

| <b>Management of pregnant women/people who have undergone previous bariatric surgery</b>  |   |
|---|---|
| <b>Summary statement: How does the document support patient care?</b>   | To provide clear guidance for staff in the management of women/people who are pregnant and have undergone gastric bypass/gastric band or sleeve gastrectomy   |
| <b>Staff/stakeholders involved in development:</b>  | Obstetric Consultants, Senior Midwifery Staff and Anaesthetists.  |
| <b>Division:</b>  | Women and Children's  |
| <b>Department:</b>  | Maternity   |
| <b>Responsible Person:</b>  | Chief of Services   |
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| <b>For use by:</b>  | All Medical and Maternity staff involved in the care and subsequent management of pregnant women/people who have undergone gastric bypass/gastric band or sleeve gastrectomy  |
| <b>Purpose:</b>   | To provide clear guidance in the recognition of women/people who have undergone gastric bypass/gastric band or sleeve gastrectomy and the care during pregnancy, labour and post-natal period.  |
| <b>This document supports: Standards and legislation</b>  | NICE 2010 Weight Management before during and after pregnancy PH27<br>NICE 2014 Obesity<br>National Bariatric Surgery Register, BOMSS BOMSS 2020 Guidelines. Pregnancy after BS: Consensus recommendations for periconception, antenatal and postnatal care Shawe et al 2019 Obesity review |
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| 3.0     | August 2022 | Dr S.Attersley-Smith, E. Mathews, Dr S. Stone, Obstetric Consultant<br>Dr K Shipman, Consultant Chem Path | Archived | 3 year review. Main updates in: <ul style="list-style-type: none"> <li>• Blood tests</li> <li>• Supplementation and replacement of deficiency</li> <li>• Screening for diabetes</li> <li>• Checklists added to appendices</li> </ul> |
| 3.1     | Oct 2022    | N. Bailey, Diabetes Specialist Midwife  | LIVE     | Correction to point 13.0. GDM fasting blood glucose level 5.3mmol/L.   |

**The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician.**  
**If in doubt contact a senior colleague or expert.**

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# **Management of pregnant women/people who have undergone previous bariatric surgery**

## **1.0 Aim**

To minimise complications and ensure optimal care for pregnant women/people who have undergone bariatric surgery. To act as a resource for staff caring for these women/people.

## **2.0 Scope**

This guideline is intended for use by midwives, medical and support staff.

## **3.0 Responsibilities**

Midwives & Obstetricians have a responsibility to:

- Access, read, understand and follow this guidance.
- Use their professional judgement in application of this guideline.

Management have a responsibility to ensure:

- The guideline is reviewed as required in line with Trust and National recommendations.
- The guideline is accessible to all relevant staff.

## **4.0 Abbreviations used in this guideline**

|  |                                       |
|--|---------------------------------------|
| <b>BMI</b> - Body Mass Index           | <b>GTT</b> - Glucose Tolerance Test   |
| <b>LFTs</b> - Liver Function Tests     | <b>U&amp;E</b> -Urea and Electrolytes |
| <b>FBC</b> - Full Blood Count          | <b>BD</b> - Twice daily               |
| <b>mg</b> - Milligrams                 | <b>mcg</b> - Microgram                |
| <b>IM</b> - Intramuscular Injection    | <b>IU</b> - International Unit        |
| <b>mmol/L</b> - millimoles per litre   | <b>BS</b> - Bariatric Surgery         |
| <b>RYGB</b> - Roux-en-Y Gastric Bypass |                                       |

## **5.0 Introduction**

NICE recommends that patients with a BMI >40 kg/m<sup>2</sup> or BMI>35 kg/m<sup>2</sup>plus co-morbidity should be considered for bariatric surgery, where lifestyle modifications alone or in combination with drug therapies have not been effective in providing significant and sustained weight loss.<sup>1</sup> It is also recommended that a follow up care package to be offered to NHS patients undergoing bariatric surgery for a minimum of 2 years. Further follow up is recommended annually with the GP.<sup>1</sup>

Adherence to this can be variable and there is no such provision for individuals having bariatric procedures performed privately.

