Supplementary file 1. Study Protocol

**Does routine weighing during pregnancy reduce excessive gestational weight gain?**

**A systematic review and meta-analysis of randomised controlled trials: Protocol**

**Research Question:**

Does routine weighing during pregnancy reduce excessive gestational weight gain?

*P (population) pregnant women, any age*

*I (intervention) weight measurement during routine antenatal care (exclusive of other dietary and lifestyle interventions)*

*C (comparator) control group*

*O (outcomes) reduction in weight gain*

**Study design:**

A systematic review and meta-analysis of randomised controlled trials

**Interventions:**

Any intervention providing regular weighing to pregnant women, exclusive of other dietary and lifestyle modification as a means of avoiding excess weight gain/reducing weight gain

**Outcome variables**

***Primary***

* Weight gain / weight change (total weight gains, weight gains within, below and above IOM ranges)

***Secondary***

* Pregnancy outcomes (gestational diabetes, hypertension, pre-eclampsia)
* Birth Outcomes (caesarean birth, instrumental birth)
* Infant outcomes (infant birth weight, Apgar score, intrauterine growth restriction, macrosomia)

**Inclusion criteria**

* Pregnant women *(any age)*
* Singleton pregnancy
* More than one measure of weight during pregnancy
* Randomised controlled trials
* Neutral and good methodological quality studies

**Exclusion criteria**

* Studies not published in English
* Animal studies
* All other study designs, except randomised controlled trials
* Poor methodological quality studies

**Subgroups / sensitivity analysis**

* BMI sub-groups (underweight, normal weight, overweight and obese)
* Diabetes or other medical conditions
* Country’s income level (OECD classification)
* Number of antenatal visits
* Care provider (midwife, GP, obstetrician etc.)

**Databases to search:**

* MEDLINE
* CINAHL
* Embase
* Maternal & Infant Care
* Scopus
* The Web of Science

**Search terms / keywords**

* pregnant
* pregnancy
* weight gain
* weighing
* randomised controlled trial
* clinical trials

**Data extraction**

* First Author, Year, Country and Reference Number
* Study design
* Number of participants
* Participant characteristics
* Intervention *(who gives the intervention i.e. self reported, how long the intervention is given for; how the intervention is delivered; marker of compliance)*
* Maternal age, country, any demographic factors
* Study aim
* Statistical analysis
* Conclusion
* Limitations
* Methodological quality