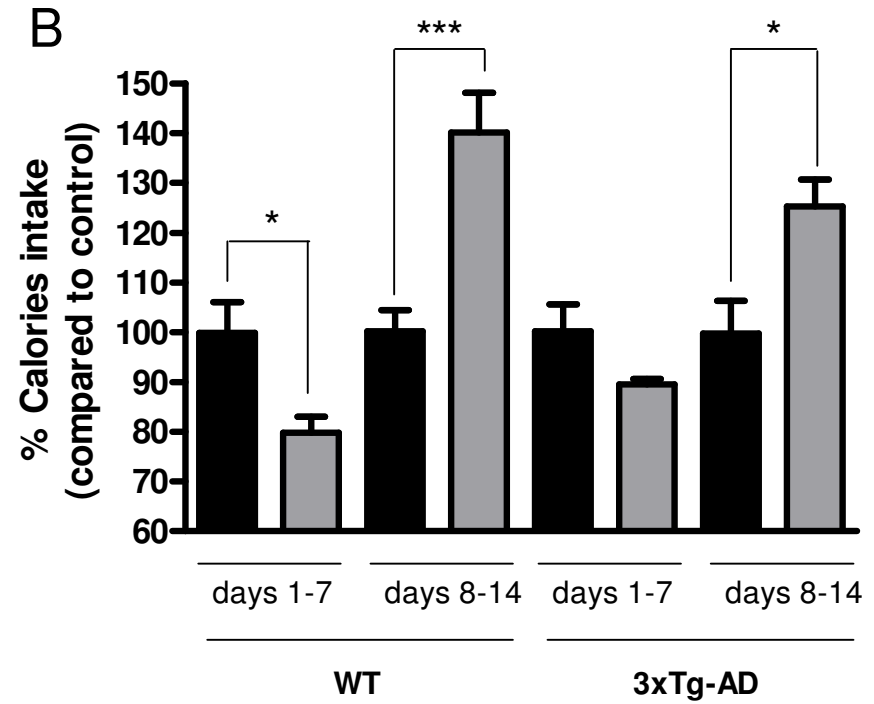
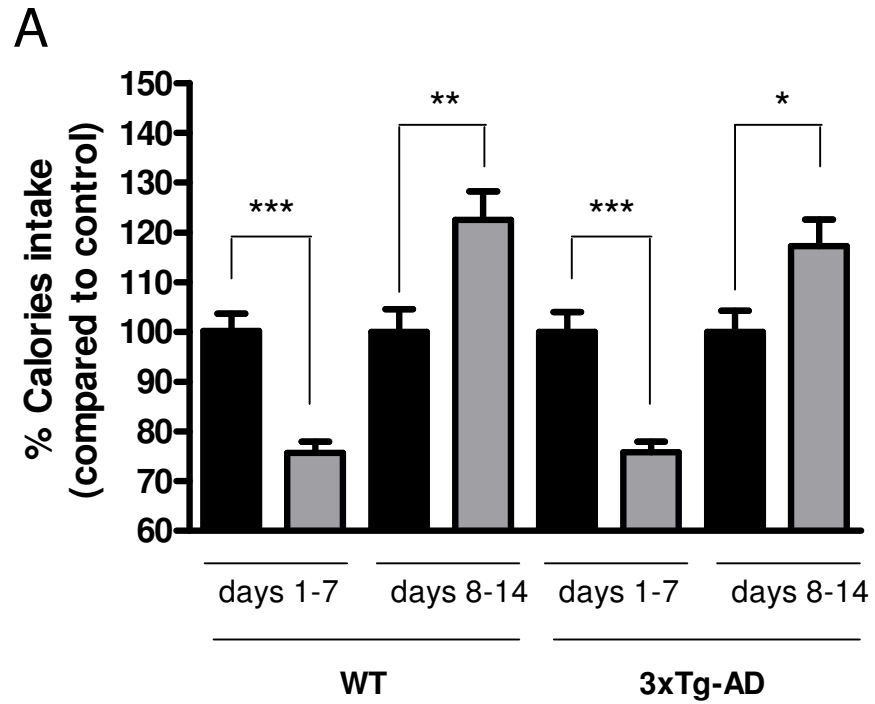
