Guideline for the Care of Childbearing Women with BMI >30 in Pregnancy

Introduction

Obesity rates in the UK have roughly doubled over the past twenty years, with 27% of women between the ages of 16 and 24 years being overweight or obese, as defined as having a BMI of > 35 (Obesity Statistic UK 2005). According to the findings of our local audit of women booked between August 2007 and January 2008, 12% were obese. Obesity in pregnancy is associated with an increased incidence of complications in the ante, intra and postpartum periods. These include miscarriage, fetal abnormality (particularly neural tube defect); UTIs, gestational diabetes, hypertension, pre-eclampsia; stillbirth (particularly late in pregnancy), slow and obstructed labour; Caesarean Section, fetal macrosomia, early neonatal loss; postnatal complications including PPH and thrombo-embolism. In the long-term, obesity in pregnancy is associated with increased rates of obesity for mother and child (Hediger *et al* 1006; Lombardi *et al* 2005; Watkins *et al* 2003). The most recent CEMACH report demonstrated that obese pregnant women with a body mass index (BMI) > 30 are far more likely to die. More than half of all the women who died from *Direct* or *Indirect* causes, for whom information was available, were either overweight or obese. More than 15% of all women who died from *Direct* or *Indirect* causes were morbidly or super morbidly obese (CEMACH 2007).

The report recommended where possible, obese women should be helped to lose weight prior to conception or receiving any form of assisted reproductive technologies (ART) (CEMACH 2007) A small study looking at attitudes and expectations of pregnant women with a BMI of >35 identified that women wanted more information and support on the issue of weight management in pregnancy (Lythgoe 2005).

Practice Implications

Antepartum

- Individual management plan should be documented in hand held notes for all women particularly identifying women who require specialist equipment.
- All pregnant women with a booking BMI >30 should be provided with accurate and accessible information about the risks associated with obesity in pregnancy and how they may be minimised. Women should be given the opportunity to discuss this information. (Appendix 1) (Patient information leaflet why your weight matters during pregnancy and after birth).
- Accurate height and weight measurements are taken for all women and BMI calculated. If appropriate equipment is not available in the community setting, women should be referred to antenatal clinic.
- The result is recorded in the hand-held notes and her ‘high-risk’ status documented.
- For women with BMI >35, re-measurement of maternal weight at 36 weeks will allow appropriate plans to be made for equipment and personnel required during labour and delivery.
- Women are informed of the result, and its importance as a tool to ensure she is offered the appropriate care and support throughout the ante, intra and postpartum periods.
- A sensitive and supportive discussion takes place on weight management in pregnancy, for those women with a raised BMI (>40).
- Written information (‘Eating while you are pregnant’ FSA 2002) coupled with explanation and discussion is given, outlining a healthy diet for pregnancy, with regard to the woman’s cultural and social circumstances.

- Women with BMI>40 should have more frequent surveillance in line with pre-eclampsia guideline.
- Breastfeeding is advocated and encouraged.
- Referral to the Stop Smoking Midwife should be encouraged for women who smoke, and the benefits of stopping smoking to reduce risk factors explained.
- Referral is made to a consultant obstetrician as early as possible in pregnancy and booking is made for consultant-led care for women with a BMI of 35 and over
- An individual risk assessment regarding planned place of birth for women with a booking BMI of 30 – 34 should be made.
- All pregnant women with BMI>30 should be advised to take 5mg folic acid till first trimester of pregnancy and 10mcg of Vitamin D supplementation throughout pregnancy and breast feeding.
- Consider low-dose aspirin (75mg/day) in presence of additional clinical risk factors (other than obesity) for PET.
- Consider thromboprophylaxis in presence of additional clinical risk factors during the first trimester.
- Anomaly scan and serum screening for congenital abnormality.
- All women with BMI >40 should be referred for anaesthetic review and management plan for labour and delivery should be discussed and documented in the handheld notes.
- Referral to a dietician is offered. Referral should be made on Electronic Patient Record (EPR).
- If a woman is booked for induction of labour or CS, liaison should be made with Delivery Suite to ensure the availability of appropriate equipment e.g. wheelchair, hoist, delivery bed, operating table.
- An appropriate BP cuff is used at every antenatal consultation, including in the community. The cuff size should be documented in the medical records.
- The number of antenatal visits should reflect the woman's high-risk status.
- Women are referred for GTT at 24-28 weeks.
- Women with abnormal GTT are referred to the obstetric diabetic clinic.
- Women with a booking BMI >40 should have a documented assessment in the third trimester of pregnancy by an appropriately qualified professional to determine manual handling requirements for childbirth and consider tissue viability issues.
  This will be done by appropriately trained midwives in the antenatal clinic. (Training of midwives to be organised by Julie Dixon, Manual handling and risk assessment advisor).
  Risk assessment tool is being developed and will be incorporated in the hand held notes.
  Manual handling requirements include consideration of safe working loads of beds and theatre tables, the provision of appropriate lateral transfer equipment, hoists, and appropriately sized thromboembolic deterrent stockings (TEDS). (Please refer to **Manual Handling Plan of Care at the end of this guidelines)**
  There is also an increased risk of pressure sores when a woman may be relatively immobile and regular inspection of potential pressure areas is important. A formal assessment of this risk should be made using validated scoring tools, and appropriate plans put in place with regard to body positions, repositioning schedules, skin care and support surfaces. This is already incorporated in the handheld notes and needs to be used by the midwife taking care of the patient.
- Women with a booking BMI >30 should have an informed discussion antenatally about possible intrapartum complications associated with a high BMI, and management strategies considered. This should be documented in the notes.

