

# Learning Environment



Ward 5

Learner Booklet

## Welcome

We would like to warmly welcome you to Lancashire Teaching Hospitals NHS Foundation Trust (LTHTR). Incorporated on the 1st of April 2005, LTHTR was the first trust in the county to be awarded “Teaching Hospitals” status.

We have created this pack as a useful resource to help you to settle in with us. The purpose of this booklet is to provide you with information to help you on your learning environment.

## About LTHTR

### We have three equally important strategic aims:

- To provide outstanding and sustainable healthcare to our local communities
- To offer a range of high-quality specialist services to patients in Lancashire and South Cumbria
- To drive health innovation through world class education, training and research

We provide a range of Hospital based health services for adults and children and cover a range of specialities. These include cancer services such as radiotherapy, drug therapies and surgery, disablement services such as artificial limbs and wheelchair provision. Other specialities include vascular, major trauma, renal, neurosurgery and neurology including brain surgery and nervous system diseases.

### Our five core values:

- Being caring and compassionate
- Recognising individuality
- Seeking to involve
- Building team spirit
- Taking personal responsibility



We deliver care and treatment from three main facilities:

- Royal Preston Hospital
- Chorley and South Ribble Hospital
- Specialist Mobility and Rehabilitation Centre, Preston

In relation to car parking, please refer to your Induction to the Trust, for information regarding car parking. Additional information can be found on our Intranet page.

<https://legacy-intranet.lthtr.nhs.uk/car-parking-documents>



## Learning Environment

We would like to welcome you to your learning environment.

The team we have on Ward 5 are all passionate about the care we provide to our patients. We have high standards and high expectations from our team and we believe patient safety and patient care is the absolute pinnacle of the ward. We will welcome you as a part of our team and will expect you to keep to these standards.

The ward has 28 beds in total and is made up of 7 bays – 4 patients to a bay.

On the ward we work 12hr shift patterns.

- Days: 0700-1930
- Nights: 1900-0730

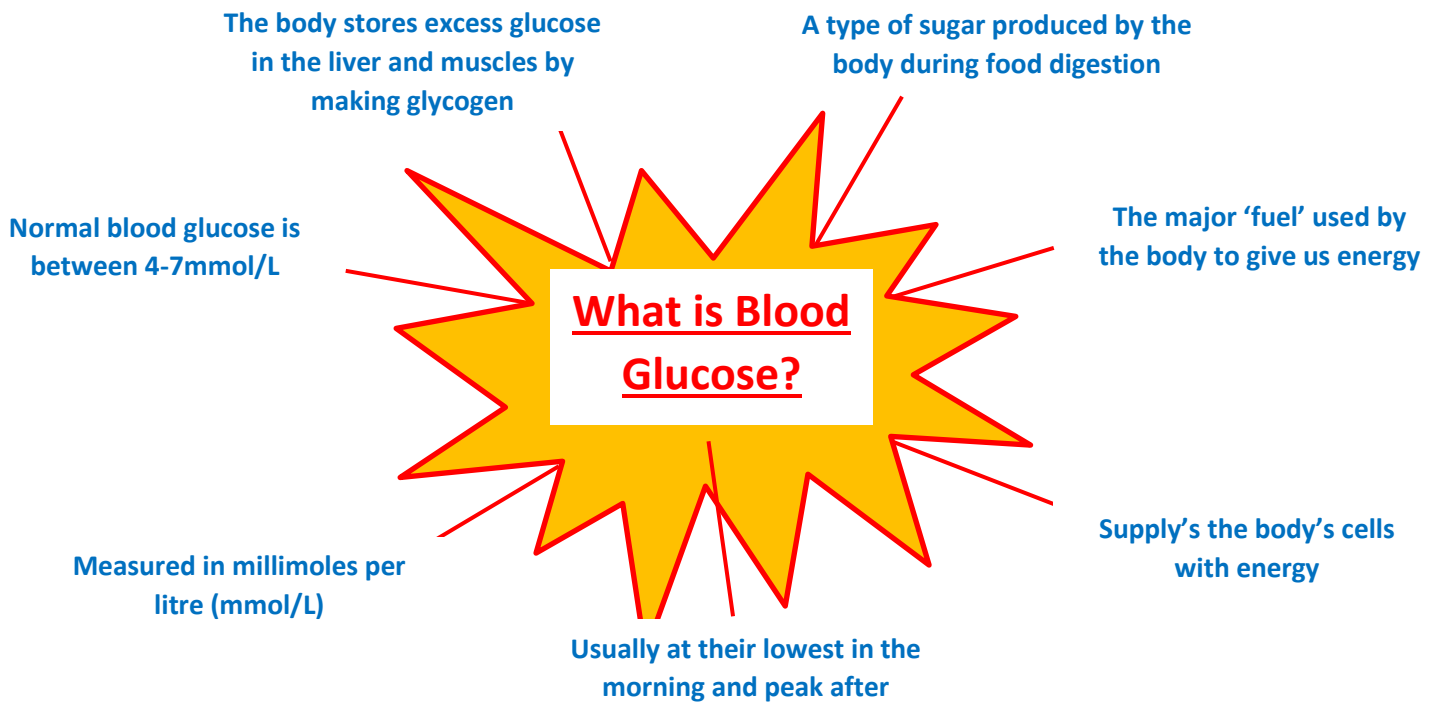
The ward has swipe access to all areas including getting in and out of the main doors. Please ask either the Ward Manager or one of the Band 6's to send an email to security with your badge number to get you access.

