**10-14 weeks’ gestation**: Research midwife identifies eligible women by GP/midwife referral letters, USS, EPAU, ANC, Fetal Medicine

**14 weeks’ gestation**: Research midwife approaches eligible women-verbal and written explanation of study given, permission sought to proceed

**14-15 weeks’ gestation**: Research midwife makes telephone/email contact to answer queries and obtain verbal consent

**Baseline/Randomisation visit: 15 +0 -18 +6 weeks’ gestation**
- Eligibility confirmed; written informed consent obtained.
- RANDOMISATION, demography, maternal history, maternal family history, current pregnancy health.
- Questionnaires: dietary assessment (FFQ), binge eating, EQ-5D, IPAQ, EPDS.
- Anthropometry
- Samples: blood & urine

**CONSENT NOT GIVEN**
- Routine ANC.
- BMI, ethnicity, age & pregnancy outcome recorded (if agreed)

**DEVELOPMENT**
- Routine ANC.
- BMI, ethnicity, age & pregnancy outcome recorded (if agreed)

**Baseline/Randomisation visit: 15 +0 -18 +6 weeks’ gestation**
- Eligibility confirmed; written informed consent obtained.
- RANDOMISATION, demography, maternal history, maternal family history, current pregnancy health.
- Questionnaires: dietary assessment (FFQ), binge eating, EQ-5D, IPAQ, EPDS.
- Anthropometry
- Samples: blood & urine

**CONTROL**
- Routine ANC

**28 week visit: 27 +0 -28 +6 weeks’**
- Consent confirmed
- Current pregnancy health
- Questionnaires: FFQ, EQ-5D, EPDS, binge eating & IPAQ.
- Anthropometry
- Samples: OGTT, Blood & urine.
- Fetal USS

**INTERVENTION Appointment with Health Trainer followed by 8 weekly sessions**

**36 week visit: 34 +0 -36 +0 weeks’**
- Consent confirmed, current pregnancy health.
- Questionnaires: FFQ, EQ-5D, binge eating, EPDS, IPAQ.
- Anthropometry
- Samples: blood & urine

**Pregnancy, Delivery and Neonatal Data:**
- Maternal late pregnancy, delivery data
- Newborn data, neonatal anthropometry
- Cord blood sample, maternal postnatal and neonatal discharge information

**6 month Follow-Up**
- **Mother**: Registration-contact details, eligibility, consent.
  - Demography, smoking, general health, Anthropometry.
  - Samples: blood & urine
  - Questionnaires: FFQ, EPDS, TFEQ-18, Binge eating, IPAQ, IBQR
- **Child**: eligibility, hospital admissions, medications & supplements. Anthropometry.
- Questionnaires: BEBQ, feeding & growth, early care/education; sleep and activity

Any time during study:
- **FATHER**
- consented for demography, DNA, anthropology

Session - week 1
Session - week 2
Session - week 3
Session - week 4
Session - week 5
Session - week 6
Session - week 7
Session - week 8