

Mice and dietary treatment. APP/PSEN1 mice were originally obtained from Jackson Laboratories (#034833) and bred with C57Bl/6J mice (#000664). All procedures using animals were approved by the Vanderbilt University Institutional Animal Care and Use Committee. Mice were maintained on standard lab chow (Purina 5001) which contains 70 ppm Mn until 3 months of ages. Mice were then randomly allocated by cage to control (70 ppm; D17020702) or high (2400 ppm) Mn diets. Diets were formulated by Research Diets Inc. and comprised their normal control diet (D19080201) and differed only in the amount of Mn. Food levels were checked at least weekly and mice were weighed monthly to ensure normal growth.