We hope you enjoy your time with us; we aim to give you as much experience as possible and we thank you for all your help and support.

### What is Diabetes?

Diabetes is a metabolic disease where the body cannot properly control levels of glucose in the blood. Diabetes is a chronic and progressive condition that impacts upon almost every aspect of life. It can affect infants, children, young people and adults of all ages and is becoming more common. Diabetes can result in premature death, ill health and disability, yet these can often be prevented or delayed by high quality care.

Glucose is one of the body's main fuels. It is an energy rich source that is broken down in cells to power the millions of biochemical reactions that constantly take place in the body. Put simple, glucose provides energy to all of the cells in the body. The cells take in glucose from the blood and break it down for energy. Some cells, like brain cells and red blood cells rely solely on glucose to fuel.



The food we eat is made up of fat, protein and carbohydrates. Protein and fat don't actually have a direct effect on blood glucose levels, but they do need to be considered as part of an overall healthy diet. It is carbohydrate that provides our main energy supply for the blood, to keep it functioning.

Carbohydrates in the form of starches and fibre are important to:

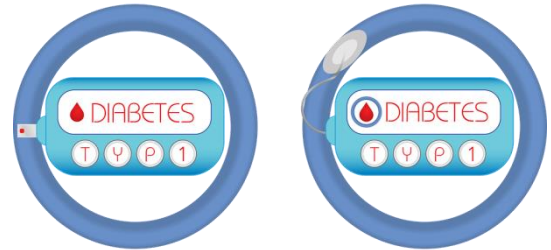
- Help regulate blood sugar levels
- Prevent the body from using protein for energy as it is required for other important functions
- Give a feeling of fullness (assisting weight control)
- Protect against heart disease, cancer and help prevent constipation.

There are 2 main types of diabetes, these are.

- Type 1 diabetes
- Type 2 diabetes

## Type 1 Diabetes

Type 1 diabetes is often referred to as insulin-dependent diabetes. It is also sometimes known as juvenile diabetes or early-onset diabetes. It can develop at any age but usually appears before the age of 40, and especially in the teenage years. It starts suddenly rather than progressing.



Type 1 diabetes is an autoimmune disease whereby the body's immune system attacks and kills off its own insulin-producing cells. As a result, the body is unable to produce insulin and this leads to increased blood glucose levels, which in turn can cause serious damage to all organ systems in the body. No one knows why this happens, but the body has an abnormal reaction to the cells. There is nothing that we can do to prevent Type 1 Diabetes.

Type 1 diabetes is always treated with insulin injections. An individual with type 1 diabetes will need to take insulin injections for life. They will also need to ensure that their blood glucose level stays balanced by eating a healthy diet and carrying out regular blood tests. People with type 1 diabetes make up only 10% of all people with diabetes.

