

# **Corinthian currants promote the expression of paraoxonase-1 and enhance the antioxidant status in serum and the brain of the 5xFAD mouse model of Alzheimer's disease**

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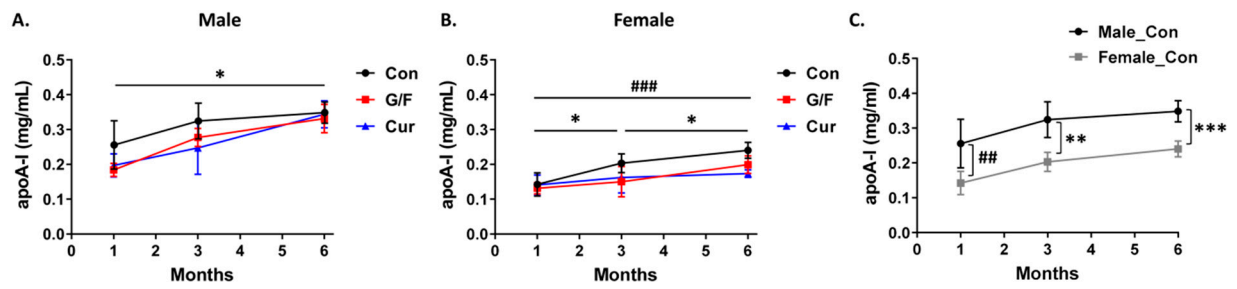
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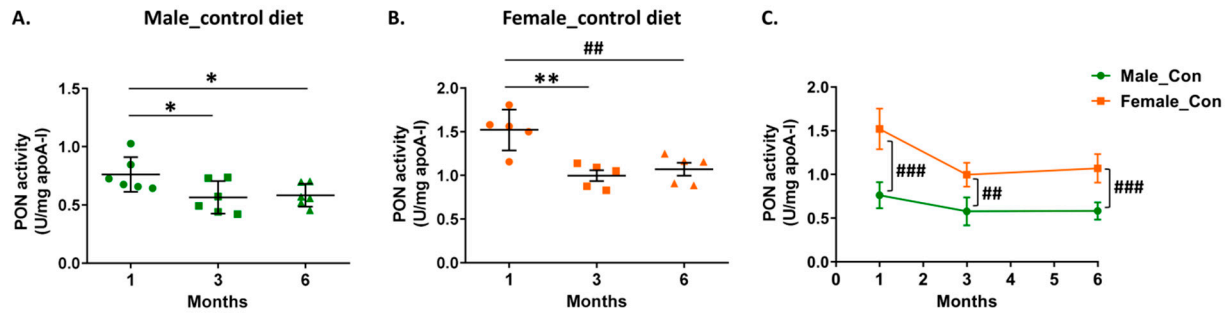
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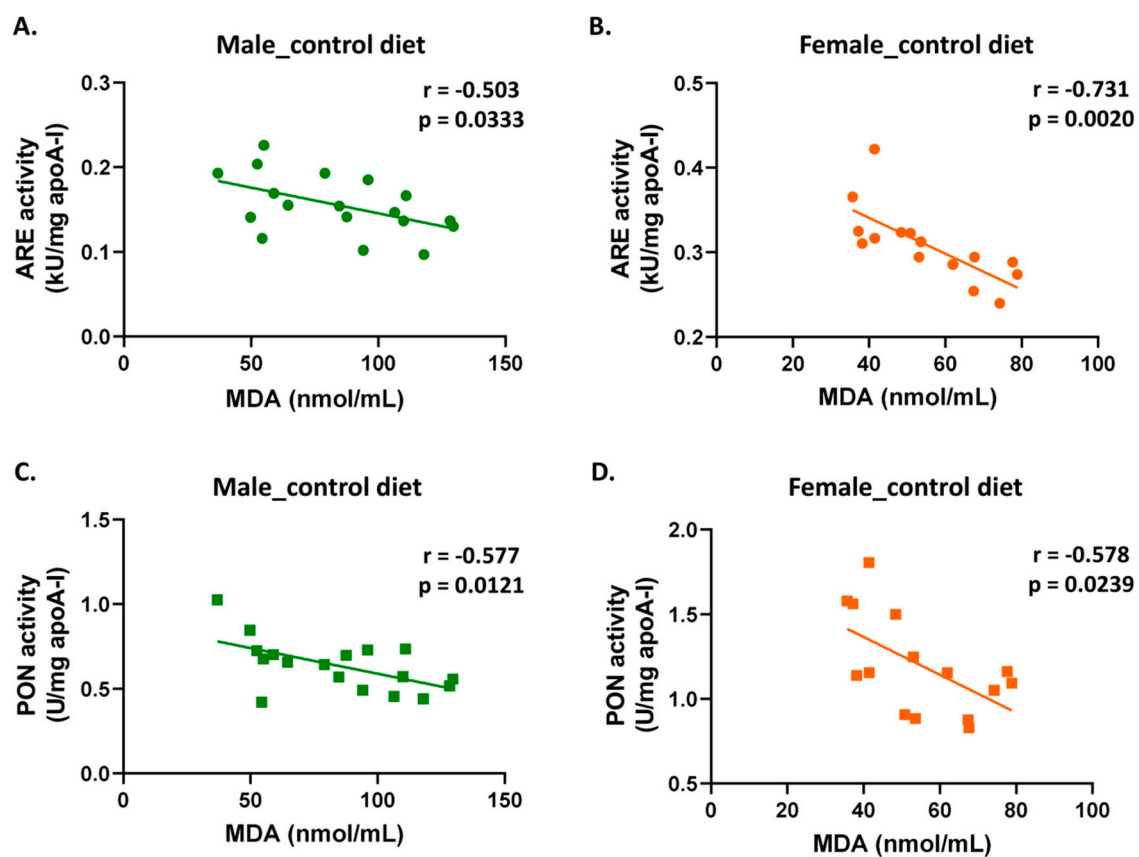
## **SUPPLEMENTARY FIGURES**