I**ntrapartum**

- Individual management plan should be documented in hand held notes
- Women with a booking BMI >30 should have an individualised decision for VBAC (vaginal birth after caesarean) following informed discussion and consideration of all relevant clinical factors**.**
- Maintaining normality in labour reduces a woman's risk of significant morbility / mortality.
- In the absence of other obstetric or medical indications, obesity alone is not an indication for induction of labour and a normal birth should be encouraged
- Arrange for an ultrasound where there is any uncertainty over fetal presentation.
- Between 9 and 5pm Request for additional equipment can be made through labour ward manager.
- Liaison should be made with Bed Managers out of hours to ensure the availability of appropriate equipment e.g. wheelchair, hoist, delivery bed
- Moving and handling advisors should be consulted for advice if required liaise with the registrar / consultant regularly to keep them updated on progress of care.
- Women with a BMI >40 should have venous access established early in labour
- Consider taking Bloods on admission for FBC, Group and Save
- The Guideline for Fetal Monitoring is followed, with the application of an FSE to be considered as necessary.
- Ted stockings are offered.
- Consultant Obstetrician and Anaesthetists informed of woman's admission and early involvement sought as required. This communication should be documented by the attending midwife in the notes.
- Operating theatre staff should be alerted regarding any woman whose weight exceeds 120kg and who is due to have an operative intervention in theatre.
- An obstetrician and an anaesthetist at Specialty Trainee year 6 and above, or with equivalent experience in a non-training post, should be informed and available for the care of women with a BMI >40 during labour and delivery, including attending any operative vaginal or abdominal delivery and physical review during the routine medical ward round.
- Women with a BMI >40 who are in established labour should receive continuous midwifery care.
- Women undergoing caesarean section who have more than 2cm subcutaneous fat, should have suturing of the subcutaneous tissue space in order to reduce the risk of wound infection and wound separation.
- A Consultant Anaesthetist and Operating Department Practitioner must be informed if surgery is anticipated.
- Due to the increased risks inherent with high BMI (>40) labouring women the use of the pool for pain relief and labour is not recommended. Senior staff / Supervisors of Midwives should be involved in any discussion where there is a strong request.
- All women with a BMI >30 should be recommended to have active management of the third stage of labour. This should be documented in the notes.
- Women with a BMI >30 having a caesarean section have an increased risk of wound infection and should receive prophylactic antibiotics at the time of surgery.

Postnatal Care

- Individual management plan should be documented in postnatal care plan.
- Encourage early and regular ambulation.
- Ted stockings should be offered and worn for the duration of postnatal stay, regardless of mode of delivery
- The Guideline for the administration of anti-thrombo prophylaxis should be followed.
- All women with a BMI >40 should be offered postnatal thromboprophylaxis regardless of their mode of delivery.
- Midwives should offer on-going support and advocacy, whilst reinforcing health messages and emphasising the benefits of achieving a healthy BMI for future well-being, especially in subsequent pregnancies.
- Women with a booking BMI >30 should receive appropriate specialist advice and support antenatally and postnatally regarding the benefits, initiation and maintenance of breastfeeding.
- The 8 week postnatal check is a further opportunity to reinforce these messages.