The main bariatric procedures undertaken on women/people in the UK are the gastric band, Gastric Sleeve and Gastric bypass – outlined below.

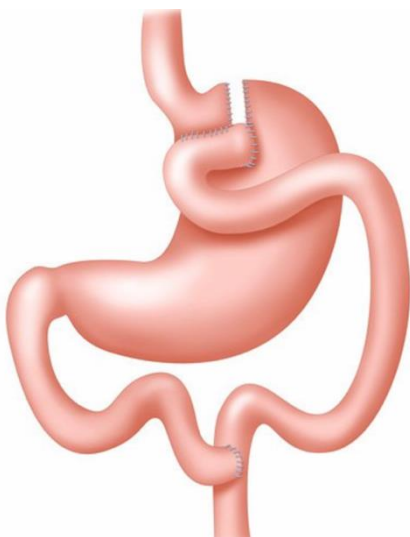
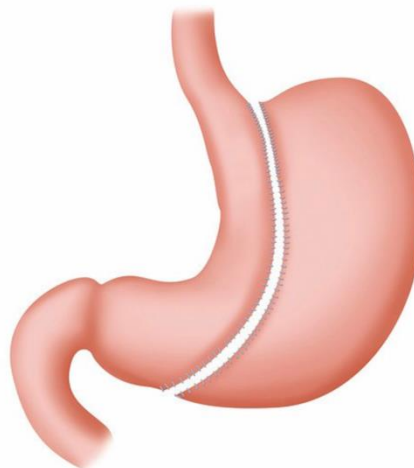
#### **Gastric band**

Cuff placed around upper section of stomach to create small pouch  
 Cuff can be inflated and deflated



#### **Sleeve Gastrectomy**

Large portion of stomach removed surgically



#### **Gastric Bypass**

Small stomach pouch created, small bowel brought up and attached to this pouch  
 Therefore large portion of stomach and some small bowel “bypassed”

Images taken from NHS.uk website bariatric procedures types - <https://www.nhs.uk/conditions/weight-loss-surgery/types/> accessed 11/7/2022.

The most common procedures performed in the NHS are the gastric bypass and sleeve gastrectomy.

Weight loss with bariatric surgery should not be assumed to mean patients have a nutritionally improved diet.

Patients are no longer provided with vitamin supplements on prescription after bariatric surgery; therefore access or adherence to necessary vitamins and mineral supplementation cannot be assumed.

All procedures have the potential to cause women/people to experience vomiting or regurgitation.

Patients after bariatric surgery have increased risk to develop nutrient deficiencies notably iron, vitamin B12, calcium, vitamin D, folic acid, zinc, copper, selenium and thiamine

Consensus guidelines recommends postponing pregnancy until stable weight is achieved after bariatric surgery. Typically this is 1 year after sleeve and bypass and 2 years after band.

## 6.0 Booking antenatal appointment

Antenatal patients that have undergone bariatric surgery must be asked the following questions by the booking midwife, and the answers documented in their notes:

1. What type of bariatric surgery has been performed?
2. Confirm adherence to recommended vitamin / mineral supplements.
3. Further details re surgery - Year performed/Name of surgeon/Name of centre.
4. Does the woman/person have their discharge paperwork from bariatric surgery?  
If the woman/person does not have a copy of her discharge paperwork (indicating the details of their surgery) they should be asked to get a copy from their bariatric team and should bring this to the first consultant antenatal clinic and to all appointments.
5. Have they attended follow up, is it still ongoing and do they have leaflet 'Dietary Advice during Pregnancy following Weight loss Surgery'? Most up to date version of leaflet available from [Bariatric surgery FAQs](#)  
(Dietitian, Bariatric Surgery Service St Richards Hospital 01243 831655 or Ext 35201).
6. Who is current follow-up with – for instance Bariatric Team, GP or metabolic/endocrine clinic.

All these details must be on the antenatal summary sheet.

## 7.0 Antenatal Care

If at the first consultant antenatal appointment the team have not seen written confirmation of the type of bariatric surgery that the woman/person has undergone, the doctor who reviews them should use [Appendix 1](#) to contact the patient's bariatric team asking them to send the required details. This must be documented in the woman/person's notes.

