

Fact sheet: Weight gain in pregnancy



“Don’t worry – the weight will just drop off quickly when you’re breastfeeding!” “Be careful – I never lost the weight after my second baby.” “Eat anything you want – you’re eating for two!” As with so many issues around pregnancy, it can seem as though everyone has an opinion about weight gain. It can be hard to find your way through all the competing advice. And comparing yourself to the magazine photos of movie stars in bikinis a few weeks after giving birth does not necessarily make real-life motherhood for the average woman any easier, either.

Having a baby is a major life change and it can disrupt so many of your usual rhythms and habits – including what you eat and whether and how you exercise. So what is “normal” for you and your baby in pregnancy? What can you realistically expect after the birth? Read on to find out what answers researchers have found to some of these questions, and how other women manage.

How much weight gain is “normal” in pregnancy?

There is no standard amount of weight gain that should be expected by every pregnant woman. A small woman who is underweight may need to gain a different amount of weight than a woman who is very overweight before pregnancy begins.

Weight gain differs through pregnancy as well, with more weight being gained in the later parts of pregnancy than in the early months. Extra weight is needed: it is not just the weight of the growing baby. The woman needs to be able to provide nutrition and support for the baby. Even if you are very overweight, you will still need to gain weight in pregnancy. Much of the weight gain, especially in early pregnancy, is extra fluid (water). This is necessary to support the extra circulation that the placenta and baby needs.

In the 1930s, doctors used to recommend that all women try to restrict their weight gain to about 6.8 kg (or around 15 pounds). By the 1970s, medical advice changed, as doctors realised that restricting weight gain too much in pregnancy could be harmful. The Institute of Medicine (IOM) in the USA issued guidelines that were followed by doctors around the world, including in Germany.

The IOM published revised guidelines in May 2009, taking account of a major review of the evidence about pregnancy weight gain published by the US government’s Agency for Healthcare Research and Quality (AHRQ) in May 2008. The AHRQ researchers concluded that it was not certain

that any one specific weight was right for all women.

As there is still no better scientific estimate of how much weight gain is normal, what do the guidelines say?

The first issue to consider is: are you overweight, underweight or within the “normal” weight range? Two approaches are commonly used to determine if people are overweight: The “body mass index” (BMI) and waist measurement. The BMI helps to determine how much you weigh in relation to your height. Waist measurements give you an idea of how fat is distributed in your body.

The BMI is the most common way to try to work out if people are overweight or obese (very overweight). It is a measure of the relationship between weight and height. There are different views on the definition of overweight and obesity. People who have a BMI between 25 and 30 are usually considered to be overweight. Being overweight alone does not always necessarily cause health problems, but it could be a problem if the person already has certain illnesses, such as type 2 diabetes. People who have a BMI over 30 are considered to be obese. Being obese is a greater risk to health than being overweight. You can read more about BMI, weight and health generally here (URL: <http://www.informedhealthonline.org/index.402.en.html>) .

The IOM recommendations for BMI and weight gain are:

- If you were underweight before pregnancy (for the IOM, that is a BMI of less than 20): between about 12.5 and 18 kgs extra weight during pregnancy
- If you were normal weight before pregnancy (for the IOM, that is a BMI between 20 and 26): between about 11.5 and 16 kg extra weight during pregnancy
- If you were overweight before pregnancy (for the IOM, that is a BMI between 26 and 29): between about 7 and 11.5 kg extra weight during pregnancy
- If you were obese before pregnancy (for the IOM, that is a BMI of over 29): between 5 and 9 kg extra weight during pregnancy

If you are very young, then more weight gain is probably needed as teenagers may still be growing themselves.

Your weight alone is not a good indicator of how well your baby is doing – or even of your baby’s weight gain. This depends on a lot of factors. It is not really possible to

be sure of the baby's weight before birth. Ultrasound and other tests can give an indication of how the baby is developing.

Can too much (or too little) weight gain cause problems or be a sign of serious problems?

Women who gain a lot of weight in pregnancy face some increased risks. The AHRQ researchers found that the following risks are higher: caesarean section, macrosomia (the baby being bigger than 4000g or 4500g) and not being able to lose the weight after giving birth. Researchers are still not certain whether or not a lot of weight gain in pregnancy increases the chances that the child will become overweight or obese later on.

Weight loss and undernutrition in pregnancy can harm the growing baby, often because he or she is then born too early (preterm birth) or has a low birthweight.