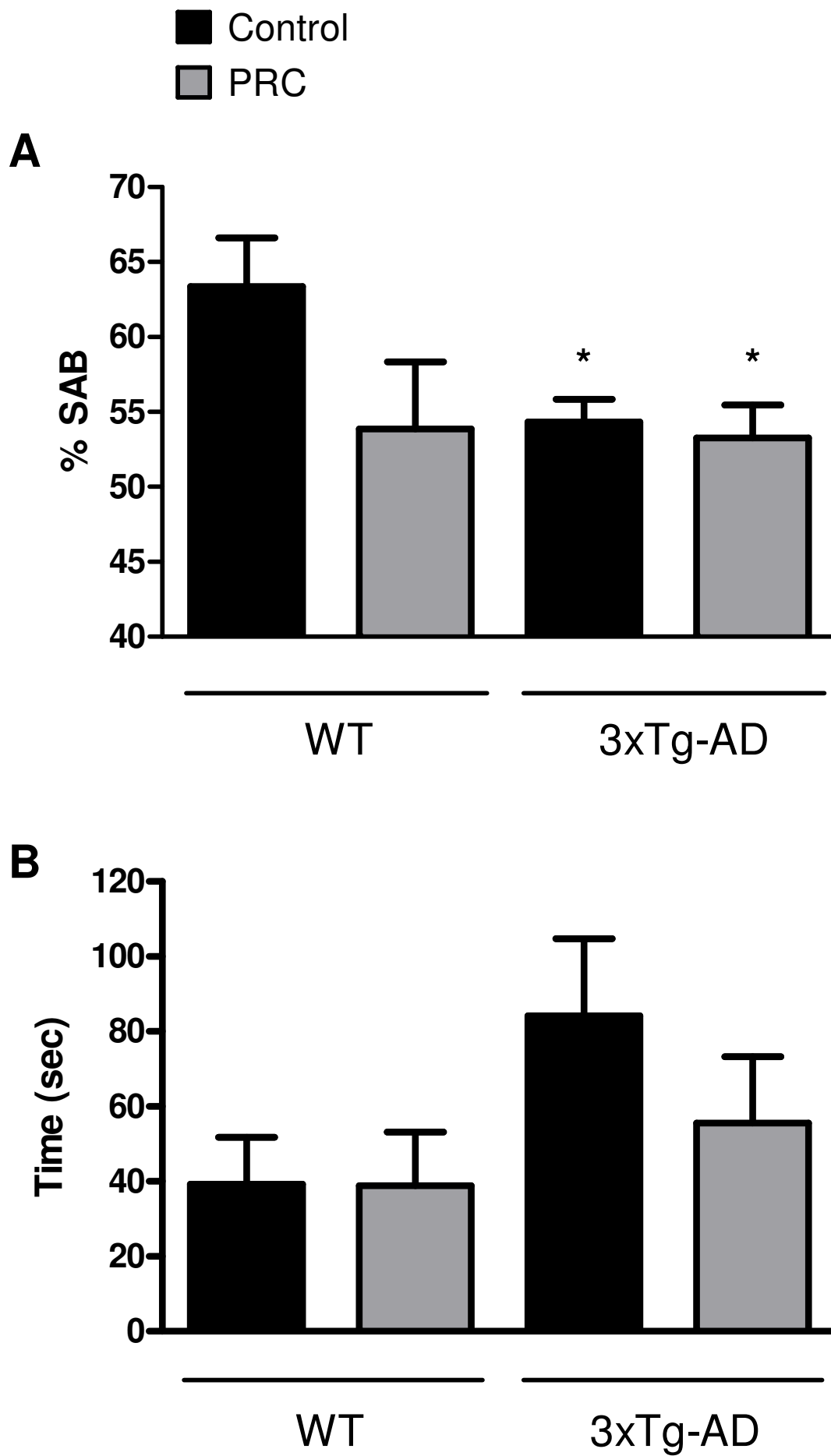


