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

Invite 4000 pre-screened potential participants

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

Request interim consent
Take blood sample

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

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

Exclude: B12 supplement consumers/injections

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

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

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

Intervention (12 months)