Supplementary Data

**Supplemental Table 1**: Daily energy intake, macro- and micro- nutrients intake

|                        | Mean  | SD   |
|------------------------|-------|------|
| Energy (Kcal)          | 2029  | 783  |
| Protein (g)            | 104   | 41   |
| Protein (%)            | 21    | 6    |
| Carbohydrate (g)       | 209   | 98   |
| Carbohydrate (%)       | 40    | 9    |
| Total fat (g)          | 82    | 41   |
| Fat (%)                | 35    | 7    |
| Saturated fat (g)      | 32    | 17   |
| Polyunsaturated fat (g)| 13    | 8    |
| Monounsaturated fat (g)| 32    | 17   |
| Cholesterol (mg)       | 335   | 176  |
| Starch (g)             | 108   | 49   |
| Sugars (g)             | 99    | 71   |
| Dietary fibre (g)      | 22    | 8    |
| Alcohol (g)            | 1     | 4    |
| Total Vitamin A equivalents (µg) | 696 | 385 |
| Retinol (µg)           | 353   | 231  |
| β-carotene-equivalents (µg) | 2094 | 1792 |
| Vitamin C (mg)         | 88    | 69   |
| Vitamin D (µg)         | 4     | 4    |
| Vitamin E (mg)         | 10    | 5    |
| Sodium (mg)            | 2617  | 1196 |
| Potassium (mg)         | 3069  | 934  |
| Magnesium (mg)         | 365   | 130  |
| Calcium (mg)           | 885   | 380  |

Dietary data available in cohort 2 (n=64)
Supplemental Figure 1: Representative HPLC analysis spectra of serum (A) and adipose tissue (B) carotenoids (spectrum range 200-700 nm).