To try and avoid confusion general concepts for care will be discussed, checklist have been created by type of procedure – it is suggested the relevant checklist is printed and attached to the patients maternity notes. (See [Appendix 2: Gastric Band](#), [Appendix 3: Gastric Sleeve](#), [Appendix 4: Gastric Bypass](#))

### 7.1 Overview of care

All patients with a history of bariatric surgery require:

- Referral to consultant antenatal clinic.
- Referral to the anaesthetic team.
- To follow the BMI pathway if BMI>30 (despite surgery BMI may still be raised).
- Supplements – all women/people should be taking a minimum of a pregnancy multivitamin –see [section 9](#) for full list of supplements per procedure.
- Additional screening for nutritional deficiencies.
- Additional growth scans to ensure no evidence of intrauterine growth restriction.
- Screening for diabetes – Consensus document recommends all patients who have had bariatric surgery to be screened for GDM, but refer to diabetes specialist midwives for monitoring instead of GTT.

## 8.0 Blood tests

Nutritional deficiencies are the area of greatest concern in women/people with a history of Bariatric Surgery (BS). They are both detrimental to the woman/person's health and can also lead to in-utero growth restriction in the foetus. The challenge comes in monitoring and responding to nutritional deficiencies in the pregnancy due to the lack of normal ranges for many of the nutrients in pregnancy and the lack of guidance on replacement. Due to the above challenges a standardised regime cannot be provided.

Ideally women/people with a history of BS would attend pre-conception counselling and any nutritional deficiencies would be addressed prior to conception.

Important factors to establish during first antenatal contact are:

- What supplementation they have been recommended and are they taking it all as prescribed?
- Have they ever had (do they have) any known micronutrient deficiencies?
- When did they last have micronutrient levels checked?
- Do they have any additional factors likely to hinder absorption of micronutrient supplementation either pregnancy specific, e.g. hyperemesis, or pre-existing, e.g. fat malabsorption?

The following BAR bloods should be performed at the Booking appointment:

| BAR Bloods |               |
|------------|---------------|
| Blood test | Bottle colour |
| FBC        | Purple        |
| LFTs       | Yellow        |
| Ferritin   | Yellow        |
| U&Es       | Yellow        |
| Folate     | Yellow        |
| B12*       | Yellow        |
| Calcium**  | Yellow        |

Additional blood tests may be required and will be determined by the maternal medicine consultant at their first appointment when an individualised plan for nutritional screening for the remainder of the pregnancy will be made.

*\*NB If woman/person is having regular IM Vitamin B12 every 3 months then screening for B12 not required.*

*\*\*Check PTH if corrected calcium is abnormal.*

Consider checking Vitamin A in gastric bypass or sleeve. Vitamin A is unstable and light sensitive therefore patient must be bled in hospital.

Selenium, zinc, copper and Vit D can be checked annually unless any concerns.

Patients who have had DS/BPD may need serum vitamin E, Vitamin A, Vitamin K1 and PIVKA-II levels monitored. These women/people will require dietician input.

Please use ICE order comms to request blood tests which will provide instructions on tube type and specimen stability. Blood references and containers can also be found here: [Table of some of the tests and turnaround times.pdf](#)

## 9.0 Supplementation

The table below highlights the recommended supplements (as per British Obesity and Metabolic Society 2020) to be taken by women/people who are pregnant or planning pregnancy after bariatric surgery. These have been divided by procedure. This recommendation is irrespective of time since surgery or current BMI.



|                                  | Band                             | Sleeve  | Bypass  |
|----------------------------------|----------------------------------|---|---|
| <b>Multivitamin and mineral*</b> | Yes                              | Yes   | Yes   |
| <b>Folic Acid</b>                | 5mg                              | 5mg   | 5mg   |
| <b>B12</b>                       | Not routinely                    | Injection every 3/12  | Injection every 3/12  |
| <b>Iron</b>                      | Not routinely                    | Ferrous fumarate (210mg) tablet BD  | Ferrous fumarate (210mg) tablet BD  |
| <b>Calcium and Vitamin D</b>     | Not routinely above multivitamin | Encourage dietary sources of calcium. Take calcium tablet providing 500-1000mg (take with food) and vitamin D supplement providing 2000-4000 IU (50-100mcg) per day | Encourage dietary sources of calcium. Take calcium tablet providing 500-1000mg (take with food) and vitamin D supplement providing 2000-4000 IU (50-100mcg) per day |