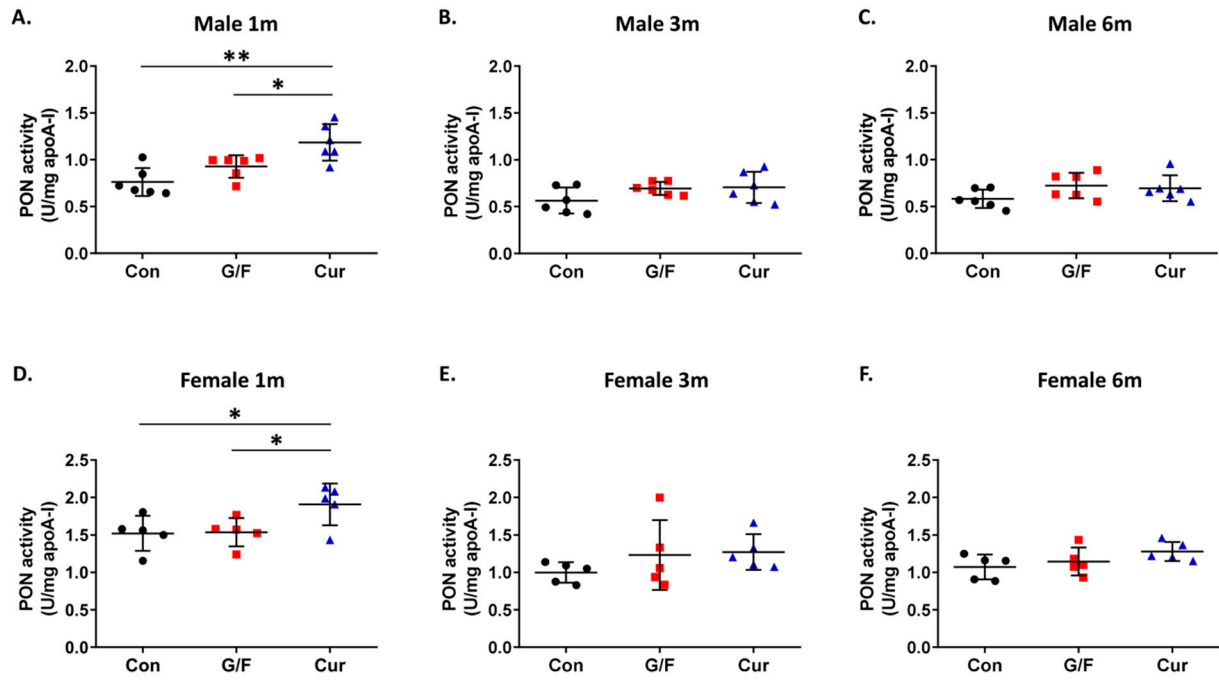
**Figure S1.** Serum apoA-I concentration in 5xFAD mice fed with the control diet, glucose/fructose-supplemented diet, and currant-supplemented diet. Panel (A) shows values for male mice, panel (B) shows values for female mice and panel (C) shows a comparison of apoA-I levels between male and female mice. Data are expressed as mean  $\pm$  SD (n = 6 males, 5 females per condition). \* $p$ <0.05, \*\* $p$ <0.005, \*\*\* $p$ <0.0001 for the indicated comparisons in mice fed the control diet.



