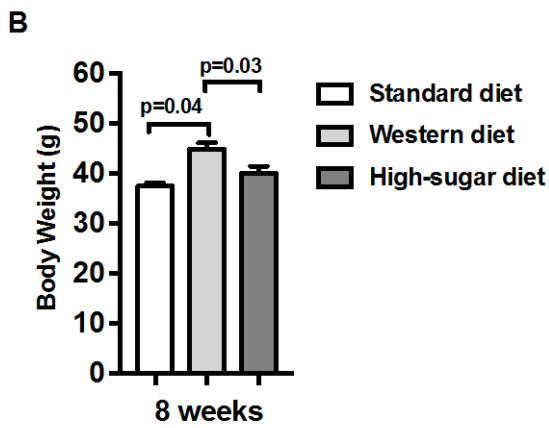
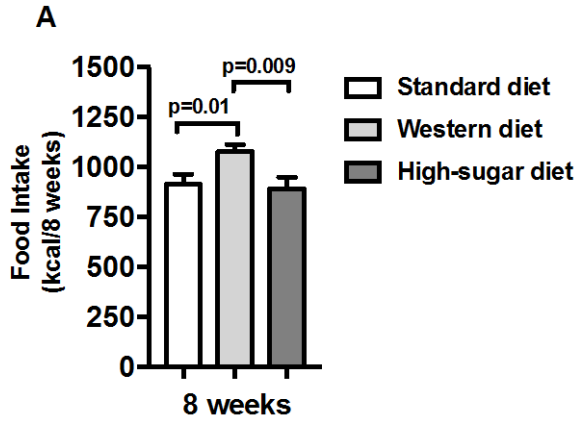


Supplemental Figure 1. Sugars consumption and cardiorespiratory fitness in HFpEF. Sugars consumption in grams (Panel A) is associated with worse peak VO₂ in HFpEF. Similarly, percentage of total calories deriving from sugars was associated with worse peak VO₂ (Panel B). Peak VO₂=peak oxygen consumption



Supplemental Figure 2. Effects of high-sugar low-saturated fat diet on cardiac function. Eight-week cumulative food intake (Panel A) and body weight (Panel B) were higher in high-sugars and high-saturated fat diet (Western diet) compared to Standard diet and high-sugar diet. Isovolumetric relaxation time (IRT)(Panel C) and myocardial performance index(MPI)(Panel D) were significantly worse in Western diet or high-sugar diet compared to Standard diet. MPI was significantly worse in Western diet-fed mice compared to high-sugar diet-fed mice. After adjustments for caloric intake, the difference in body weight between groups were not anymore apparent (Panel E) and differences between Western diet and high-sugar diet disappeared (Panels F and G).



Supplemental Table 1. Nutritional characteristics of experimental diets in the mouse

Nutrients (% of total calories)	Western diet	High-sugar diet	Standard diet
Proteins	15.2	15.2	25.0
Total Fat	42.0	42.0	17.0
Saturated Fatty Acids (% of total fatty acids)	65	15	14
Unsaturated Fatty Acids (% of total fatty acids)	35	85	86
Total Carbohydrates	42.7	42.8	58
Sugars	30	30	0
Cholesterol (% of weight)	0.2	0.2	0
Energy density (kcal/g)	4.5	4.5	3.1