It is recommended that all pregnant women/people take a pregnancy specific multivitamin. The retinol form of Vitamin A should be avoided during pregnancy due to teratogenicity risk. It is especially important to ensure that women/person who have undergone any form of bariatric surgery are taking pregnancy multivitamins. The multivitamin preparations recommended for pregnancy after bariatric surgery are:

- Pregnacare OD
- Seven seas Pregnancy OD
- Forceval Capsule OD (not soluble)

*Note:* although Pregaday can be used for iron supplementation as only contain 350mcg of folate is not adequate supplementation of folic acid in those requiring 5mg folic acid.

Women/people taking calcium/vitamin D/iron/B12 supplements prior to pregnancy should be encouraged to continue them.

Encourage dietary calcium intake. Calcium Food Fact Sheet, British Dietetic Association (bda.uk.com)

### Folate

Women/people with a history of bariatric surgery and BMI>30 or T2DM should be prescribed folate 5mg daily, ideally pre-conceptually or as early in pregnancy as possible.

Check B12 level before starting folic acid supplementation (if not on B12 injections regularly or had assessment up to 6 months before).

### 9.1 Replacement of deficiency

| Vitamin or mineral | Definition of deficiency  | First-line treatment  | Escalation of treatment   |
|--------------------|---|---|---|
| <b>Iron</b>        | Ferritin <30 <sup>7</sup>   | Oral iron (ferrous fumarate, pregaday) max 1 tablet BD  | Iron infusion (consider as first-line if late 3 <sup>rd</sup> trimester)  |
| <b>Folate</b>      | <3.4 ug/L <sup>6</sup>  | 5mg Folic Acid daily  |   |
| <b>B12*</b>        | <130 ng/L <sup>6</sup><br>If low normal i.e 130-350 <b>MMA</b> level is checked by lab at Worthing/SRH              | IM B12, every other day (5 doses total)   | Maintenance dose every 3/12   |
| <b>Vitamin D</b>   | < 37.5nmols <sup>4</sup>  | Colecalciferol 50,000IU weekly for 6 weeks and then maintenance of 800 – 2000 IU daily <sup>4</sup>   | Consider IM Vit D if no improvement with high dose oral supplementation (after 12/40) ergocalciferol 7.5mg IM. D/w Maternal Medicine prior to prescribing |
| <b>Calcium</b>     | 2.2 – 2.6 mmol/L<br>Check PTH if abnormal   | Encourage dietary sources of calcium, take calcium tablet with food providing 500-1000mg calcium and Vitamin D tablet providing 2000-4000IU (50-100mcg)<br><br>Adcal D3 chewable, Cacit D3 or calcichew D3 forte – all bd | If calcium is low despite taking the usual recommendation of supplements trigger more investigations with endocrinology.                                  |
| <b>Copper</b>      | < 20 umol/L <sup>6</sup>  | Seek input from Bariatric Dietitians for advice   |   |
| <b>Zinc</b>        | < 8 umol/L <sup>6</sup>   | seek input from Bariatric Dietitians for advice   |   |
| <b>Selenium</b>    | < 1.4 umol/L in 1 <sup>st</sup> trimester <sup>6</sup><br>< 0.9 in 2 <sup>nd</sup> and 3 <sup>rd</sup> <sup>6</sup> | 2-3 brazil nuts daily <sup>5</sup>  |   |
| <b>Vitamin A</b>   |   | Vitamin A Treat with 10,000 – 25,000 IU oral daily for 1-2 weeks until clinical improvement. D/W Maternal medicine before prescribing   |   |
| <b>*Thiamine</b>   | If suspicious of thiamine deficiency (e.g hyperemesis) do not wait for a blood                                      |   |   |

|  |  |
|--|--|
|  | test. Prescribe Thiamine 100mg tds and Vitamin B Co-Strong 1- 2 tds<br>For those unable to tolerate thiamine orally or clinical suspicion of acute deficiency IV Pabrinex SHOULD BE GIVEN. |
|--|--|