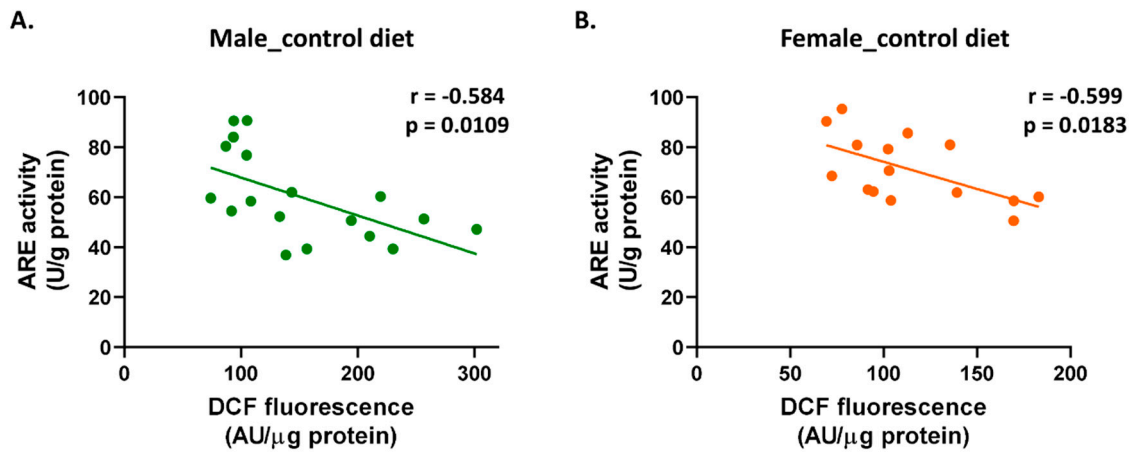
**Figure S2.** Effect of aging and sex on PON1 paraoxonase (PON) activity in serum of 5xFAD mice fed with the control diet. PON activity was normalized with apoA-I concentration and expressed as U/mg of apoA-I. Panel (A) shows values for male mice, panel (B) shows values for female mice and panel (C) shows a comparison of PON activity between male and female mice. Data are expressed as mean  $\pm$  SD ( $n = 6$  males, 5 females per condition). \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.005$ , \*\*\*\* $p < 0.001$ .



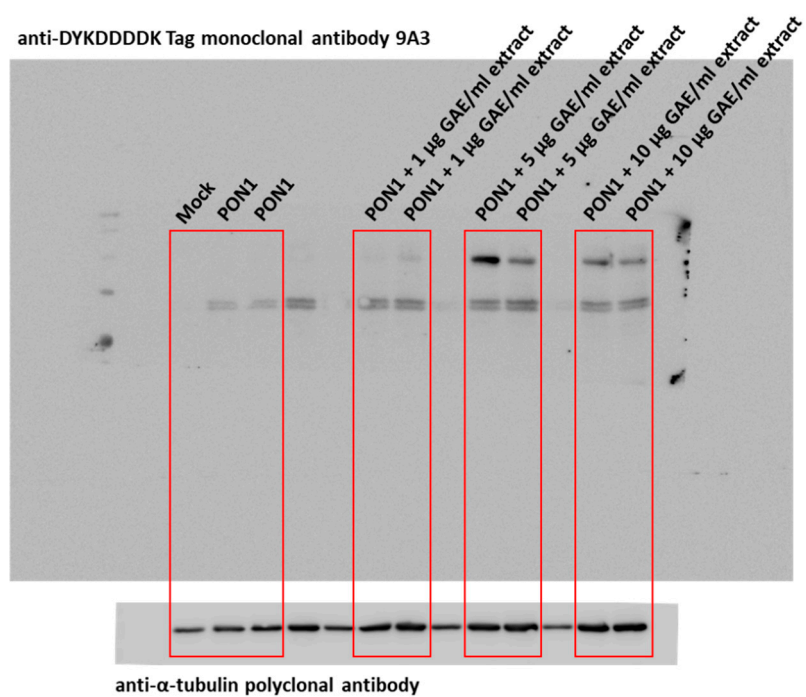
**Figure S3.** Correlation analysis between ARE or PON activity and MDA levels in serum of male and female 5xFAD mice fed with the control diet for 1, 3 and 6 months (control groups).



**Figure S4.** Time-dependent effect of currant diet on PON1 paraoxonase (PON) activity in serum of 5xFAD mice. PON activity was normalized with apoA-I concentration and expressed as U/mg of apoA-I. Panels (A-C) show values for male mice and panels (D-F) show values for female mice. Data are expressed as mean  $\pm$  SD ( $n = 6$  males, 5 females per condition). \* $p < 0.05$ , \*\* $p < 0.005$ .



**Figure S5.** Correlation analysis between ARE activity and DCF fluorescence (indicative of free radical levels) in the cortical homogenate of male and female 5xFAD mice fed with the control diet for 1, 3 and 6 months (control groups).



**Figure S6.** Uncropped immunoblots for PON1 and  $\alpha$ -tubulin. Red frames indicate the bands presented in Figure 10D.