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## WEIGHT MANAGEMENT AND RAISED BODY MASS INDEX (BMI) IN PREGNANCY

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The latest approved version of this document is online.  
If the review date has passed please contact the Author for advice.

Powys Teaching Health Board is the operational name of Powys Teaching Local Health Board  
Bwrdd Iechyd Addysgu Powys yw enw gweithredol Bwrdd Iechyd Lleol Addysgu Powys

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1	Initial Issue	July 2012
2	Added in Midwives nutrition advice and weighing at 36 weeks.	July 2015
3	Minor changes to update in relation to National Exercise Referral Scheme and Bumps to Buggy walks, update of references.	Jan 2019
4	Minor changes to update in relation to All Wales Midwifery Led Care guidance 6 <sup>th</sup> Edition (2022).	Aug 2024

**Engagement & Consultation**

**Key Individuals/Groups Involved in Developing this Document.**

<b>Role / Designation</b>
Consultant Midwife
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**Circulated to the following for Consultation.**

<b>Date</b>	<b>Role / Designation</b>
08/02/2024	Midwifery Leadership and Management team
08/02/2024	Powys Public Health Team
08/02/2024	Women and Childrens Service Leads
08/02/2024	Powys Midwives
28/06/2024	Powys Midwives & Women & Children's Service Leads
28/06/2024	Powys Public Health Team
28/06/2024	Safeguarding
05/08/2024	Maternity Policy group
19/08/24	W & C guidelines policy group
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## 1 Introduction

There are currently no UK-specific guidelines on safe weight gain in pregnancy. NICE (2010) provides useful dietary advice for discussion with women and outlines the recommendations for weight management, before, during and after pregnancy. It should be acknowledged that these are based on limited evidence.

Body mass index (BMI) is a simple measure assessing an individual's weight relative to their height. It is calculated by dividing a person's weight in kilograms by the square of their height in meters (kg/m<sup>2</sup>).

During pregnancy, there is an association between women with a BMI  $\geq 30$  and an increased chance of maternal and neonatal morbidity and mortality. Identification of women with a BMI  $> 30$  is essential in the delivery of safe, effective midwifery care and referral pathways.

Advice on weight and lifestyle should be given during preconception counselling or contraceptive consultations. Weight is best optimised pre-pregnancy.

## 2. Objective

The overall objective is the provision of safe and effective care to a woman with a raised Body Mass Index (BMI)  $\geq 30$ kg/m in pregnancy, supporting informed decision-making.

## 3. Definitions

- **PTHB** – Powys Teaching Health Board
- **BMI** – Body Mass Index

## 4. Safeguarding

If any safeguarding concerns or significant risk factors are identified for a child or young person/vulnerable adult (\*delete as appropriate), practitioners must follow Wales Safeguarding Procedures (2019) and SGP036 Safeguarding Policy [Policies & Written Control Documents - SGP 036 Safeguarding Policy.pdf \(sharepoint.com\)](#) . Advice and support concerning any safeguarding issue can be sought from PTHB Safeguarding Team via the Safeguarding Hub on 01686 252806 or email [PowysTHB.Safeguarding@wales.nhs.uk](mailto:PowysTHB.Safeguarding@wales.nhs.uk) (Monday-Friday 09:00-17:00, excluding Bank Holidays). Outside of office hours, Local

Authority can be contacted on 0345 0544 847 or contact Silver on Call.

All registered practitioners should access appropriate safeguarding supervision and training as per guidance. [Safeguarding Supervision \(sharepoint.com\)](#).

## 5. Role and Responsibilities

### 5.1 Head of Department

The Head of the Department must:

- Ensure all staff read and understand this procedure.
- Arrange regular review to monitor compliance with this procedure.

### 5.2 Midwives

All midwives working in Powys hold a recognised midwifery qualification.

Each midwife has responsibility to:

- Ensure this guideline is followed.
- Maintain their own knowledge and skills to advise on the health benefits of weight management and risks of being overweight before, during and after pregnancy through self-study and mandatory training.
- Ensure safe and effective care is provided to the mother and baby.

## 6. Background

Refer to Weight Management before, during and after Pregnancy (NICE, 2010) guidance for helpful information to discuss with women.