Manual Handling Plan of Care

It is important that the manual handling issues that are associated with caring for women with higher BMI's is considered to reduce the risk of injury to the women and clinical staff and that this is documented in the women's health records. During the 3rd trimester if a mother has a BMI of 40+ or a weight of 160kgs or more that a plan is made to ensure that the correct equipment is in place. If the Trust does not own the equipment then it should be rented in to ensure that the safety of the staff and mother is maintained.

Antenatal Care

If a woman is admitted to hospital for antenatal care the safe working load (SWL) of the ward bed, chair and commode must be check. If the woman's weight is greater than the SWL the following action must be taken.

- **Hospital bed -** King Fund manual bed SWL is 184 Kgs (29 stone) if the patient needs assistance in/out of bed or manual handling in bed a electric profiling bed must be obtained. The Huntleigh Enterprise Beds has a SWL of 250 Kgs. Alternatively the Trust also has some bariatric width adjustable beds which extend from 3 to 4 foot wide with a SWL of 414 Kgs.
- **Patient Chair -** The SWL of the chair must be checked if the patient exceeds the SWL a Bariatric chair must be obtained. If a Bariatric chair is not available a chair must be hired. (Supplies will assist with this, the Trust tends to use Benmor medical as its supplier)
- **Commode -** If the women weight exceeds the SWL of the commodes a Bariatric commode must be obtained (see above)

For Labour/Delivery

- **Delivery bed-** The SWL of the delivery bed is 227 Kgs. If the women exceeds the SWL a delivery bed must be obtained
- **Post natal bed-** Please follow the instructions in **Antenatal Care - Hospital Bed, Patient Chair and Commode.**

For Caesarian sections - The size and shape of the women must be considered prior to the women's caesarean date. The SWL of the operating table is 450 Kgs.
The HoverMatt must be used to lateral transfer the women from the theatre table to the profiling bed. The HoverMatt is located in the equipment library at Chase Farm Hospital and by the Site Managers Office at Barnet Hospital. The Hovermatt must be placed on the Theatre table prior to the women being transferred on to table, the Hovermatt must only be operated by staff who received training in the uses of the Hovermatt (training available from the Manual Handling Department).
Postnatal Care Following a Caesarean - Please follow the instructions in the **Antenatal care - Hospital bed, Patients chair, Commode.** Should a wheelchair be required the Trust has a large wheelchair in maternity with a SWL 190 Kgs.

Audit and Monitoring:

Auditable standards are as per the minimum requirements set out in the NHSLA Maternity CNST Standards and will include:

	the calculation and recording of the body mass index (BMI) for all women
*pilot	the calculation of the body mass index (BMI) and recording of the BMI in the electronic patient information system
	all women with a BMI >40 should have an antenatal consultation with an obstetric anaesthetist
*pilot	an obstetric anaesthetic management plan for labour and delivery should be discussed with the woman and documented in the health record
*pilot	all women with a BMI >30 should have an antenatal consultation with an obstetric consultant to discuss possible intrapartum complications, the discussion must be documented in the health record
	the requirement to assess the availability of suitable equipment in all care settings for women with a high BMI and the development of an action plan to ensure the availability is met
*pilot	the requirement for women with a booking BMI >40 to have an individual documented assessment in the third trimester of pregnancy by an appropriately qualified professional to determine manual handling requirements for childbirth and consider tissue viability issues.

* The Maternity service will aim to incorporate the pilot requirements within the audit but these will not be assessed during 2011/12.

Compliance:
The guideline will be audited:

Continuous rolling audit	[ ]
2 Yearly	[X]
Six monthly	[ ]
Individualised review date if low frequency procedure or condition	[ ]

Size of audit:
The aim will be to audit:

- 0.5% of all health records of women who have delivered.
- 4 sets of health records of women who have delivered who required an antenatal consultation with an anaesthetist.
- 4 sets of health records of women who have delivered who required an antenatal consultation with an obstetric consultant.
- 4 sets of health records of women who have delivered who required an individual documented assessment in the third trimester of pregnancy.
- Yearly presentation of evidence to demonstrate monitoring compliance with the availability of suitable equipment in all care settings

Minimum implementation of 75% compliance required.

