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# DIABETES MANAGEMENT

# INTRODUCTION

Meet Anastasia! She is a 35 year old woman originally from Poland but she has lived in the UK for the past 20 years

2. It can affect mental and social wellbeing. Diabetes can affect quality of life and social contact, and people with type 2 diabetes are more likely to have depression, (Public Health England, 2018)

After experiencing some of the common symptoms of diabetes such as fatigue, frequent urination and recurrent thrush (National Health Service, 2025). She was diagnosed with type 2 diabetes

*Diabetes is vital in health and social care today because....*

1. It affects many people. It is a major and growing health issue in the UK meaning health and social care professionals may support people living with diabetes

3. It requires person centred care. Professionals can support people with medication, healthy eating, physical activity, monitoring, education and regular health checks



This is a blood glucose meter with a test strip inserted (National Institute of Diabetes and Digestive and Kidney Diseases, 2026)

# More about Anastasia...

- As aforementioned, Anastasia is 35 years old and polish
- She also lives alone in a rented two bedroom flat
- She works full time and often has a sedentary routine
- She prepares some meals herself but frequently relies on convenience foods because of her busy schedule

| Measurement                        | Anastasia's results    | Healthy range                                    | What it means                         |
|------------------------------------|------------------------|--------------------------------------------------|---------------------------------------|
| Height                             | 1.65 m                 | N/A                                              | N/A                                   |
| Weight                             | 86 kg                  | 50-68kg                                          | Above a healthy weight for her height |
| BMI                                | 31.6 kg/m <sup>2</sup> | 18.5–24.9                                        | Falls within the obese range          |
| Waist circumference                | 94 cm                  | <80 cm                                           | Increased health risk                 |
| Blood glucose – before meals       | 8.2 mmol/L             | 4–7 mmol/L                                       | Above target                          |
| Blood glucose – 2 hours after meal | 11.2 mmol/L            | <8.5 mmol/L                                      | Above target                          |
| HbA1c                              | 64 mmol/mol (8.0%)     | ≤48 mmol/mol (6.5%),<br>(depending on treatment) | Above target                          |
| Blood pressure                     | 142/88 mmHg            | below 140/90 mmHg                                | Slightly raised                       |
| Total cholesterol                  | 5.8 mmol/L             | <5 mmol/L                                        | Raised                                |