There is no recent updated guidance on recommended weight gain in pregnancy, however the Institute of Medicine (2009) state that women with a BMI over 30 kg/m<sup>2</sup> should gain no more than 5-9kgs in pregnancy. Focus should be around health promotion with regards diet and lifestyle over weight gain. Information can be shared with women using the RCOG patient information leaflet 'Being overweight in pregnancy and after birth'.

Women with a raised BMI ( $\geq 30$ kg/m) are recognised to be at greater risk of a variety of pregnancy-related complications compared with women with a normal BMI, including

- Cardiac disease
- Pre-eclampsia
- Gestational diabetes
- Venous thromboembolism
- Dysfunctional labour
- Shoulder dystocia
- Caesarean birth
- Wound infection
- Postpartum haemorrhage
- Reduced breastfeeding rates
- Maternal death and morbidity

Babies born to mothers with a raised BMI are also at an increased chance of:

- Congenital abnormalities, including neural tube defects
- Prematurity
- Stillbirth
- Neonatal death

Inform women that the ability to diagnose fetal abnormality by ultrasound scan can be more difficult where there is a higher BMI. In addition to the increased risk of incidence and diagnosis of congenital abnormality there may be the need for longer ultrasound appointments and need for re-scan to optimise image views and quality.

## **7. Antenatal Period**

For **all** women at **booking**:

- Measure height and weight and record in the handheld records
- BMI worked out accurately (kg/m<sup>2</sup>)
- Signpost all women to the 'Foodwise in Pregnancy' App
- Discuss diet and healthy lifestyle with all women referring them to the individualised recommended weight gain in pregnancy (see chart below).

<b>Prepregnancy BMI</b>	<b>Total Weight Gain</b>	
	<b>Range in kg</b>	<b>Range in lbs</b>
Underweight (< 18.5 kg/m <sup>2</sup> )	12.5–18	28–40
Normal weight (18.5–24.9 kg/m <sup>2</sup> )	11.5–16	25–35
Overweight (25.0–29.9 kg/m <sup>2</sup> )	7–11.5	15–25
Obese (≥ 30.0 kg/m <sup>2</sup> )	5–9	11–20

*Table: Institute of Medicine Pregnancy Weight Gain (2009)*

- At 36 weeks gestation offer to reweigh all women, record the measurement in the handheld record and whether weight gain is within the normal range.
- Do **not** recalculate BMI.
- Where there is weight gain above recommendations at any BMI use this as an opportunity to reinforce health promotion advice around healthy diet and lifestyle, including postnatally.

### **7.1 BMI ≥30 kg/m<sup>2</sup>**

- **Advise weight gain should be no more than between 5 – 9 kgs in pregnancy .**
- Recommend 5mg of folic acid until 12 weeks gestation (increased risk of Neural Tube Defect) and issue in line with PGD if appropriate.
- Recommend 10 micrograms of vitamin D daily.
- Oral glucose tolerance test to be offered between 24 and 28 weeks gestation.
- Management plan documented in clients held notes and reviewed at each antenatal appointment.
- Basic nutrition and healthy lifestyle advice given to all women by Midwife.
- Offer referral to the National Exercise Referral Scheme (NERS) if available locally.
- Discuss bumps to buggy walks and inform of availability locally.
- Venous thromboembolism (VTE) assessment should be recorded in handheld records and reviewed at every midwifery contact. Appropriate obstetric referral should be made if there is a high risk of VTE.

- If one or more risk factors for pre-eclampsia identified, refer early for obstetric review and recommend Aspirin 150mg as per Powys Guideline MAT 055.
- Discuss increased risks including pre-eclampsia, gestational diabetes, potential for poor ultrasound visualisation of baby, delay in labour progress, shoulder dystocia, emergency caesarean birth and postpartum hemorrhage.
- If there is weight gain above recommendations at the 36 week reweigh use this as an opportunity to reinforce health promotion advice around healthy diet and lifestyle, including postnatal considerations.

The 36-week weight can be used as a reference to determine manual handling requirements (including equipment and personnel) and consideration of tissue viability around the time of labour and birth.

- Do not recalculate BMI at 36 weeks.