SFig. 1

■ Control
■ PRC

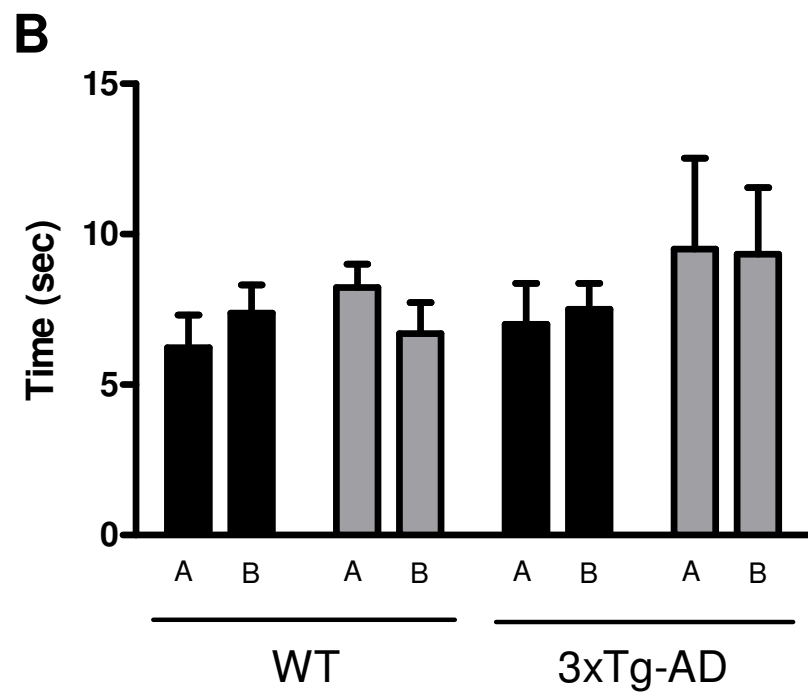
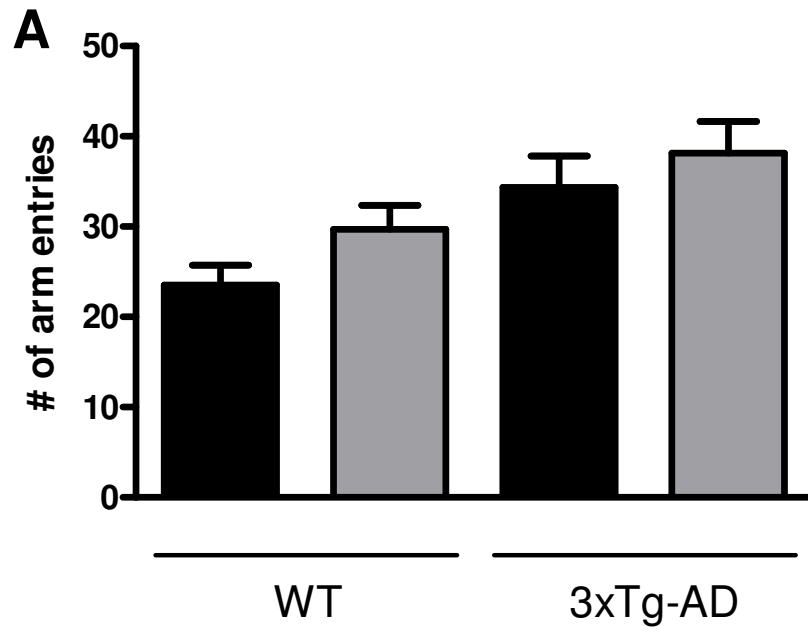


SFig. 2



SFig. 3

■ Control
■ PRC



Supplemental Figure Legends

SFig.1

Food intake was measured and used to calculate calories intake. Calories intake normalized for grams of body weight was scored daily at the beginning (weeks 1 and 2, **A**) and at the end of the dietary treatment (weeks 17-18, **B**) and was expressed as percentage calculated for the first week (days 1-7, PR diet) or the second week (days 8-14, re-feeding with normal diet) of diet cycle compared to control diets values scored during the same periods (* = $p < 0.05$, ** = $p < 0.01$, *** = $p < 0.001$).

SFig.2

(**A**) Shown is SAB (spontaneous alternation behaviour), obtained testing the mice with Y-maze after 12 weeks of PRC regimen. 3xTg-AD groups performed worse than WT control group (* = $p < 0.05$, 13-14 mice per group). (**B**) Shown is the time spent in open arms scored testing the mice with EPM at 8-9 months of age, before any dietary treatment. We did not detect significant difference in the scored parameter (13-14 mice per group).

SFig.3

After 18 weeks of diet intervention the mice were tested on Y-maze and NOR tests. (**A**) Shown is the number of arm entries scored during the Y-maze task. We did not detect significant difference among WT and 3xTg-AD groups (13-14 mice per group). (**B**) On trial 1 of NOR test the rodents were allowed to explore a box containing two identical objects (object A and object B) and the time spent exploring them was recorded. No significant difference was found in the time the animals dedicated to explore the different objects (t-test: time object A vs. time object B, 12-14 mice per group).