The guideline will be disseminated:

1. Electronically via the hospital Intranet > Guideline > Maternity section
2. Paper copy filed in the appropriate clinical area
3. All staff notified of new guidelines via e-mail and departmental newsletter
4. All staff made aware of guidelines and how to access them at induction

Presentation of the audits will be made to:

Departmental audit meeting	[X]
Other	[ ]

Reports of the completed audits will go to:

Labour Ward Forum	[X]
Women's Health Clinical Governance Group	[X]
Trust Clinical Governance Group	[X]

Monitoring:

1. Via regular audit as detailed above
2. Incident reports generated as a result of non-compliance with guidelines or complications and complaints.
3. Monitoring and review of action plans from audits is outlined in the departmental audit strategy.

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Date clinical guidelines approved By Evidenced Based Practice Group	**October 2012**
Ratification	**Evidenced Based Practice Group** **October 2012**
Review date	**2015**
Reviewing responsibility	**EBPG**
Lead Author/s Sponsor	**Consultant Obstetrician** **Consultant Midwife/Clinical Lead Midwife**
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PATIENT INFORMATION (Appendix 1)

Why Your Weight Matters During Pregnancy And After Birth

Most women who are overweight have a straightforward pregnancy and birth and deliver healthy babies. However being overweight does increase the risk of complications to both you and your baby. This information is about the extra care you will be offered during your pregnancy and how you can minimise the risks to you and your baby in this pregnancy and in a future pregnancy. Your healthcare professionals will not judge you for being overweight and will give you all the support that you need.

What is BMI?

BMI is your body mass index which is a measure of your weight in relation to your height. A healthy BMI is above 18.5 and less than 25. A person is considered to be overweight if their BMI is between 25 and 29.9 or obese if they have a BMI of 30 or above. Almost one in five (20%) pregnant women have a BMI of 30 or above at the beginning of their pregnancy.

When Should my BMI be Calculated?

You should have your BMI calculated at your first antenatal booking appointment. If you have a BMI of 30 or above, your midwife should give you information about the additional risks as well as how these can be minimised and about any additional care you may need. If you have any questions or concerns about your BMI or your care, now is a good time to discuss these.
You may be weighed again later in your pregnancy.

What are the Risks of a Raised BMI During Pregnancy?

Being overweight (with a BMI above 25) increases the risk of complications for pregnant women and their babies. With increasing BMI, the additional risks become gradually more likely, the risks being much higher for women with a BMI of 40 or above. The higher your BMI, the higher the risks.

Why Your Weight Matters During Pregnancy and After Birth

Information for you

If your BMI is less than 35 and you have no other problems you may still be able to remain under midwifery led care. However if your BMI is more than 35, the risks to you and your baby are higher and you will need to be under the care of a consultant.

Risks for you Associated With a Raised BMI Include:

Thrombosis

Thrombosis is a blood clot in your legs (venous thrombosis) or in your lungs (pulmonary embolism). Pregnant women have a higher risk of developing blood clots compared with women who are not pregnant. If your BMI is 30 or above, the risk of developing blood clots in your legs is additionally increased.

Gestational Diabetes

Diabetes which is first diagnosed in pregnancy is known as gestational diabetes. If your BMI is 30 or above, you are three times more likely to develop gestational diabetes than women whose BMI is below 30.

High Blood Pressure and Pre-Eclampsia
A BMI of 30 or above increases your risk of developing high blood pressure. Preeclampsia is a condition in pregnancy which is associated with high blood pressure (hypertension) and protein in your urine (proteinuria). If you have a BMI of 35 or above at the beginning of your pregnancy, your risk of pre-eclampsia is doubled compared with women who have a BMI under 25.

Risks For Your Baby Associated With A Raised BMI Include:
- If you have a BMI of 30 or above before pregnancy or in early pregnancy, this can affect the way the baby develops in the uterus (womb). Neural tube defects (problems with the development of the baby's brain and spine) are uncommon. Overall around 1 in 1000 babies are born with neural tube defects in the UK but if your BMI is over 40, your risk is three times that of a woman with a BMI below 30.
- Miscarriage - the overall risk of a miscarriage under 12 weeks is 1 in 5 (20%), but if you have a BMI over 30, your risk increases to 1 in 4 (25%).
- You are more likely to have a baby weighing more than 4 kg (8 lb and 14 ounces). If your BMI is over 30, your risk is doubled from 7 in 100 (7%) to 14 in 100 (14%) compared to women with a BMI of between 20 and 30.
- Stillbirth - the overall risk of stillbirth in the UK is 1 in 200 (0.5%), but if you have a BMI over 30, your risk is doubled to 1 in 100 (1%).
- If you are overweight, your baby will have an increased risk of obesity and diabetes in later life.