However, if you gain weight suddenly, or if you are gaining more than half a kilo a week, your doctor or midwife will need to monitor your weight and do additional tests. Very quick and large weight gains (such as 1 kg in a single week) can be a sign of health problems developing in the pregnant women, for example pre-eclampsia.

Pre-eclampsia is a pregnancy-related illness that can become life-threatening for both mother and baby, involving high blood pressure (hypertension) in particular. Pre-eclampsia can limit the baby's growth and make the mother very ill, including the risk of having fits (convulsions). Higher weight gain puts women at risk of developing "gestational diabetes" – or it can be a sign that they have developed it. This is a condition in pregnancy where a woman who did not have diabetes before starts to have high levels of a type of sugar (glucose) in her blood. This can cause excessive weight gain in her baby.

How can I gain extra weight if I am underweight in pregnancy?

There is no hard and fast rule, and no specific diet that is proven to be particularly helpful. Researchers have looked at whether diet supplements (such as protein supplements) can help increase weight in under-nourished women. But they have not identified any specific supplement that works well. You can speak with your doctor, midwife, dietitian or nutritionist about how to help increase your weight if you need to.

How can I stop gaining too much weight in pregnancy?

Your baby and you both need a balanced diet during pregnancy. If you limit your energy intake too much, both of you could suffer. On the other hand, too much weight gain could also be unhealthy for you both.

One of the possible problems here, especially if you are already overweight, is that you start eating very differently because you are pregnant. You could really enjoy being pregnant and feel like, for these few months, "anything goes". Or if you are stressed and perhaps struggling a little with all the major changes happening in your body and your life, you could find yourself eating more or differently to make you feel better (often called "emotional eating"). For many women, "emotional eating" can quickly become a way of giving themselves a treat or helping cope with tiredness. A little of that is always fine, but it can quickly develop into a habit that causes problems.

Some of the things that have been tried in research in pregnant women are individual dietary counseling (often with a dietitian or nutritionist), cooking demonstrations and exercise classes. Although these might help individual women, researchers have still not been able to pinpoint anything in particular that has a very high success rate. You can speak with your doctor, midwife, dietitian or nutritionist if you think you might need help, or to find out what options are available in your area.

Is weighing myself regularly a good idea?

This is still not clear. Doctors and midwives will generally weigh you once a month during pregnancy, and they might do this more often if you have signs of problems. Later in the pregnancy, you might have more frequent visits, and you are likely to be weighed then as well.

Weighing yourself could have advantages and disadvantages: researchers are still not sure whether it is helpful. Some research in non-pregnant people has suggested that self-weighing about once a week might help people keep their weight under better control, but this is not certain. Weighing yourself too often could also make you feel worse: we really do not know. At this point, the best that can be said is that weighing yourself up to once a week might not do harm, but there is no reason to stress yourself with frequent weighing.

Does keeping weight gain under control prevent stretch

marks and backache?

There is no clear answer to this yet. The AHRQ researchers tried to find out how weight gain affects stretch marks, backache and other common problems for the woman during pregnancy – including whether weight gain affects energy levels. There is, however, surprisingly little research about problems like stretch marks and backache in pregnancy. You will no doubt hear or read many claims about what causes these problems and what might help. These claims are not supported by strong research though.

Whether or not you get stretch marks or backache does not only depend on the weight you gain. Very sudden and major changes in weight can cause more stretch marks, but whether keeping weight down will prevent stretch marks is just not known.

When can I expect to lose the weight after the birth, and is there anything I should do to help get my weight back to normal?

Getting back to roughly where you were before pregnancy is not necessarily going to happen very quickly. For some women, feeding and taking care of a baby are enough to melt away the weight gained during pregnancy: indeed, they really need this stored up energy to help get through those early weeks and months of motherhood.

Most women will not really get close to their pre-pregnancy weight until perhaps six months after the birth. Women who do not lose most of the weight they gained in pregnancy by six months or a year after the baby is born might be more likely to continue to have weight problems in the long term. The problem might get worse in the next pregnancy, too.

The main options for trying to lose weight are a balanced diet or extra exercise. Programmes to help people change their eating and lifestyle habits are often used to try to achieve this. This does not mean starting immediately after the birth. In the research studies, these kind of weight control efforts started a month or two after the birth, or even later. After childbirth, weight loss is complicated by the extra nutritional needs of the mother if the baby is breastfed.

Too much, or too sudden, weight loss can also have disadvantages. The possible adverse effects of too much dieting or exercise after having a baby could include a reduction in the quality or quantity of breast milk. But we

still do not know for certain when this could become a problem.