## Type 2 diabetes

Type 2 diabetes develops when the body can still produce some insulin but not enough for it to function properly, or when the cells in the body do not react properly to insulin. This is called insulin resistance.



## What is insulin resistance?

Insulin resistance is a condition in which the body produces insulin but cannot use it effectively. When people have insulin resistance, glucose builds up in the blood instead of being absorbed by the cells. When an individual develops insulin resistance, their muscle, fat and liver cells do not respond properly to insulin and so find it difficult to absorb glucose from the blood stream. One of insulin's jobs is to unlock the cells of the body to enable them to take in glucose. Insulin resistance occurs when the cells do not unlock to take in glucose. When this happens, the body requires higher levels of insulin to help the glucose enter the cells. The beta cells of the pancreas try to keep up with this demand by producing more insulin in an attempt to stabilise the blood glucose. As long as the beta cells are able to produce enough insulin to overcome the insulin resistance, blood glucose levels will remain in

the health range. Although the exact causes of insulin resistance are not completely understood, it is thought that major contributing factors include excess weight (especially around the middle of the body) and physical inactivity.

### How is Insulin produced?



Insulin is a hormone made by an organ in the body called the pancreas. The pancreas is a large gland and is part of the digestive system. It is located high up in the abdomen and lies across the body where the ribs meet at the bottom. It is shaped like a leaf and is about six inches long. The wide end is called the head while the narrower end is called the tail: the middle part is called the body.

The pancreas has two important functions. It produces:

- Pancreatic digestion juices
- Insulin and other digestive hormones

The exocrine pancreas is the part of the pancreas that produces digestive juices; whilst the endocrine pancreas is the part of the pancreas that produces insulin and other digestive hormones.

Endocrine cells are made up of tiny clusters of cells known as islets of Langerhans or pancreatic islets. Two of these cells produce the hormones insulin and glucagon.

- The beta cells create and secrete insulin
- The alpha cells create and secrete glucagon.

The whole process begins when food is eaten. When the food is digested, glucose passes into the blood stream and the pancreas is stimulated to produce insulin. The Insulin acts as a key that unlocks the cells in the body to allow the glucose to enter. Glucose is used by the body as its major energy source, but if too much glucose is left in the blood, glucose levels will remain elevated. Insulin is secreted by the beta cells in the pancreas.



It is the pancreas that is responsible for this process. It is only when the beta cells in the pancreas start to decline or malfunction that people become aware of the essential role it plays in providing energy and in the regulation of blood glucose levels.

### How Insulin regulates blood and glucose levels

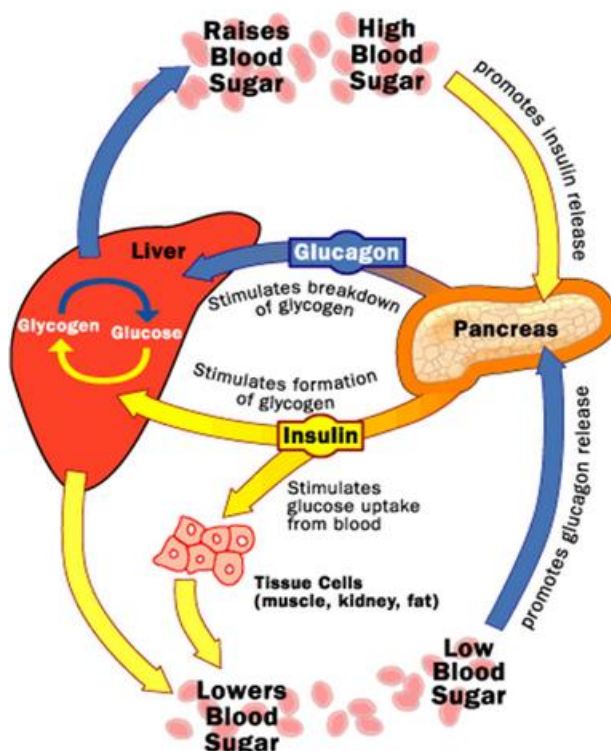
Insulin is a hormone that plays a number of roles in the regulation of the body's metabolism. It also plays a key role in regulating blood glucose levels. If the pancreas cannot produce insulin or if the body is unable to respond to the insulin, it will result in diabetes.