What Are The Risks Of A Raised BMI During Labour And Birth?
There is an increased risk of complications during labour and birth, particularly if you have a BMI of more than 40. These include:
- your baby being born early (before 37 weeks)
- a long labour
- the baby's shoulder becoming 'stuck' during birth.
- an emergency caesarean birth
- a more difficult operation if you need a caesarean section and a higher risk of complications afterward, for example your wound becoming infected
- anaesthetic complications, especially with general anaesthesia
- heavy bleeding after birth (postpartum haemorrhage) or at the time of caesarean section.

How Can The Risks During Pregnancy Be Reduced?
By working together with your healthcare professionals, the risks to you and your baby can be reduced by:

Healthy Eating
The amount of weight women may gain during pregnancy can vary greatly. A healthy diet will benefit both you and your baby during pregnancy. It will also help you to maintain a healthy weight after you have had your baby. You may be referred to a dietician for specialist advice about healthy eating. You should aim to:
- Base your meals on starchy foods such as potatoes, bread, rice and pasta, choosing wholegrain where possible.
- Watch the portion size of your meals and snacks and how often you eat. Do not 'eat for two'.

- Eat a low-fat diet. Avoid increasing your fat and/or calorie intake. Eat as little as possible of the following: fried food, drinks and confectionary high in added sugars, and other foods high in fat and sugar.
- Eat fibre-rich foods such as oats, beans, lentils, grains, seeds, fruit and vegetables as well as wholegrain bread, brown rice and pasta.
- Eat at least five portions of a variety of fruit and vegetables each day, In place of foods higher in fat and calories.
- Always eat breakfast.

In general you do not need extra calories for the first two-thirds of pregnancy and it is only in the last 12 weeks that women need an extra 200 kilocalories a day.

Trying to lose weight by dieting during pregnancy is not recommended even if you are obese, as it may harm the health of your unborn baby. However, by making healthy changes to your diet you may not gain any weight during pregnancy and you may even lose a small amount. This is not harmful.

Exercise

Your midwife should ask you about how physically active you are. You may be given information and advice about being physically active as this will be a benefit to your unborn child.

- Make activities such as walking, cycling, swimming, low impact aerobics and gardening part of everyday life and build activity into daily life by taking the stairs instead of the lift or going for a walk at lunchtime.
- Minimise sedentary activities, such as sitting for long periods watching television or at a computer.
- Physical activity will not harm you or your unborn baby. However, if you have not exercised routinely you should begin with no more than 15 minutes of continuous exercise, three times per week, increasing gradually to 30 minute sessions every day. A good guide that you are not overdoing it is that you should still be able to have a conversation whilst exercising.

An Increased Dose of Folic Acid

Folic acid helps to reduce the risks of your baby having a neural tube defect. If your BMI is 30 or above, you should take a daily dose of 5mg of folic acid. This is a higher dose than the usual pregnancy dose and it needs to be prescribed by a doctor. Ideally you should start taking this a month before you conceive and continue to take it until you reach your 13th week of pregnancy. However, if you have not started taking it early, there is still a benefit from taking it when you realise you are pregnant.

Vitamin D Supplements

All pregnant women are advised to take a daily dose of 10 micrograms of vitamin D supplements. However, this is particularly important if you are obese as you are at increased risk of vitamin D deficiency.

Venous Thrombosis

Your risk for thrombosis (blood clots in your legs or lungs) should be assessed at your first antenatal appointment and monitored during your pregnancy. You may need to have injections of low molecular weight heparin to reduce your risk of blood clots. This is safe to take during pregnancy.

Gestational Diabetes
You should be tested for gestational diabetes between 24 and 28 weeks. If your BMI is more than 40 you may also have the test earlier in pregnancy. If the test indicates you have gestational diabetes, you will be referred to a specialist to discuss this further.

Monitoring for Pre-Eclampsia
Your blood pressure will be monitored at each of your appointments. Your risk of pre-eclampsia may be additionally increased if you are over 40 years old, if you had pre-eclampsia in a previous pregnancy or if your blood pressure is high before pregnancy.
If you have these or other risk factors, you may need to attend hospital for your appointments and your doctor may recommend a low dose of aspirin to reduce the risk of developing high blood pressure.