Research suggests that light or moderate dieting, with or without exercise, could help you lose weight after childbirth. Exercise might not necessarily help lose weight faster, but it could help increase cardiovascular (heart and circulation) fitness and have other benefits too. You can read more about this research here (URL: <http://www.informedhealthonline.org/index.517.en.html>) . Some of the ways that women got rid of the weight in those studies were classes, cooking demonstrations, group support for weight loss and for exercise – groups taking their babies out for walks in prams, for example. You can read more about weight loss generally here (URL: <http://www.informedhealthonline.org/weight-loss.398.56.en.html>) .

How do women feel about their bodies and weight in pregnancy and afterwards?

Women are exposed to many unrealistic images of female body size, and body size around pregnancy or after birth is no exception. That makes it difficult for many women to be satisfied with their figure, and it can damage their self-image and enjoyment of their body. The media adds to the pressure on pregnant women and mothers by focusing a lot of attention on how quickly celebrities re-gain their pre-pregnancy figures. However, it is unusual to not gain extra weight in pregnancy – and you cannot really expect to bounce straight back to pre-pregnancy weight within weeks of giving birth.

What's more, restricting weight gain too much could pose health risks for the growing baby. If you do not gain so much weight that you become overweight or obese, then getting back to normal may not be difficult.

On the other hand, for many women, pregnancy is a time when they really enjoy their babies and curves – and they can feel like it is “time off” from worrying about their size. That can be one of the really enjoyable parts of being pregnant. It could become a problem, though, if you get too far out of your normal weight range and dietary habits: then it might be harder to go back to your “pre-baby” healthier lifestyle. But you do not have to be movie-star thin to be happy, healthy and have a healthy baby.

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Health Care (IQWiG)

Glossary

evidence

Evidence is what we call scientific proof from well-conducted, good-quality scientific trials that have been carefully designed to answer specific questions. Depending on the types of questions, different scientific research methods (types of study) are most appropriate to find reliable answers to these questions. Randomized controlled trials (RCTs), for example, are the best way to get reliable evidence on the effectiveness of medical treatments (interventions). This type of study, however, is not the best form of evidence for all possible questions, and does not provide the best answers to all kinds of questions, either. Epidemiological studies, for example, are very suitable for establishing well-founded proof for the spreading of a disease in the population.

AHRQ

The Agency for Healthcare Research and Quality (AHRQ) is an agency of the US Department of Health and Human Services. Its mission is to improve the quality, safety, efficiency, and effectiveness of health care for all Americans. Information from AHRQ's research aims to help people make more informed decisions and to improve the quality of health care services. AHRQ was formerly known as the Agency for Health Care Policy and Research. You can read more about AHRQ at its website: www.ahrq.gov

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BMI

The Body Mass Index (BMI) is a measurement used to assess body weight. It describes the relationship between a person's weight and height and is calculated using the following formula: $BMI = \text{weight (kg)} / \text{height (m)}^2$. For example, if you are 1.70 m tall and weigh 60 kg, you would calculate your BMI like this: $60 / (1.70 \times 1.70) =$

20.76. So this would mean that you have a BMI of around 21. People who have a BMI between 18.5 and 24.9 are considered to have a normal weight. A BMI below 18.5 is considered to be underweight, and a BMI between 25 and 29.9 is considered to be overweight. People who have a BMI over 30 are considered to be obese. The BMI only says something about people's total body weight, though, and nothing about their body fat. Two people could have the same BMI but a different amount of fat in their bodies. So a bodybuilder who has a lot of muscle tissue and little fat could have the same BMI as a person who has little muscle tissue and a lot of fat. Still, a BMI over 30 is usually a sign of a high percentage of body fat.

Sources

IQWiG health information is based on research in the international literature. We identify the most scientifically reliable knowledge currently available, in particular, systematic reviews of the effects of health care. You can read more about systematic reviews and why these can provide the most trustworthy evidence about the state of knowledge here (URL: <http://www.informedhealthonline.org/evidence-based-medicine.61.en.html>) . The authors of the major systematic reviews on which our information is based are always approached to help us ensure the medical and scientific accuracy of our research summaries.

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The German Institute for Quality and Efficiency in Health Care (IQWiG)

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Evidence basis of our health information

Our information is based primarily on systematic reviews of the effects of health care. Systematic reviews are necessary to gain an objective picture of health care. In order to do this, a clear question is formulated. Researchers then find all the relevant studies that could answer this question. They then evaluate those studies.

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