\*Seek urgent specialist advice if there is neurological involvement such as unexplained sensory and/or motor and gait symptoms

## 10.0 Ultrasound surveillance

Due to changes in absorption of nutrients following bariatric surgery, babies are theoretically at increased risk of growth restriction in the pregnancy. The degree of concern is dependent on type of surgery and interval between surgery and conception but additional antenatal growth ultrasound scans should be considered for patients with a history of bariatric surgery.

The minimum recommended in all women/people with a history of bariatric surgery is **4 weekly scans from 32 weeks gestation**. Increased surveillance may be required for other maternal/fetal reasons or if growth restriction is suspected.

## 11.0 Gestational weight gain

Women/people after Bariatric surgery are advised as to what is a healthy weight gain in pregnancy based on their BMI at booking (alongside general population)<sup>2</sup>. Energy needs increase by 200 kcal only in the 3rd trimester.

| BMI start pregnancy | Guide during pregnancy | Average weekly gain rate in second and 3 <sup>rd</sup> trimesters |
|---------------------|------------------------|---|
| < 18.5              | 12.5-18                | 0.5 kg/wk   |
| 18.5-24.9           | 11.5-16                | 0.4 kg/wk   |
| 25 – 29.9           | 7-11.5                 | 0.3 kg/wk   |
| 30 and over         | 5-9                    | 0.2 kg/wk   |

## 12.0 Anaesthetic review

All women/people who have undergone **any type** of bariatric surgery irrespective of booking BMI should be referred for an anaesthetic assessment in the third trimester.

## 13.0 Screening for diabetes

Women/people with a history of bariatric surgery require screening for gestational diabetes.

Screening for gestational diabetes in patients who have undergone **Gastric bypass/Sleeve gastrectomy** should be performed by carrying out blood glucose profiles for a week between 26-28 weeks' gestation. Refer to the pregnancy diabetic team to arrange by email: [uhsussex.diabetesmaternity@nhs.net](mailto:uhsussex.diabetesmaternity@nhs.net). This should include a fasting glucose level and 1hr post prandial blood glucose level to be carried out with every meal for one week. The patient will have these profiles reviewed by the diabetes specialist midwives.

A diagnosis of gestational diabetes made if the fasting glucose is 5.3mmols or more, or the 1 hour post prandial glucose is >7.8mmol/L. These patients will then be managed regarding their gestational diabetes via the diabetic antenatal clinic.

Screening for gestational diabetes in patients who have undergone **gastric band** can be performed using the standard glucose tolerance test unless the woman/person has a past history of dumping syndrome.

## 14.0 Procedure specific care

If the woman/person has had bariatric surgery less than 1 years ago they require special consideration due to concern about rapid weight loss, reduced nutritional intake and poorer pregnancy outcome.

For ease of implementation and clarity on the antenatal schedule for each woman/person a checklist has been prepared by procedure, these can be found in appendix II. These checklists are not intended to be prescriptive but cover the salient aspects of antenatal care which should be considered in women/people with a history of bariatric surgery.

### 14.1 Non-standard procedures (e.g. BPD/duodenal switch)

Senior obstetrician to formulate individual schedule of care. Increased risk of nutritional deficiencies. Recommend specialist dietetic input from booking, please contact team via Ext 31655

## 15.0 Antenatal admissions

The main potential complications of bariatric surgery to be familiar with are listed below, they are uncommon, but can be serious. Please liaise with bariatric surgery department for management.

- Gastric band – band migration, band slippage, gastric prolapse, stomal obstruction, pouch dilatation, gastric erosion and necrosis.
- Sleeve gastrectomy - gastric erosion and necrosis, obstruction.
- Gastric bypass – internal hernia (8% in pregnancy)<sup>3</sup> leading to intestinal obstruction, perforation, maternal death and intrauterine death.
- Reactive hypoglycaemia.

