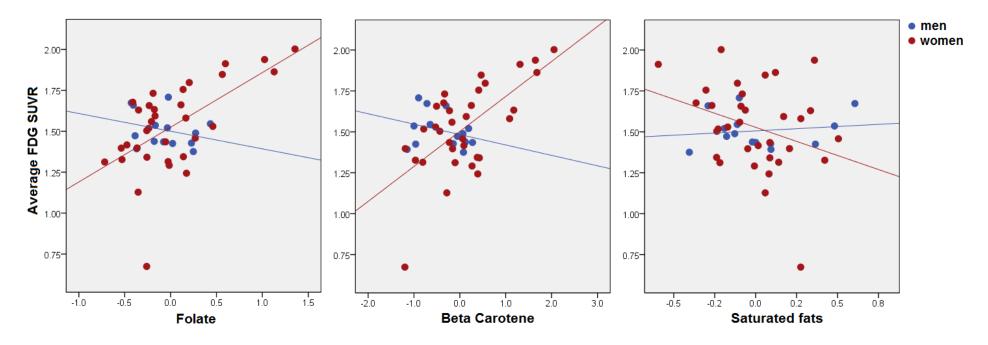
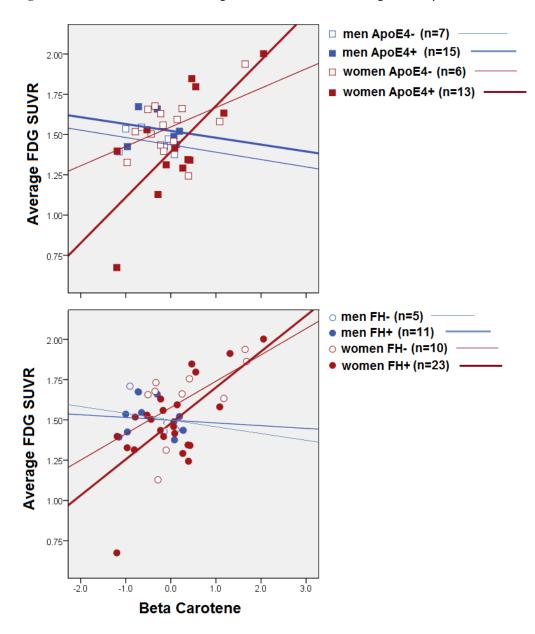
**eFigure 1.** Associations between brain glucose metabolism in AD-regions, folate,  $\beta$ -carotene and saturated fats in women (n=33) vs. men (n=16)



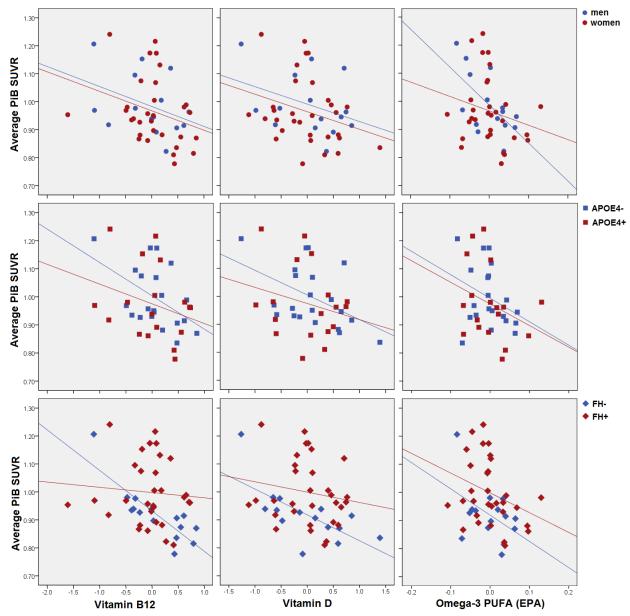
Nutrient values are age and caloric intake-adjusted residuals. FDG values are regional standardized uptake value ratios to pons activity [SUVR, unitless]. Corresponding p values are found in Table 2

**eFigure 2.** Associations between brain glucose metabolism in AD-regions and  $\beta$ -carotene as a function of gender  $\times$  APOE  $\times$  family history of AD (FH)



β-carotene values are age and caloric intake-adjusted residuals. FDG values are regional standardized uptake value ratios to pons activity [SUVR, unitless]. Corresponding *p* values are found in Table 2. Abbreviations: *APOE* ε4 allele carriers (*APOE*4+), *APOE* ε4 allele non-carriers (*APOE*4-), positive family history of late-onset AD (FH+), negative family history of late-onset AD (FH-)

**eFigure 3.** Associations of PiB retention in AD-regions with vitamin B12, vitamin D and omega3-PUFA (EPA) as a function of gender, family history of late-onset AD (FH) and *APOE* status



Nutrient values are age and caloric intake-adjusted residuals. PiB values are regional standardized uptake value ratios to cerebellar uptake [SUVR, unitless]. There are no significant nutrient×group interaction effects at p<0.05. Abbreviations: APOE  $\varepsilon 4$  allele carriers (APOE4+), APOE  $\varepsilon 4$  allele non-carriers (APOE4-), positive family history of late-onset AD (FH+), negative family history of late-onset AD (FH-).