In addition to insulin, the pancreas also produces glucagon; these two hormones are responsible for regulating glucose levels in the blood. Insulin and glucagon are secreted from the pancreas directly into the bloodstream.

When the concentration of blood glucose rises in the blood, insulin is released. Insulin lowers the blood glucose levels by stimulating cells throughout the body to use and store glucose.

Glucagon has the opposite effect of insulin. It triggers the release of stored sugars, increasing the concentration of glucose in the blood. Glucagon acts as a control mechanism whenever the body produces too much insulin.

Without insulin the blood glucose builds up in the blood and the cells are starved of

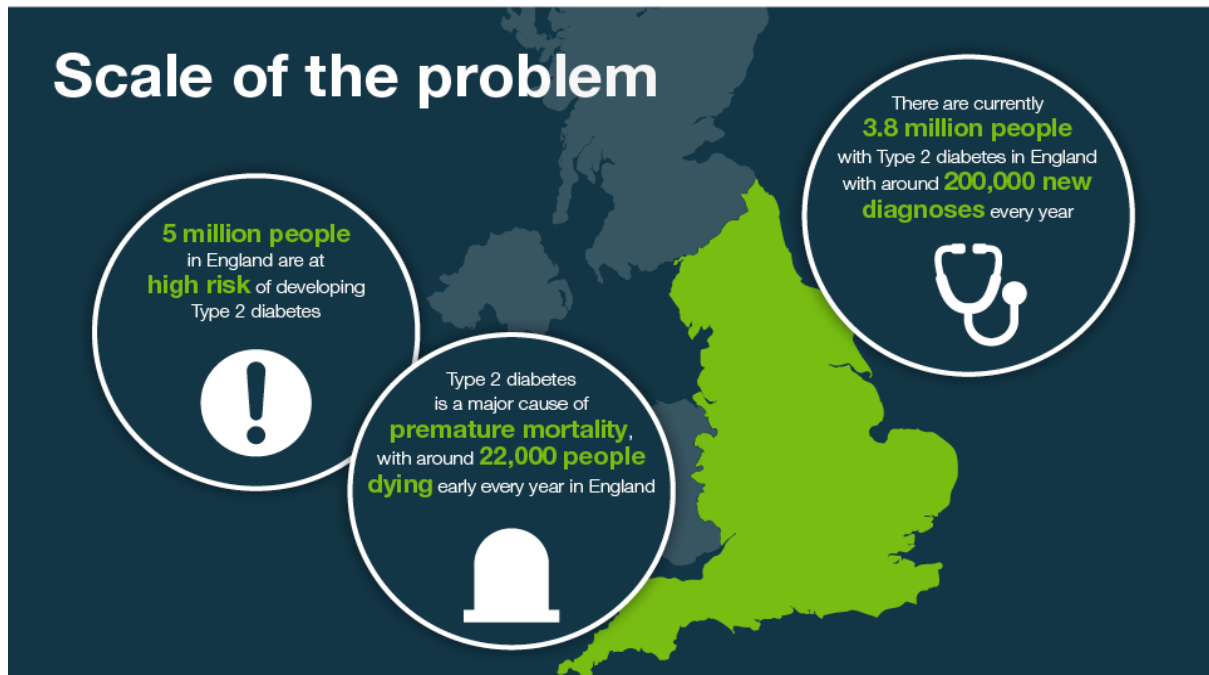


their energy source. Research has indicated that people with pre-diabetes can prevent it from developing into type 2 diabetes by making changes to their lifestyle – mainly through changes to diet and physical activity. It is therefore important that people with pre-diabetes are supported to make lifestyle changes and that they are encouraged to manage their condition. Early action can slow down or even stop the development of type 2 diabetes.

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### Signs and symptoms of Diabetes

The signs and symptoms of diabetes are generally the same for Type 1 and Type 2 diabetes; however, there is a difference in the way in which they appear. With Type 1 diabetes the signs and symptoms are usually obvious and develop very quickly, often over just a few weeks. With type 2 diabetes the signs and symptoms may not be obvious as the condition develops slowly over a period of years and may only be picked up through a routine check-up.

