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## ABOUT GESTATIONAL DIABETES

Having **gestational diabetes** means that your blood glucose levels during pregnancy are too high. In Flanders, more than 1 out of every 10 pregnancies is complicated with gestational diabetes.

Some risk factors, like obesity, age and heredity (familial type 2 diabetes), definitely play a big role. However, we can't really predict which women will develop gestational diabetes. A number of women don't have obvious risk factors and still develop gestational diabetes.

## HOW DOES GESTATIONAL DIABETES DEVELOP?

Pregnancy is a very intense time for your body. During every healthy pregnancy the placenta produces lots of hormones that help the baby develop. However, those same pregnancy hormones also have a negative side effect. They tend to impair metabolic processes, especially in the second half of the pregnancy. To some extent, the pregnancy hormones prevent insulin's action. The insulin hormone is considered to be the 'key' that lets the body's fuel – glucose or blood sugar – enter the cells. Because insulin is less active, the body requires much more insulin to enable the same amount of glucose to enter the tissues and cells.

When your body is no longer capable of keeping up with the increased insulin need, the fuel (glucose) starts to pile up in the blood – this is what we call "hyperglycemia" – which eventually results in gestational diabetes.

Chronically elevated blood sugar levels are

harmful for you and your baby. This is why gestational diabetes needs treatment.

Mostly, a balanced diet and a sufficient amount of exercise, will keep the blood glucose levels under control. However, additional insulin may be required to avoid complications during both pregnancy and delivery.

IN 9 OUT OF 10 CASES, GESTATIONAL DIABETES IS RESOLVED SHORTLY AFTER DELIVERY, ALTHOUGH IT MUST BE CONSIDERED AN IMPORTANT WARNING SIGN OF YOUR BODY!

## GESTATIONAL DIABETES, A WINDOW INTO YOUR FUTURE



Gestational diabetes reveals a certain vulnerability of your body, which you might otherwise not even notice. Women with gestational diabetes typically tend to have a history of poor insulin action, and this problem often appears for the first time during pregnancy.

In most cases, blood glucose reverts to normal after delivery. But remember this is an important warning sign of your body. About 30-50% of the women who have had gestational diabetes, will develop permanent diabetes within the next 5 to 10 years following delivery.

This does not only apply to you if you needed insulin treatment during pregnancy. Even women who weren't really inconvenienced by their gestational diabetes, or who reached sufficient glycemic control by improving their diet and exercise habits, are considered to be at risk of developing diabetes. This means that you have to be attentive and vigilant.

## "DIABETES", WHAT'S IN A NAME?

Whereas gestational diabetes is, by definition, a transient disease state, "real" diabetes is not. In Belgium, an estimated 10% of the adult population suffers from one type of diabetes or another.

We can distinguish two main types. Type 1 and type 2 diabetes.





**TYPE 2 DIABETES** 

#### TYPE 1 DIABETES

## Mostly CHILDREN OR YOUNG ADULTS

LESS THAN 10% of all people with diabetes

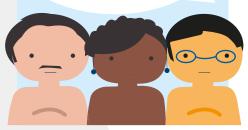
No prevention possible

#### Typically > 40 YEARS

Prevention is possible!

Clearly related to OVERWEIGHT AND UNHEALTHY DIET





ABOUT 30-50% OF THE WOMEN WHO HAVE HAD GESTATIONAL DIABETES, WILL DEVELOP PERMANENT DIABETES WITHIN THE NEXT 5 TO 10 YEARS FOLLOWING DELIVERY.

# AFTER THE PREGNANCY: YOUR PERSONAL ACTION PLAN

Since you've had gestational diabetes, the following advice is extremely important to follow:

## 1. HAVE YOUR BLOOD GLUCOSE CHECKED BY YOUR GP

After delivery, your general practitioner is the best person to keep an eye on your health.

Always inform him/her of the fact that you have had gestational diabetes. You carry a lot of responsibility yourself!

Regular blood glucose screening and testing is necessary to be able to quickly track new disruptions of your blood sugar levels. That's why it is recommended to schedule a first screening within 6 to 12 weeks after delivery. Following this, make sure you visit your general practitioner annually for a fasting blood glucose test.

Even when you're planning to get pregnant again, an extra check-up is highly recommended! Getting pregnant while having (untreated) diabetes, poses a health risk for your child.