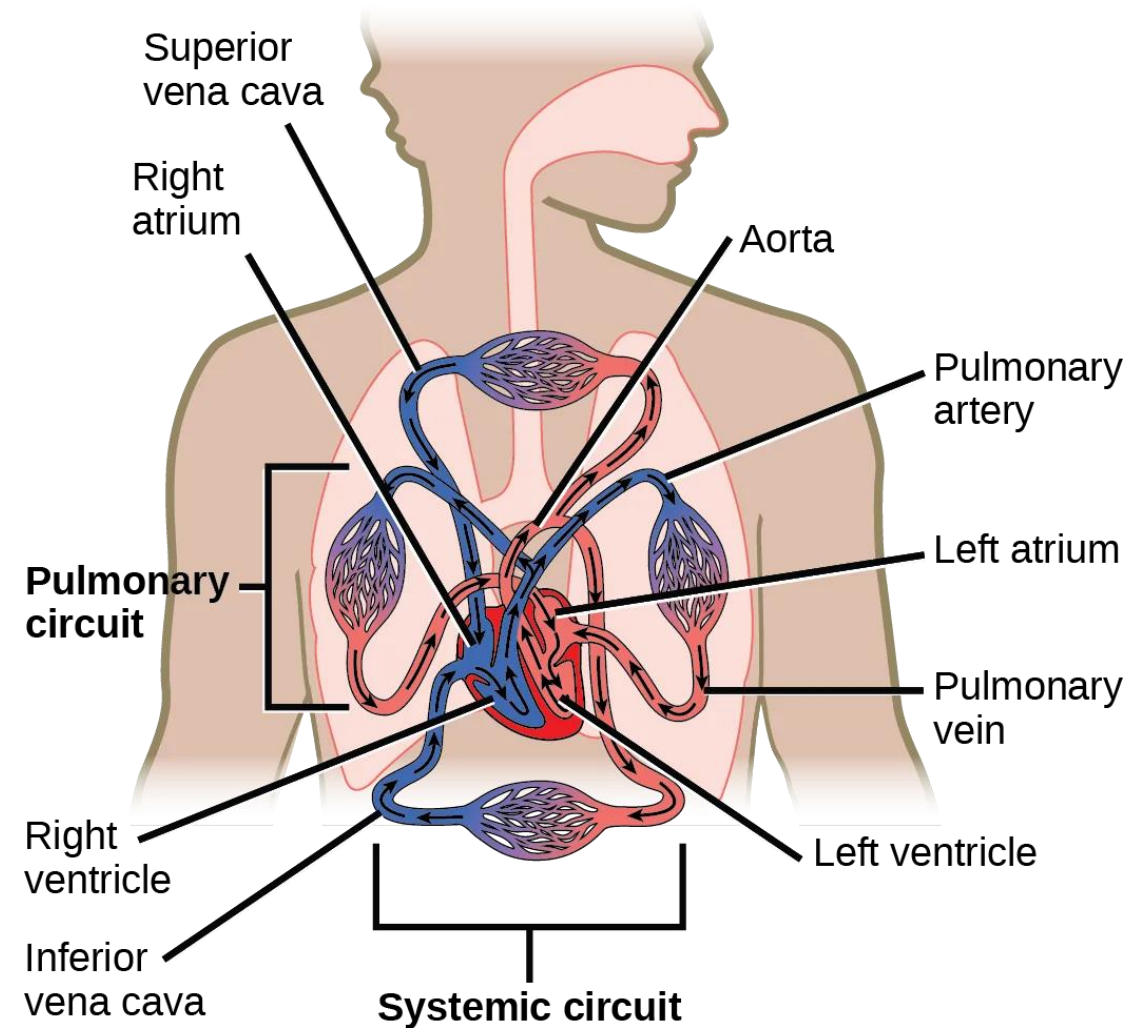
# WHAT DO ANATASIA'S RESULTS TELL US ABOUT HER HEALTH

Anastasia's results suggest that her Type 2 diabetes is not currently well controlled. Her blood glucose readings of 8.2 mmol/L before meals and 11.2 mmol/L two hours after eating are above the usual recommended targets for many adults with Type 2 diabetes. Her HbA1c of 64 mmol/mol (8.0%) is also elevated, suggesting that her blood glucose has been higher than recommended over the previous few months. Individual blood glucose and HbA1c targets can vary depending on the person and their treatment plan (My Way Diabetes, 2026).

Her BMI of 31.6 kg/m<sup>2</sup> places her within the obesity class I category, as a BMI of 30–34.9 is classified as obesity class I. Her waist circumference of 94 cm is also above the 80 cm threshold for increased health risk in women (NICE, 2022). Her blood pressure of 142/88 mmHg is slightly raised, while her total cholesterol of 5.8 mmol/L is also higher than the desirable level. Taken together, these results suggest that Anastasia may have an increased risk of cardiovascular and other diabetes-related complications. Her care plan should therefore consider blood glucose management, healthy eating, physical activity, weight management, blood pressure and cholesterol monitoring (NHS, 2026).

# ANATOMY AND PHYSIOLOGY

The cardiovascular system is one of the main body systems affected by Type 2 diabetes. The cardiovascular system consists primarily of the heart, arteries, veins and capillaries. The heart acts as a pump, moving blood around the body; arteries carry blood away from the heart, veins return blood to the heart, and tiny capillaries allow oxygen, nutrients and waste products to be exchanged with body tissues (Betts *et al.*, 2022). In Type 2 diabetes, insulin does not work effectively, causing blood glucose levels to remain too high. Over time, persistently high blood glucose can damage blood vessels and contribute to the build-up of fatty deposits in the arteries. This can restrict blood flow and increase the risk of high blood pressure, coronary heart disease, heart attacks and strokes (Diabetes UK, 2025). Therefore, although the cardiovascular system normally transports oxygen and nutrients efficiently around the body, Type 2 diabetes can damage the blood vessels and make this circulation less effective (Diabetes UK, 2025).



Clark, Douglas and Choi (2018)

# LIFESTYLE FACTORS

Anastasia has several lifestyle habits that may negatively affect her Type 2 diabetes. She works in an office-based job and spends long periods sitting, meaning she has a sedentary lifestyle. She currently does very little structured exercise and does not regularly reach the recommended level of physical activity. She also frequently relies on takeaways and convenience foods, which may make it more difficult for her to maintain a balanced diet and manage her weight and blood glucose. In addition, Anastasia sleeps for around 6 hours per night and often has an inconsistent sleep routine. These habits are important because regular physical activity helps the body use glucose and improves how effectively insulin works, while prolonged sitting is associated with Type 2 diabetes. A diet containing more nutritious foods and fewer highly processed or high-sugar foods can also support diabetes management. Poor or insufficient sleep is associated with insulin resistance and can contribute to weight gain, which may make blood glucose management more difficult (Diabetes UK, 2026).

# DAY IN THE LIFE OF ANASTASIA

Anastasia wakes at 7am and checks her blood glucose as part of her diabetes management. She goes to work and plans her meals and medication around her working hours. Poorly controlled blood glucose causes tiredness and difficulty concentrating, which affects her productivity at work. After work, she takes her medication, prepares dinner and checks her blood glucose again. She also attends regular diabetes appointments and health checks.

