**Online supplementary Figure**

**Figure A:** Sequence of steps in creating the dietary inflammatory index in the Whitehall II cohort study

Review of articles published from 1950 to 2010 resulting in 1943 studies linking a total of 45 food parameters with inflammatory biomarkers.

A score for each food parameter was calculated giving:

**+1** to each article if the effects were pro-inflammatory (significantly increased IL-1β, IL-6, TNF-α or CRP, or decreased IL-4 or IL-10),

**-1** if the effects were anti-inflammatory (significantly decreased IL-1β, IL-6, TNF-α or CRP, or increased IL-4 or IL-10),

 **0** if the food parameter did not produce any significant change in the inflammatory marker.

The score for each food parameter was weighted according to the study design. The weights were 10 (experimental design), 8 (observational), 7 (case-control), 6 (cross-sectional), 5 (experimental with animals), 3 (cell culture).

A food parameter-specific overall inflammatory effect score was calculated by substracting the anti-inflammatory fraction from the pro-inflammatory fraction. This score was corrected if the total weighted number of articles was <236. In these cases the raw overall inflammatory score is multiplied by the total weighted number of articles divided by 236.

18 food parameters were not available from this Whitehall II cohort study

Z-score and centred-percentiles for each of the 27 food parameters for each participant of this study were calculated based on the average and standard deviation for each food parameter obtained from the global database which was created from the consumption of the original 45 food parameters fron 11 countries from around the world.

The centred percentile for each food parameter was multiplied by the the respective ‘overall food parameter-specific inflammatory effect score’ to obtain the ‘food parameter-specific DII score’.

All of the ‘food parameter-specific DII scores’ are summed to create the ‘overall DII score’ for each individual.