# If you've had **gestational diabetes**, you have a greater risk, especially in the next years to come, of developing type 2 diabetes. Diabetes is a serious condition that demands your lifelong attention. Current treatment options allow diabetes to be controlled and managed quite well. However,

If diabetes is treated early enough, is well managed and kept well under control, these complications can be prevented. You should certainly remain

chronic diabetes complications may still develop

and in turn reduce quality of life.

vigilant and attentive for the typical symptoms of diabetes, which include: thirstiness and frequent urination, fatigue and recurrent infections. On the other hand, these symptoms are not always present in type 2 diabetic individuals. This is one reason for which type 2 diabetes is often diagnosed too late, several years down the line when damage has already been done to various tissues and organs. Hence the importance of being vigilant and having your glucose levels tested regularly, especially if you're at risk of developing diabetes, which is the case if you've had gestational diabetes.

# DIABETES consequences and complications

early detection and treatment are key



CARDIOVASCULAR DISEASE



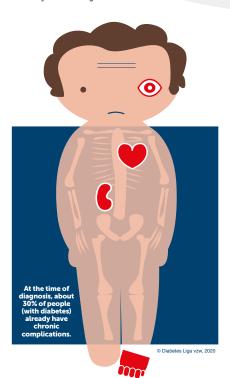
**EYE CONDITIONS** 



**KIDNEY DISEASE** 



**FOOT PROBLEMS** 





#### 2. MAINTAIN A HEALTHY LIFESTYLE

It is scientifically proven that type 2 diabetes can be prevented in people who have a high risk of developing diabetes, such as women with a history of gestational diabetes.

Below you can see which kind of steps you can take to reduce your future risk of diabetes and also to reduce the likelihood of developing gestational again.

## **Preventing type 2 diabetes HEALTHY LIFESTYLE**

lifestyle > 50% of



healthy **balanced** weight nutrition physical activity limit sedentary behavior



#### HEALTHY WEIGHT

#### **DO I HAVE A WEIGHT ISSUE?**

Within 6 to 12 weeks after delivery, try to reach the weight you had before the pregnancy. If you still are heavily overweight, it is very important to do something about it! Overweight and obesity is one of the main risk factors for the future development of type 2 diabetes.

To get a better idea of what a healthy weight means for you, there are two things you can do.

O Calculate your BMI (body-mass index): this is your weight (in kilograms, kg), divided by your height squared (in meter, m<sup>2</sup>)

 $BMI = ka/m^2$ 

For instance: If you weigh 70 kg and are 1,60 m tall, your BMI is: 70/(1.60 x 1.60)

Normal weight	BMI < 25 kg/m²
Overweight	25 ≤ BMI > 30 kg/m²
Obesity	BMI ≥ 30 kg/m²

• Measure your waist circumference: this is a good measure for the amount of abdominal fat. Even with a "normal" BMI of 18,5-24,9, a large waist circumference raises the risk of type 2 diabetes and other comorbidities, such as cardiovascular disease.

To determine your waist circumference, use a tape measure: measure your waist about halfway between your lowest rib and the top of your hip bone.

Health risk	waist circumference ≥ 80 cm
Severe health risk	waist circumference ≥ 88 cm

#### **HEALTHY NUTRITION**

### I 'M CARRYING SOME EXTRA POUNDS ... HOW DO I LOOSE THEM?

- O If you are overweight, it might help to take a closer look at your eating habits. Write down what you eat each day in detail. Be honest with yourself! This gives you the opportunity to discover where there's room for improvement.
- You don't have to starve yourself to obtain your weight goal, on the contrary! A moderate weight loss of 5 to 10% of your current weight has been shown to have a very positive effect on your health outcomes and risk of developing diabetes, even if you don't succeed in reaching your ideal weight. Do the math yourself: shedding a few kilograms will already be very beneficial for your health and may be sufficient in reducing the risk of developing diabetes. Consult your doctor and inform him/her of your concerns regarding your weight.
- O Breastfeed your baby! It is strongly recommended for the health of both mother and child, especially after gestational diabetes. However, you should not start a strict and demanding weight loss diet while you are breastfeeding as breastfeeding increases your energy needs in order to ensure adequate milk production.

- Maintaining the balance between food intake and energy output (burning the calories) is key. So exercise for at least 30 minutes a day at a moderate intensity, like walking briskly, swimming, cycling, etc. Don't start moving too fast, with too much intensity or for too long a time. Slowly build it up after a pregnancy and, if necessary, seek professional advice.
- O It is especially important to maintain your weight loss in the long term. Therefore, keep realistic goals in mind and take gradual small steps.

  If necessary, you should consult a dietician.

ADOPT A HEALTHY LIFESTYLE TO REDUCE YOUR RISK OF DEVELOPING TYPE 2 DIABETES BY 50%.

