

# Guidelines for Diabetes Care Overview

## INITIAL VISIT

TYPE OF TEST	TARGET /TEST	COMMENTS
<b>Weight/ BMI</b>	<b>BMI</b>	<b>Measure initially and each routine visit</b>
Normal	18.5–24.9	If obese, determine level of obesity and assess to identify: <ul style="list-style-type: none"> <li>potential medical causes/metabolic co-morbidities</li> <li>psychological status/potential barriers to treatment</li> </ul> Possible options to treat obesity when other options fail: <ul style="list-style-type: none"> <li>weight loss drugs (BMI <math>\geq</math>30) (with lifestyle modification)</li> <li>bariatric surgery (BMI <math>\geq</math>40)</li> </ul>
Overweight	25.0–29.9	
Obesity (I)	30.0–34.9	
Obesity (II)	35.0–39.9	
Severe obesity (III)	$\geq$ 40	
<b>Waist Circumference</b>		<b>Measure at initial visit and periodically thereafter</b>
Measure waist	Men $\leq$ 40 in (102 cm) Women $\leq$ 35 in (88 cm)	Persons with larger waist circumference are at greater disease risk
<b>Nutrition</b>		<b>Review at each routine visit</b>
Refer for Medical Nutrition Therapy (MNT) Counselling	<ul style="list-style-type: none"> <li>Follow an individualized meal plan to improve glycaemic control</li> <li>Weight loss as required</li> </ul>	<ul style="list-style-type: none"> <li>Assess for readiness to change at initial visit and refer</li> <li>Discuss ongoing nutrition and weight goals / celebrate successes</li> <li>Goals should be realistic and achievable</li> <li>Assess compliance to MNT plan at follow-ups</li> <li>Key points: portion size/number servings/ limit food high in sugar/reduce high fat foods /increase fruit and vegetable intake</li> </ul>
<b>Physical activity</b>		<b>Review each routine visit</b>
Aerobic exercise	<ul style="list-style-type: none"> <li>30-60 minutes 5 times a week</li> </ul>	<ul style="list-style-type: none"> <li>Assess patient for level of activity (see physical activity section)</li> <li>Aerobic Exercise should be of moderate intensity</li> <li>Exercise can be in 10 minute blocks of time</li> </ul>
Resistance exercise	<ul style="list-style-type: none"> <li>3 times a week</li> </ul>	<ul style="list-style-type: none"> <li>If not contraindicated, patients with type 2 diabetes are recommended to perform resistance exercises</li> <li>Initial instruction by an exercise specialist is recommended</li> </ul>
<b>Smoking</b>		<b>Review each routine visit</b>
	<ul style="list-style-type: none"> <li>Ask if smoker</li> <li>Advise to quit</li> <li>Assess readiness</li> <li>Assist - refer</li> <li>Arrange – follow-up</li> </ul>	<b>Brief advice by medical providers to quit smoking is effective</b> <ul style="list-style-type: none"> <li>Use "5A's" – of motivational interviewing</li> <li>More intensive interventions (individual, group or telephone counselling) that provide social support and training in problem-solving skills are effective</li> <li>Use approved smoking cessation drugs to assist with smoking cessation</li> </ul>

Refer for	Routine well persons tests
<ul style="list-style-type: none"> <li>Diabetes education</li> </ul>	<ul style="list-style-type: none"> <li>Mammogram / Clinical Breast exam</li> </ul>
<ul style="list-style-type: none"> <li>Nutrition counselling</li> </ul>	<ul style="list-style-type: none"> <li>PAP or PSA /Prostate exam</li> </ul>
<ul style="list-style-type: none"> <li>Psychological counselling</li> </ul>	<ul style="list-style-type: none"> <li>Faecal occult blood</li> </ul>
<ul style="list-style-type: none"> <li>Lifestyle/ behaviour changes counselling</li> </ul>	<ul style="list-style-type: none"> <li>Colonoscopy</li> </ul>
<ul style="list-style-type: none"> <li>Annual blood glucose meter accuracy assessment</li> </ul>	<ul style="list-style-type: none"> <li>Bone density</li> </ul>
<b>Immunizations</b>	<ul style="list-style-type: none"> <li>Other tests as required</li> </ul>
<ul style="list-style-type: none"> <li>Annual influenza</li> </ul>	
<ul style="list-style-type: none"> <li>Pneumococcus</li> </ul>	