Diabetes means Anastasia has to **organise her daily routine around managing her condition**, including medication, meals, blood glucose monitoring and appointments. This adds responsibility to her everyday life and requires her to maintain a consistent routine.

Support from her **GP and diabetes nurse** helps her monitor her condition and manage medication, while a **dietitian** provides guidance on healthy meals. Support from family and friends also encourages Anastasia to maintain her treatment routine and attend appointments (**NHS, 2025**).

# RISK FACTORS

## Lifestyle risk factors:

**Poor diet** – her frequent takeaways and convenience foods can make it harder to manage her weight and blood glucose.

**Low physical activity** – her office job involves long periods of sitting and she does little structured exercise.

**Obesity** – her BMI of  $31.6 \text{ kg/m}^2$  increases insulin resistance.

**Poor sleep** – she sleeps around six hours and has an inconsistent sleep routine.

## Risk factors from the condition itself:

**Family history** – Anastasia has a mother with Type 2 diabetes,

## What can be managed:

Diet and takeaway intake

Physical activity and sedentary behaviour

Weight/BMI

Sleep routine

Blood glucose levels

Blood pressure and cholesterol through lifestyle changes and prescribed treatment

# RECOMMENDATIONS

Monitor HbA1c regularly: Anastasia's HbA1c is 64 mmol/mol, so this should be reviewed regularly and her treatment adjusted if it remains above her agreed target. NICE recommends agreeing an individual HbA1c target with the person and intensifying treatment when glucose control is inadequate (NICE, 2026).

Monitor cardiovascular risk: Her BMI, blood pressure and cholesterol should be monitored because she already has raised results. Lifestyle changes and medication should be considered where appropriate (NICE, 2026).

Monitor kidney health: Anastasia should have serum creatinine/eGFR and a urine albumin-to-creatinine ratio (ACR) checked to identify early kidney complications (NICE, 2026).

Foot and eye monitoring: She should receive regular foot-risk assessment and diabetic retinal screening to identify complications early (NHS England, 2026).

Review medication: Her diabetes medication should be reviewed alongside her HbA1c, weight, cardiovascular risk and kidney function. If her HbA1c remains above target, her healthcare professional should consider whether treatment needs intensifying (NICE, 2026).

The long-term aim should be to reduce Anastasia's HbA1c, improve her weight, blood pressure and cholesterol, and prevent complications. Her care plan should include realistic goals for improving her diet and physical activity, with regular follow-up to see whether these changes are working. She should also receive support to manage her diabetes independently and understand when she needs professional help. NICE recommends involving people with Type 2 diabetes in decisions about their treatment and agreeing targets that are appropriate for their individual circumstances (NICE, 2026).

**IN CONCLUSION,** THE MOST IMPORTANT PART OF ANASTASIA'S CARE PLAN IS CONTROLLING HER BLOOD GLUCOSE AND REDUCING HER RISK OF LONG-TERM COMPLICATIONS. HER RAISED HBA1C, BMI, BLOOD PRESSURE AND CHOLESTEROL SHOW THAT SHE NEEDS SUPPORT WITH SEVERAL AREAS OF HER HEALTH RATHER THAN FOCUSING ONLY ON DIABETES. UNDERSTANDING THE CARDIOVASCULAR SYSTEM IS PARTICULARLY IMPORTANT BECAUSE TYPE 2 DIABETES CAN DAMAGE THE HEART AND BLOOD VESSELS, INCREASING THE RISK OF CONDITIONS SUCH AS HEART DISEASE AND STROKE. THIS UNDERSTANDING HELPS HEALTHCARE PROFESSIONALS MONITOR HER BLOOD PRESSURE, CHOLESTEROL AND GLUCOSE LEVELS AND PROVIDE APPROPRIATE LIFESTYLE AND TREATMENT SUPPORT.

THE CASE STUDY ALSO SHOWS THAT TYPE 2 DIABETES AFFECTS EVERYDAY LIFE, INCLUDING EATING, EXERCISE, MEDICATION, APPOINTMENTS AND PLANNING ROUTINES. HOWEVER, ANASTASIA CAN ACTIVELY MANAGE MANY OF HER RISK FACTORS THROUGH HEALTHIER EATING, INCREASED PHYSICAL ACTIVITY, WEIGHT MANAGEMENT, MEDICATION AND REGULAR MONITORING. OVERALL, PERSON-CENTRED SUPPORT AND EARLY MONITORING CAN HELP ANASTASIA MANAGE HER CONDITION SAFELY, MAINTAIN HER INDEPENDENCE AND REDUCE THE RISK OF FUTURE COMPLICATIONS.

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