## **7.2 BMI $\geq$ 35kg/m<sup>2</sup>**

### **In addition to the above:**

- Measure blood pressure using an appropriately sized cuff (document size of cuff in notes).
- Offer referral for serial growth scans from 28 weeks gestation as per Powys Guideline MAT 084 Small for Gestational Age and Fetal Growth Restricted Babies – Antenatal Management – All Wales guideline (2021).
- Referral to consultant for review and plan of care.
- Recommend birth at DGH unless a multiparous woman with a previous vaginal birth with normal glucose tolerance test and normal growth scans can birth in a midwifery led setting without an obstetric review or clinical information sharing form (CIS).
- Individual assessment for manual handling risk assessment is advised for women with a BMI  $\geq$ 35. If planning a Powys birth, ensure this assessment takes place in the third trimester.

## **7.3 BMI $\geq$ 40kg/m<sup>2</sup>**

### **In addition to the above:**

- Recommend referral for obstetric-led care and anaesthetic review

## 8. Labour

In the absence of other obstetric or medical indications, obesity alone is not an indication for induction and care offered should encourage and support the spontaneous onset of labour.

- Primiparous women with a BMI  $\geq 35\text{kg/m}^2$  are recommended to birth in a DGH. Multiparous women, with a previous vaginal birth and a BMI up to 39.9, with a normal glucose tolerance test and normal growth scans, are recommended to birth in a midwifery led setting.
- Women choosing to birth in Powys outside of recommendations should have a clinical information sharing (CIS) form completed and circulated by their named midwife with a detailed management plan in their hand-held antenatal records. The plan should include risk assessments and the risks discussed and documented.
- Women with a BMI  $\geq 35\text{kg/m}^2$  are at increased risk of shoulder dystocia and postpartum hemorrhage. Midwives should be prepared for potential obstetric emergencies.
- Recommend active management of the third stage of labour to reduce the risk of postpartum hemorrhage.
- A manual handling risk assessment should be completed in the third trimester outlining the weight of the mother and the appropriate equipment, e.g. beds.
- A pool birth risk assessment should be completed, including an evacuation plan (MAT 070).

The recommended method of fetal monitoring during labour for raised BMI alone is intermittent auscultation. This carries with it a number of benefits, including the freedom of the woman to mobilise, optimising labour progress. Discussion regarding the method and timing of IA (i.e. immediately after a palpated contraction) and potentially needing to change position to auscultate the fetal heart is recommended.

Where there is difficulty performing IA in labour, recommend immediate transfer to the obstetric unit for continuous electronic fetal monitoring.

## 9. Postnatal

- Recommend breastfeeding and ongoing breastfeeding support.
- Early mobilisation to be encouraged.

- Assess Maternal Early Warning Score (MEWS) at the first contact. Thereafter where the mother feels unwell.
- VTE assessment and consideration of thromboprophylaxis should be completed at each Midwifery contact in line with national guidance.
- Plan postnatal visits according to the woman's needs.
- Women diagnosed with gestational diabetes should have a fasting blood glucose blood test at 6 weeks postnatal with the GP and regular follow up to screen for type 2 diabetes.
- Women diagnosed with gestational diabetes should have annual screening for cardio-metabolic risk factors.
- Offer advice regarding planning for a future pregnancy including weight management, BMI, pre-conceptual folic acid and healthy diet and lifestyle.
- Discuss availability of Bumps to Buggy walks to encourage exercise.
- Offer referral to National Exercise Referral Scheme if not already accepted previously – postnatal women with a BMI > 30 kg/m<sup>2</sup> can access this at any available site.
- Discuss with the Health visitor the woman's raised BMI and any weight management recommendations as part of routine hand over of care.
- Advice should be given to see GP regarding weight reduction and lifestyle.

## **10. Monitoring Compliance / Audit**

Compliance will be monitored by the Datix system of reporting, and any issues raised through training days. Themes will also be identified through record keeping audits conducted each year, which equates to 10% of total records over a 12-month period.

## **11. Review and Change Control**

This document will be reviewed every three years or earlier should audit results or changes to legislation / practice within PTHB indicate otherwise.

## **12. References / Bibliography**

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