### 15.1 Internal hernia

Any patient presenting with abdominal pain and/or vomiting with a history of bariatric surgery (particularly gastric bypass), should be managed with extreme caution. Obstetric consultant review within the first 24hrs of admission is mandatory. Blood tests and ultrasound are unlikely to help make the diagnosis. Urgent surgical referral will reduce the chance of misdiagnosis.

The incidence of internal hernia after RYGB (Roux-en-Y Gastric Bypass) during pregnancy is 8%. One third of patients who have had a RYGB and present with abdominal pain have an

internal hernia diagnosed and has a high incidence of maternal and foetal death. Care providers should assume small bowel obstruction unless otherwise advised. We recommend all women/people with RYGB are counselled on risks and symptoms of internal hernia and seek medical assistance without delay.

## 15.2 Hyperemesis/vomiting in pregnancy

Please be aware that due to nutritional deficiencies women/people with a history of bariatric surgery may become unwell more quickly if they have hyperemesis or severe vomiting at any point in pregnancy. Of particular concern is thiamine deficiency and subsequent Wernicke's Encephalopathy. Prescribe vitamin B Co-Strong 2 TDS and Thiamine 100mg TDS for any patient with chronic vomiting. There should be a low threshold for escalating to a Pabrinex infusion. Refer to [CG13003 Management of hyperemesis guideline](#).

### Gastric Band and vomiting:

Patient should be counselled on risks and symptoms of band slippage due to vomiting and increased intraabdominal pressure during pregnancy. The patient should be directed to contact the Bariatric Surgery Service 31655 for advice re defiling the band.

## 16.0 Labour and birth

There is no medical reason that pregnant women/people with previous bariatric surgery require different management with induction, labour or birth.

Women/people with BMI  $>30 \text{ kg/m}^2$  should be managed in line with the BMI pathway and their individualised needs.

## 17.0 Postnatal care of the mother/birthing parent

- Routine post-natal care
- No special diet is required
- Thromboprophylaxis as indicated according to the VTE risk assessment
- Post-natal contraception advice
  - Avoid CHC
  - POP may not be fully absorbed, therefore only recommend if no other method Safe/acceptable
  - Encourage use of LARC

## 18.0 Baby

The baby should stay with the mother/birthing parent unless additional neonatal care is required. The diabetes pathway must be followed for babies of mothers/birthing parents with diabetes antenatally. Breastfeeding should be encouraged and ensure a feeding assessment is completed and documented.

## Audit

Suggested auditable points:

Booking antenatal appointment – is the following documented on the Antenatal Summary sheet:

- What type of bariatric surgery has been performed?
- Confirm adherence to recommended vitamin / mineral supplements.
- Further details re surgery - Year performed/Name of surgeon/Name of centre.
- Does the woman/person have their discharge paperwork from bariatric surgery.
- Have they attended follow up, is it still ongoing and do they have leaflet 'Dietary Advice during Pregnancy following Weight loss Surgery'?
- Who is current follow-up with – Bariatric Team, GP or metabolic/endocrine clinic?

Antenatal Care – has the following been performed:

- Referral to consultant antenatal clinic.
- Referral to the anaesthetic team.
- Screening for diabetes.
- Have the relevant blood tests been performed at Booking, 28 weeks and 34 week?
- Has the correct supplementation been advised?
- Have growth scans been performed 4 weekly from 32 weeks?