The main symptoms of untreated diabetes are:

- Increased Thirst – This is due to the loss of large volumes of water
- Frequency in passing large amounts of urine – the kidneys attempt to filter the glucose out of the body
- Extreme Tiredness – this is because the glucose cannot be taken up by the cells and used for energy
- Blurred vision – due to glucose building up in the lens at the front of the eye

- Genital itching or regular episodes of thrush – this is because of the increased glucose levels this creates an environment where micro-organisms that cause thrush can survive.
- Slow healing of wounds - this is because of high levels of glucose, bacteria are more likely to thrive in wounds, making healing much slower.

### Common abbreviations

ABX – antibiotics

AF- atrial fibrillation

AKI – acute kidney injury

ALD – alcoholic liver disease

BD – twice daily

CKD – chronic kidney disease

COPD – chronic obstructive pulmonary disease

CVA – cerebral vascular accident

CXR – chest x-ray

DNAR – Do no attempt cardiopulmonary resuscitation

DVT – Deep vein thrombosis

HTN – hypertension

IDA – iron deficiency anaemia

IEOCOPD – infective exacerbation of chronic obstructive pulmonary disease

IHD – ischemic heart disease

IVI – intravenous infusion (fluids)

LRTI – lower respiratory tract infection

MI – myocardial infarction (heart attack)

MOFD – medically optimised for discharge

NBM – Nil by mouth

NDNF – normal diet, normal fluids

NG- nasogastric

NIEOCOPD- Non- infective exacerbation of chronic obstructive pulmonary disease

NKDA – no known declared allergies

OA – osteoarthritis

OD – once daily

QDS – four times daily

RA – rheumatoid arthritis

SFB- strict fluid balance

SOB- shortness of breath

T1DM – type 1 diabetes mellitus (IDDM – insulin dependent diabetes mellitus)

T2DM – type 2 diabetes mellitus

T2RF – type 2 respiratory failure

TDS – three times daily

TWOC- trial without catheter

URTI – upper respiratory tract infection

### Common medications

Amlodipine

Amoxicillin

Aspirin

Atenolol

Bisoprolol

Clarithromycin

Co-amoxiclav

Dalteparin

Enoxaparin

Erythromycin

Exenatide

Flucloxacillin

Furosemide  
Glicazide  
Insulin  
Lansoprazole  
Levetiracetam  
Linagliptin  
Macrogol 3350  
Meropenem  
Metformin  
Omeprazole  
Saxagliptin  
Sitagliptin  
Spironolactone

### Spoke placements

DSN – liaise with the DSN's to gain knowledge around diabetes and common medications

DF – there is an opportunity to spend half a day with the discharge facilitator

PT/OT – liaise with the team to follow them for your select group of patients.

SALT - liaise with the team and follow them for your select group of patients.

## Induction

The Local Induction process will take place throughout the first week of your placement.

This will comprise of:

- Trust and department orientation, including housekeeping information
- Location of emergency equipment
- IT access
- Reading & acknowledgement of Mandatory Trust policies such as Health & Safety, Fire Safety, Infection Control, Information Governance, Staff Code of Conduct, Social Networking and Dress Code policies.
- Adult Basic Life Support training if applicable
- Trust Moving & Handling Training if applicable
- COVID-related policies & procedure
- Orientation
- Professional voice: - freedom to speak up, datix, chain of command, open door policy
- An awareness of our Educational Governance Team- evaluation and importance of feedback
- Inter-professional Learning Sessions
- Practice Assessment Record and Evaluation (PARE) training, if applicable
- Collaborative Learning in Practice (CLiP™), if applicable
- How the role of Practice Development Facilitator can support you, where applicable



## What to bring on your first day

- Uniform: All other items in the dress code policy must be adhered to <https://legacy-intranet.lthtr.nhs.uk/search?term=uniform+policy>
- A smallish bag which would fit into a small locker.
- You may wish to bring a packed lunch and a drink on your first day.

## Inter-professional Learning Sessions and eLearning Resources

At our Trust, our Education Team facilitates a yearly programme of Inter-professional Learning (IPL) sessions. This programme consists of various teaching sessions, delivered by our Specialist Teams, to support and enhance our learners and trainees' learning experience with us.