#### ΓIPS

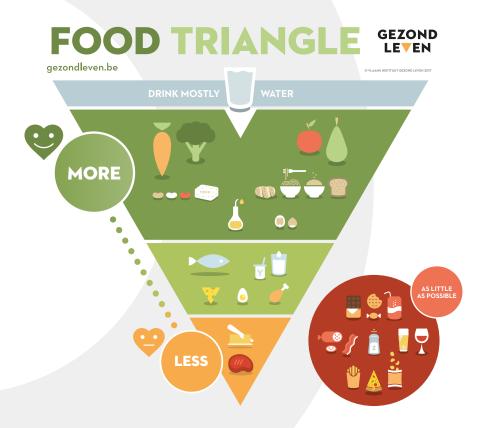


- Limit your intake of foodstuffs of animal origin
- O Drink plenty of water
- Eat as little processed foods as possible
- Vary and look for alternatives: eating the same food every day will become monotonous. Experiment with healthy eating patterns.
- Eat at set times, and together with other people
- Eat consciously and in moderation
- Change your environment so the healthy choice becomes the obvious, and the unhealthy choice becomes more difficult
- Implement changes stepwise. Do you need to change your eating habits overnight? Certainly not, every little improvement means a step forward.
- Enjoy your food! Food should remain a celebration. Spoil yourself with a daily dose of health nutrition.



# MOVING FURTHER IN THE RIGHT DIRECTION

In case you need more tips on healthy eating, please check out the recommendations on www.gezondleven.be.



YOU SHOULD SEE YOUR GENERAL PRACTITIONER EVERY YEAR FOR A BLOOD GLUCOSE TEST.

#### **AND...ACTION!**

- Make sure that you stay physically active. The goal is to get at least 30 minutes of moderately intense physical activity, every day. Will it be a brisk walk, swimming, fitness, dancing...? It's all fun up to you! Gradually increase the amount and intensity of exercise you do in order to reach your goals in a healthy and sensible way.
- Reduce your sitting time. Stand up from time to time or take a walk, if you are sitting down too long. Introduce more physical activity into your daily life. Because every amount of physical activity is worth it.
- O You don't have to complete an intensive fitness program every week. Sometimes, taking small steps is all it takes to introduce more physical activity into your daily life. Don't take your car for everything, and when you do, try to park it further away from your destination and walk the remaining distance. Use the stairs instead of an escalator or elevator. Be creative! It will benefit your health and make you feel better too!
- Feel good about yourself. Pat yourself on the back after a healthy day. Think of a reward that fits your healthy lifestyle habits.

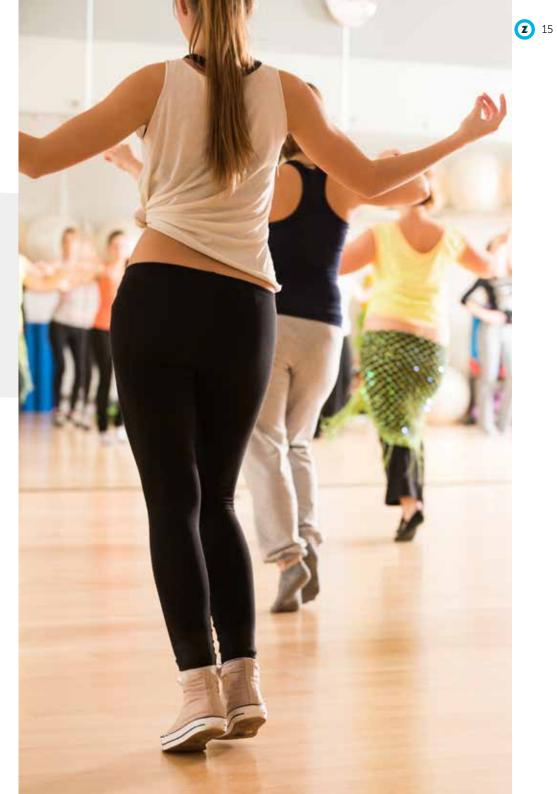


#### PREVENTING DIABETES **IS TEAMWORK!**

Congratulations! You've read this brochure. This means you've already taken the first step! But preventing diabetes isn't something you can or should do on your own. As mentioned before, your general practitioner is your medical contact person. Consulting other medical specialists and expanding the professionals that support you to a multidisciplinary team may also be helpful.

#### Some suggestions:

- Seek advice from a dietitian: let an expert coach you to adjust your eating habits and help you lose weight step-by-step.
- Get your family members on board: get your child(ren) and your partner involved in your project.
- Exercising in a group: look for people to join you, sign up to a gym, a sports club or team, take a dance class or participate in any other group activity and make a habit of it – that's the easiest way to keep it up!
- O If you currently smoke and you want to quit, you can seek help from a tobaccologist. He/she will coach and motivate you.





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ADOPT A HEALTHY LIFESTYLE TO REDUCE YOUR RISK OF DEVELOPING TYPE 2 DIABETES BY 50%.

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