

## Monitoring and Complications

### Care plan

An individual care plan to address issues of concern by both the person with diabetes and the health professional should be negotiated, within an agreed reasonable and achievable time frame, and should be regularly reviewed

**Annual Review** is an essential part of the planned diabetes management and it is recommended that it should be undertaken within Primary Care wherever possible (Adults type 1 and type 2). The elements of the annual review may need to be addressed at a number of appointments.

### Establish and review management plans and treatment targets for:

- Hyperglycaemia
- Hypertension
- Lipid management
- Cardiovascular protection / Assessment
- Contraception status in child-bearing women
- Pre-conceptual advice / Erectile Dysfunction

### Lifestyle

- Activity and Lifestyle Advice
- Advise to stop smoking/refer to Stop Smoking Service
- Diet review
- Advise on exercise

### Clinical

- Weight / BMI / Waist Circumference
- Blood Pressure
- Symptoms of hyperglycaemia / hypoglycaemia
- Injection site status
- Assessment of self-monitoring (including ketone testing where appropriate)
- Psychological factors / Depression
- Medication problems and concordance
- Clinical waste/sharps

### Biochemical

- HbA1c and fasting glucose
- Urea and electrolyte levels
- Lipid Profile
- Liver function testing
- Consideration of FBC and TFT levels if relevant to medication use

### Diabetic Retinopathy Screening

Annual eye screening by local programme

### Renal Monitoring

- Urine [Albumin:Creatinine ratio](#) (regardless of urine dipstick result) and eGFR
- Serum calcium, phosphate and PTH in stage 4 and 5 CKD to identify anaemia. If Hb11g/dl check haematinics and exclude other causes.

### Foot care

- Deformity/callus
- Check dorsalis pedis and posterior tibial foot pulses
- Pinprick sensation
- Light touch -10g Semmes-Weinstein monofilament
- Foot ulcers
- Footwear
- Check risk levels (prevention of active foot disease)

## Introduction

The benefits of engaging in regular physical activity and/or exercise are clear.

### Benefits of physical activity or exercise include:

- Improved insulin sensitivity
- Lower blood glucose
- Increase HDL and lower LDL cholesterol
- Lower blood pressure
- Aids weight loss
- Provides stress relief \*

Physical activity can be defined as any movement of skeletal muscle, which results in energy usage ([NICE, 2008 PH8](#)).  
Examples include:

- Walking
- Gardening
- Housework
- Shopping

Exercise can be defined as physical activity that is planned, structured and involves repetition of muscle that is aimed to maintain or improve fitness ([WHO 2010](#)). Examples include:

- Running
- Swimming
- Gym Classes
- Sports such as football, cricket, rugby

Advice on physical activity and or should be individualised and reflect treatment goals, which could include: weight loss, reducing cardiovascular risk and benefiting glycaemic control whilst being realistic and achievable.

People with type 1 diabetes may need additional support from Diabetes Specialist Nurses, as different types of exercise may have different effects on blood glucose levels, to ensure safety.

**Supporting agency:** [PSS](#) Barnsley Health Trainers