**TARGET HbA1c**

- <53mmol/mol (7.0%) in Type 1 Diabetes
- 48-58mmol/mol (6.5-7.5%) in Type 2 Diabetes
- <48mmol/mol (6.5%) in patients with short duration Type 2 Diabetes on diet plus 1 or 2 oral therapies
- <58mmol/mol (7.5%) once 3rd line treatment is added (see NICE guidelines)
- <53mmol/mol (7%) Pre-conception

Although we strive for these targets, levels should be set with the individual patient. For more information on oral agents see Glycaemic Management - Oral Agents sheet.

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**Algorithm for Glycaemic Management**

1. **Adult with Type 2 Diabetes**
   - **Does the person need insulin early?** See Glycaemic Management

2. **NO**
   - Check baseline investigations (HbA1c, lab glucose, U+E’s, LFT’s, lipid profile, TFT’s, urine for protein and ketones).
   - Consider checking B12 values in South Asian patients.
   - Calculate BMI. Measure waist circumference.

3. **Routine Surveillance**
   - Structured education and lifestyle for 6-12 weeks for monitoring and glycaemic targets (Structured education programme should comply with D0H recommendation on education eg. DESMOND).
   - Offer early oral hypoglycaemic agent therapy to those symptomatic ± a pre-breakfast glucose >15mmol/l.

4. **NO**
   - **HbA1c above target?**

5. **YES**

See "Glycaemic Management (2)" on page 4 for NICE Guidelines on Blood Glucose Lowering Therapy.
**Type 2 Diabetes - Algorithm for Blood Pressure Management**

**Blood Pressure**

Treatment Target

- <140/80
- <130/80 if any degree of end organ changes (kidneys/eyes/brain)

**Is BP satisfactory (<140/80)**

- **YES**

- **NO**
  - Treat to target <140/80
  - <130/80 if any degree of end organ changes
  - Review at least 3 monthly

**Is BP satisfactory**

- **YES**
  - Add further therapy
  - Review at least 3 monthly

- **NO**
  - Review at least 3 monthly

**Offer lifestyle advice, particularly salt intake**

- **Aim for BP <140/80 (JBS-2)**

- **Offer early pharmacological treatment to reduce BP, particularly in those with:**
  - BP >160/100
  - Cardiovascular disease
  - Microvascular disease

- **Consider:**
  - Introduction of a statin
  - Combination pharmacological therapy is likely to be needed

**1st Line Anti-hypertensive Agents**

- ACE Inhibitors
- Low-cost Angiotensin II Receptor Blockers such as losartan*
- Long acting calcium channel blockers (CCB)
- Thiazide Diuretics (particularly in the elderly with systolic hypertension) such as Indapamide
- Patients of Afro-Caribbean origin may respond differently to anti-hypertensive treatment (CCB often preferred as 1st line treatment)

**Anti-hypertensive Agents as part of Combination Therapy**

- Beta Blockers
- Spironolactone
- Alpha Blockers

*See Leicestershire Medicines Formulary at http://leicestershire.formulary.co.uk
It is important to consider lifestyle intervention at every stage.

**Type 2 Diabetes - Algorithm for Lipid and Diabetes Management**

**Practical Guidelines in Diabetes**

**Audit Target**
Total Cholesterol <5
LDL <3

**Target to be Achieved**
Total Cholesterol <4
LDL <2

- Target can be difficult to achieve. The closer you can get the better. Consult if necessary for specialist advice.

**Statins Should not be Used in Women of Childbearing Potential who are Not Taking Contraception, or During Pregnancy**

*See Leicestershire Medicines Formulary at http://leicestershire.formulary.co.uk*

**Risk Factors:**
- Diabetic eye disease
- Diabetic kidney disease
- HbA1c >75mmol/mol (9%) 
- Hypertension
- Total cholesterol >5 mmol/l
- Family history of premature CVD
- Metabolic syndrome
- South Asian Ethnic Origin

**If patient aged 18-39**

- **WITH** Type 1 Diabetes + 1 Risk Factor
- **WITH** Type 2 Diabetes

**Consider other risk factors and consider statin use on merit**

**If patient over 40**

- **RISK FACTORS:**
  - Diabetic eye disease
  - Diabetic kidney disease
  - HbA1c >75mmol/mol (9%)
  - Hypertension
  - Total cholesterol >5 mmol/l
  - Family history of premature CVD
  - Metabolic syndrome
  - South Asian Ethnic Origin

**Low cost statin** at bedtime
eg. Simvastatin 40mg
(Maximum recommended dose in conjunction with amlodipine or diltiazem is now 20 mg/day.

- If target not met after 6 weeks or if the patient is intolerant of Simvastatin

**Switch to Atorvastatin 20mgs once daily**

- **IF TARGET NOT MET**

**Up-titrate Atorvastatin to 40mgs daily**
If Atorvastatin not tolerated start Rosuvastatin 10mgs once daily (5mgs in South Asian patients)

- **IF TARGET NOT MET**

**If statin not tolerated consider Ezetimibe 10 mgs once daily**

- **IF TARGET NOT MET**

**Refer to Lipid or Diabetes Clinic**

**IT IS IMPORTANT TO CONSIDER LIFESTYLE INTERVENTION AT EVERY STAGE**

- If triglycerides >10, check U+E’s, HbA1c, LFT + TFTs, CK, LDH.
- Start a fibrate and re-check lipids fasting after 6 weeks.
- If fasting triglycerides remain >10 refer to lipid clinic.