## References

1. NICE (2014) Obesity: identification, assessment and management of overweight and obesity in children, young people and adults. November 2014.
2. NICE (2010) guideline Weight management before, during and after pregnancy PH27.
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10. Pregnancy after Bariatric Surgery: Balancing Risks and Benefits \_A-M Carreau E.T. al, Canadian Journal of Diabetes, 2017-08-01, Volume 41, Issue 4, Pages 432-438
11. RCOG (2018) Green top guideline 72: Care of women with obesity in pregnancy. Published November 2018
12. Consensus recommendations for periconception, antenatal and postnatal care Shawe et al 2019 Obesity review

## Appendix 1: Letter to bariatric surgeon

Address

Date:

Dear

Re:

This women/person is currently.....weeks pregnant and has undergone a weight loss procedure in your centre prior to pregnancy. I would be grateful if you could provide me with the details of her previous surgery, in particular the following:

Date of bariatric procedure:

Type of operation:   Gastric band  
                              Sleeve gastrectomy  
                              Gastric bypass  
                              Other (with details)

Weight and BMI prior to surgery:

Any known complications or nutritional problems:

Regards



## Appendix 2: Gastric Band checklist

| <b>Gastric Band</b>   |                                |
|---|--------------------------------|
| When caring for women/people who have had a gastric band please consider the following schedule of care: if any items are being omitted please document this and the reasons why        |                                |
| <b>Action</b>   | <b>Done/not done &amp; why</b> |
| Referral to consultant antenatal clinic.  |                                |
| Referral to the anaesthetic team.   |                                |
| Referral to Bariatric Surgery Centre. Contact Ext 31655.<br>Gastric bands may be deflated during pregnancy if required. If having problems with eating enough – band should be deflated |                                |
| To follow the BMI pathway as appropriate including folic acid   |                                |
| Supplements – Should be taking a multivitamin and mineral safe for pregnancy (see <a href="#">section 9.0</a> ) and any other pre-pregnancy supplements as long as deemed safe.         |                                |
| Blood tests – FBC and ferritin at booking, other tests on an individualised basis only  |                                |
|   |                                |
|   |                                |
|   |                                |
| 4 weekly growth scans from 32/40.   |                                |
| Screening for diabetes – GTT safe   |                                |

### Appendix 3: Gastric Sleeve checklist

| <b>Gastric Sleeve</b>  |                                |
|--|--------------------------------|
| When caring for women/people who have had a gastric sleeve please consider the following schedule of care: if any items are being omitted please document this and the reasons why   |                                |
| <b>Action</b>  | <b>Done/not done &amp; why</b> |
| Referral to consultant antenatal clinic.   |                                |
| Referral to the anaesthetic team.  |                                |
| To follow the BMI pathway as appropriate including folic acid  |                                |
| Supplements:   |                                |
| <ul style="list-style-type: none"> <li>• Multivitamin safe for pregnancy <a href="#">section 9.0</a>)</li> <li>• Iron</li> <li>• B12 injection (frequency as per pre-pregnancy)</li> <li>• Any other pre-pregnancy supplements as long as deemed safe</li> </ul> |                                |
| Blood tests:   |                                |
| Booking  |                                |
| 28 weeks   |                                |
| 34 weeks   |                                |
| 4 weekly growth scans from 32/40.  |                                |
| Screening for diabetes – refer to diabetes specialist midwife to organise BM monitoring  |                                |

## Appendix 4: Gastric Bypass checklist

| <b>Gastric Bypass</b>  |                                |
|--|--------------------------------|
| When caring for women/people who have had a gastric bypass please consider the following schedule of care: if any items are being omitted please document this and the reasons why   |                                |
| <b>Action</b>  | <b>Done/not done &amp; why</b> |
| Referral to consultant antenatal clinic.   |                                |
| Referral to the anaesthetic team.  |                                |
| To follow the BMI pathway as appropriate including folic acid  |                                |
| Supplements:   |                                |
| <ul style="list-style-type: none"> <li>• Multivitamin safe for pregnancy <a href="#">section 9.0</a>)</li> <li>• Iron</li> <li>• B12 injection (frequency as per pre-pregnancy)</li> <li>• Any other pre-pregnancy supplements as long as deemed safe</li> </ul> |                                |
| Blood tests:   |                                |
| Booking  |                                |
| 28 weeks   |                                |
| 34 weeks   |                                |
| 4 weekly growth scans from 32/40.  |                                |
| NB if gastric bypass performed with 2 years of conception additional scans may be required (proposed schedule every 4 weeks from 28/40).   |                                |
| Screening for diabetes – refer to diabetes specialist midwife to organise BM monitoring  |                                |