Inter-professional learning is an important part of your development and allows you to build professional relationships and communication skills with the wider multi-disciplinary teams. Our IPL sessions are valuable in supporting you to stretch your knowledge and experiences to enhance your clinical practice. They also help bridge the gap between theory and practice, allowing you to hold a deeper understanding of the topics discussed. Our sessions are open for all learners and trainees on placement at our Trust to attend and these learning opportunities are an extension to your learning environment; therefore, these hours need to be recorded on your timesheets. We encourage our staff to facilitate enabling a learner/trainee to attend these sessions.

**Please note: You must inform your learning environment prior to attending a session.** These IPL sessions need to be discussed in a timely manner with your learning environment.

You are required to complete a reflection on each of your IPL sessions, as well as documenting on your HEI documentation what you have learnt and how this relates to your current placement.

You can book onto our IPL Sessions by accessing this link <https://elearning.lthtr.nhs.uk/login/index.php> and searching for 'IPL'.

You can access our policies and procedures via our Intranet page, which will help expand and stretch your knowledge.

## Support with evidencing your learning outcomes or proficiencies

We encourage you to use the Trust learning logs to collate and evidence your skills, knowledge and abilities achieved. You can then present your completed learning logs to your Practice Assessor/Educator during your assessment meetings. Any staff member who is involved in coaching you can complete your learning log feedback.

You can request time during your placement hours to complete these and request feedback prior to the shift ending. To obtain a copy of our learning logs, please visit our Health Academy Webpage on the link below, where you will see a copy of our CLiP™ Learning Log available for you to download, on the right hand side - <https://healthacademy.lancsteachinghospitals.nhs.uk/support/clinical-placement-support/collaborative-learning-in-practice-clip/>

## Chain of Command

Keeping patients safe, providing the best care that we can and learning in an environment where you feel safe and valued is important to us. Speaking up about any concern you have on your learning environment is also important. In fact, it's vital because it will help us to keep improving our services for all patients.

There may be occasions where we witness, experience or are asked to do something that causes us concern. Often, these concerns can be easily resolved, but sometimes it can be difficult to know what to do.

Our Clinical Placement Support Team are available Monday – Friday, 8.00am – 4.00pm should you need to contact them in relation to any concerns regarding your learning environment. If your concern relates to patient safety and/or your concerns are outside of these hours, please follow the chain of command in your learning environment and speak with the person in charge.

Please visit our Freedom to Speak Up page on the Intranet for more details.





## We value your feedback

Our Trust values your feedback. To continuously improve, we offer opportunities for our learners and trainees to provide feedback regarding both your learner experience and your learning environment. We would encourage you to kindly complete your end of placement evaluation, within your clinical hours.

We will keep you updated with the improvements that we make based on the feedback you provide us with.

## Learning Environment Improvement Forum

Our Learning Environment Improvement Forum began in November 2021, with key stakeholders attending; Learners, Trainees, Clinical Staff, Education Leads and our Nursing Directorate. Monthly meetings are held to share new and innovative ideas as to how we can collaboratively enhance our learning environments, to support both learners, trainees and staff.

All attendees at the Learning Environment Improvement Forums contribute their suggestions and guidance on our projects. Collaboratively, exciting improvements are implemented to enhance our learning environments.

Innovative changes made by our Learning Environment Improvement Forum, within Academic Year 2021-2022;

- NEW Learner Boards designed and placed on our learning environments
- Learner booklets made available on our Health Academy webpage to prepare our learners and trainees for their clinical placements, as suggested by our learners and trainees
- PARE and CLiP™ training embedded into our Learner and Trainee Inductions
- Quick Reference Guide designed and created to welcome our learners and trainees to the Trust and prepare them for their clinical placements

We welcome any of our staff, learners and trainees at the Trust to attend our Learner Environment Improvement Forums, to contribute your ideas and suggestions for our new and innovative projects. You can join via the E-Learning Portal - <https://elearning.lthtr.nhs.uk> and going to Courses, then selecting the tab 'Inter Professional Learning', where you will see our forum listed.