

Select, inform and enrol participating general practices (n=10)

Pre-screen potential participants aged 75+ years for diabetes and dementia using usual clinic search procedures

*Exclude: individuals with diabetes, dementia, pernicious anaemia, pacemaker, alcoholic, epileptic, nursing home resident*

Invite 4000 pre-screened potential participants

*Exclude: B12 supplement consumers/ injections*

Pre-intervention First Assessment  
Screen for possible dementia (MMSE<24)

*Exclude : individuals with MMSE<24, epileptic or with pacemaker*

Request interim consent  
Take blood sample

*Exclude: individuals with B12 levels <107pmol/l or >210pmol/l or anaemic*

Study Entry Visit  
Request full informed consent  
Enrol and randomly allocate to intervention or control arm (n=100 each)

Carry-out baseline neurophysiological testing

Initiate dietary intervention

Placebo

Intervention

2-monthly telephone calls to monitor compliance and distribute supplements

Carry-out post-intervention neurophysiological testing at 12 months

Participant selection, pre-screening and baseline data collection (15 months)

Intervention (12 months)