Additional Ultrasound Scanning
Having a BMI of more than 30 can affect the way the baby develops in the uterus (womb) so you may need additional ultrasound scans. You may also need further scans because it can be more difficult to check that your baby is growing properly or feel which way round your baby is.

Planning for Labour and Birth
Because of these possible complications, you should have a discussion with your obstetrician and/or midwife about the safest way and place for you to give birth. If you have a BMI of 40 or more, arrangements should be made for you to see an anaesthetist to discuss a specific plan for pain relief during labour and birth.
These discussions may include:

Where You Give Birth
There is an increased chance of your baby needing to be cared for in a special care baby unit (SCBU) after birth. If your BMI is 35 or above, you will be recommended to give birth in a consultant-led obstetric unit with a SCBU. If your BMI is between 30 and 35, your healthcare professional will discuss with you the safest place for you to give birth depending on your specific health needs.

What Happens in Early Labour
If your BMI is over 40, it may be more difficult for your doctors to insert a cannula (a fine plastic tube which is inserted into the vein to allow drugs and/or fluid to be given directly into your blood stream) into your arm. Your doctors will usually insert this early in labour in case it is needed in an emergency situation.

Pain Relief
All types of pain relief are available to you. However, having an epidural (a regional anaesthetic injection given into the space around the nerves in your back to numb the lower body) can be more difficult if you have a BMI over 30. Your anaesthetist should have a discussion with you about the anticipated difficulties. He or she may recommend that you have an epidural early in the course of labour.

Delivering the Placenta (Afterbirth)
An injection is normally recommended to help with the delivery of the placenta (afterbirth) to reduce the risk of postpartum haemorrhage (heavy bleeding).

What Happens After Birth?
After birth some of your risks continue. By working together with your healthcare professionals, you can minimise the risks in the following ways:

Monitoring Blood Pressure
You are at increased risk of high blood pressure for a few weeks after the birth of your baby and this will be monitored.

Prevention of Thrombosis
You are at increased risk of thrombosis for a few weeks after the birth of your baby. Your risk will be re-assessed. To reduce the risk of a blood clot developing after your baby is born:

- Try to be active – avoid sitting still for long periods.
- Wear special compression stockings, if you have been advised you need them.
- If you have a BMI of 40 or above, you should have low molecular weight heparin treatment for at least a week after the birth of your baby regardless of whether you deliver vaginally or by caesarean section. It may be necessary to continue taking this for 6 weeks.

Test for Diabetes
For many women who have had gestational diabetes, blood sugar levels return to normal after birth and medication is no longer required, but you should be re-tested for diabetes about 6 weeks after giving birth. Your risk of developing diabetes in later years is increased if you have had gestational diabetes. You should be tested for diabetes by your GP once a year.

Information and Support About Breastfeeding
Breastfeeding is best for your baby. It is possible to breastfeed successfully if you have a BMI of 30 or above. Extra help should be available if you need it.

Vitamin D Supplements
You should continue to take vitamin D supplements whilst you are breastfeeding.

Healthy Eating and Exercise
Continue to follow the advice on healthy eating and exercise. If you want to lose weight once you have had your baby, you can discuss this with your GP.

Planning For a Future Pregnancy

Reducing Your Weight to Reach the Healthy Range
If you have a BMI of 30 or above, whether you are planning your first pregnancy or are between pregnancies, it is advisable to lose weight. If you lose weight, you:

- Increase your ability to conceive and have a healthy pregnancy.
- Reduce the additional risks to you and your baby during pregnancy.
- Reduce your risk of developing diabetes in further pregnancies and in later life.

If you have fertility problems it is also advisable to lose weight, since having a BMI of more than 30 may mean you would not be eligible for fertility treatments such as IVF.
Your healthcare professional should offer you a structured weight loss programme.
You should aim to lose weight gradually (up to about 1 kg or about 1 to 2 lbs a week). Crash dieting is not good for your health. Remember even a small weight loss can give you significant benefits.

You may be offered a referral to a dietician or an appropriately trained health professional. If you are not yet ready to lose weight, you should be given contact details for support for when you are ready.

An increased Dose of Folic Acid

If you have a BMI of 30 or above, remember to start taking 5mg of folic acid at least a month before you start trying to conceive. Continue taking this until you reach your 13th week of pregnancy.

Sources and Acknowledgements

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