## EVERY VISIT

TYPE OF TEST	TARGET /TEST	COMMENTS
Blood glucose		<b>Measure / review every 3-6 months</b>
FPG	72- 126 mg/dL	<b>T2DM</b> - primary objective is to achieve and maintain glycaemic levels as close to non diabetic level as possible. 1. Introduce <b>oral Metformin</b> with lifestyle changes <b>If glycaemic levels are not maintained then:</b> 1. Add a <b>second medicine:</b> oral medicine or insulin 2. Add <b>third medicine:</b> insulin (basal or intensified therapy)
2 hour Plasma Glucose	T1DM 90-180 mg/dL T2DM 90-144 mg/dL	
HbA1c		<b>Measure every 3-6 months</b>
	< 7%	HbA1c reductions of even 1% reduces the risk of CVD by 10-15%
Hypertension		<b>Measure each routine visit</b>
	130/ 80 mg	To treat hypertension, maintain lifestyle modification and: <ul style="list-style-type: none"> <li>Prescribe any agent <b>except alpha-adrenergic blockers</b></li> <li>Can use ACEI, A2RBs, DHP, CCBs or thiazide diuretics</li> <li>If <b>intolerant</b> to ACEI use A2RB (3 or more drugs may be required to reach target)</li> </ul>
Foot care		<b>Visual foot exam at each visit</b>
	Review by foot-care team: <ul style="list-style-type: none"> <li>At risk - 6 monthly</li> <li>High risk – 3-6 months</li> <li>Foot ulceration – refer to foot-care team</li> </ul>	<ul style="list-style-type: none"> <li>Refer to chiropodist at diagnosis of T2DM</li> <li>Ensure patients at high risk of foot ulceration receive:                             <ul style="list-style-type: none"> <li>Foot care education, professionally fitted footwear</li> <li>Smoking cessation strategies if they are smokers</li> <li>Early referral to professionals trained in foot care management if problems occur</li> </ul> </li> <li>Aggressive treatment for any infection of a diabetic foot</li> </ul>

## ANNUALLY

TYPE OF TEST	TARGET /TEST	COMMENTS
Lipids		<i>In most adult patients measure fasting lipid profile annually or every two years if low risk.</i>
LDL cholesterol	< 100 mg/dL	For established CVD in addition lifestyle intervention, prescribe: <ul style="list-style-type: none"> <li>Statin drugs</li> <li>ACE-inhibitors</li> <li>ASA</li> </ul>
HDL cholesterol	> 50 mg/dL	
Triglycerides	< 150 mg/dL	
Neuropathy		<b>Type 1 Diabetes:</b> screen 5 yrs after diagnosis then quarterly or as required <b>Type 2 Diabetes:</b> screen at diagnosis and then quarterly or as required
Screening method	<ul style="list-style-type: none"> <li>Prick sensation</li> <li>1.10 g monofilament</li> <li>Vibration sensitivity of big toe with tuning fork</li> <li>Assessment of ankle reflexes</li> </ul>	<ul style="list-style-type: none"> <li>Intensive glycaemic control important for <b>T1DM</b></li> <li>In <b>T2DM, lower blood glucose levels</b> are associated with reduced frequency of neuropathy</li> <li>Treatment / management of autonomic neuropathy will vary depending on severity and nerves affected</li> <li>Refer for <b>pain management</b> as required</li> </ul>
Retinopathy		<b>Type 1 Diabetes:</b> screen 5 yrs after diagnosis & annually if no/minimal unchanged retinopathy <b>Type 2 Diabetes:</b> screen at diagnosis & annually if no or minimal unchanged retinopathy
Screening method	<ul style="list-style-type: none"> <li>Visual acuity assessment</li> <li>Dilated funduscopy</li> <li>Retinal photography through dilated pupil</li> </ul>	<ul style="list-style-type: none"> <li>Diagnose the severity of retinopathy and establish appropriate monitoring intervals</li> <li>Treat sight-threatened retinopathy with photocoagulation</li> <li>Screen for other complications</li> </ul>
Renal/ kidney		<b>Type 1 Diabetes:</b> screen 5 yrs after diagnosis, then annually if no CKD <b>Type 2 Diabetes:</b> screen at diagnosis and then annually if no CKD
Normal ACR ratio:	<18 mg/g (men) <25 mg/g (women)	<b>If DKD measure: ACR and eGFR at least every 6 months</b> <b>Refer patient to a nephrologist or an internist</b> if there is chronic progressive loss of kidney function: <ul style="list-style-type: none"> <li>eGFR is &lt;30 ml/min</li> <li>ACR is persistently &gt; 530 mg/g</li> <li>&gt;30% increase creatinine within 3 mos of starting ACE</li> </ul>
Normal eGFR:	> 60 ml/min	



