

DM Guidelines

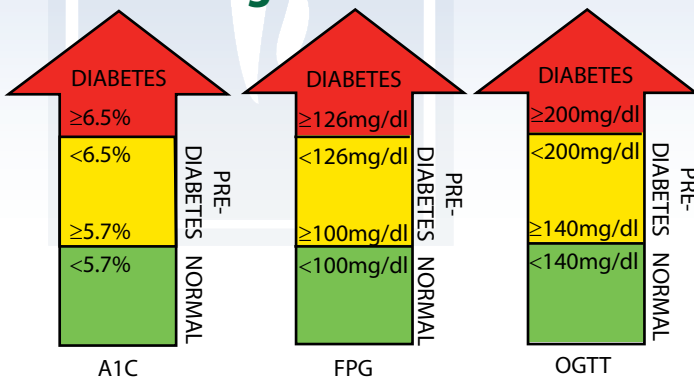
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from the American Diabetes Association (ADA)

Diagnosis

Testing to check for DM should be done on asymptomatic patients with BMI ≥ 25 and if they have any of the following risk factors: physical inactivity, 1st degree relative with DM, high risk race/ethnicity, HTN, women with PCOS, women with baby born >9 lbs or had gestational diabetes, history of CVD, HDL <35 mg/dL, triglyceride >250 mg/dL, HgA1C $\geq 5.7\%$, or other clinical conditions associated with insulin resistance.

Diabetes Diagnosis Criteria



For patients with diabetes, the ADA recommends checking HgA1C at least twice a year for patients that meet treatment goals. For patients who do not meet the goals, check their HgA1C quarterly.

Goals

Keep HgA1C $< 7\%$. For patients with severe hypoglycemia or limited life expectancy, advanced

microvascular or macrovascular complications and extensive comorbid conditions it may be difficult to attain that goal. It may be reasonable to be less stringent and try to attain a goal of HgA1C $< 8\%$.

Treatment

Individuals with pre-diabetes and diabetes, should receive individualized medical nutrition therapy by a registered dietitian. Weight loss is recommended for all overweight or obese individuals. Physical activity and behavior modifications are important components to the weight loss program. Diabetics should perform 150min/week of moderate intensity aerobic physical activity, reaching 50-70% of maximal heart rate, spread over 3 days per week.

Diabetics should also receive self-management diabetic education materials at onset of diabetes and followed as needed.

Alongside with the above lifestyle modifications, patients with diabetes may need to be placed on medication. First line medication is metformin. If patients are markedly symptomatic or have markedly elevated glucose levels/HgA1C level, physicians may consider insulin therapy. After 3-6 months, if monotherapy is not sufficient, consider adding a second oral agent or insulin.

Immunizations

Patients (≥ 6 months of age) with diabetes should be given the influenza vaccine annually. One time administration of pneumococcal polysaccharide vaccine should be given to diabetic patients. One time revaccination with pneumococcal is recommended for individuals > 64 year of age if previous pneumococcal vaccine was > 5 years ago.

Co-morbidities

- 1. Hypertension:** Blood pressure should be screened at every diabetic visit. Systolic goal is < 130 mm Hg for diabetics. Diastolic goal is < 80 mm Hg. Preferentially use of an ACE inhibitor or ARB to control BP.
- 2. Dyslipidemia:** Check fasting lipid panel annually.
 - a. For patients with overt CVD or without CVD, >40 years old, with one or more risk factors for CVD: start statin therapy – regardless of baseline lipid levels.
 - b. For lower risk patients, consider starting statin if LDL is > 100 mg/dL, with a goal of decreasing LDL to below 100 mg/dL.
 - c. For individuals with overt CVD, goal is to keep LDL < 100 mg/dL. May also consider using a more stringent goal of < 70 mg/dL if physician feels it is appropriate for a particular patient.
 - d. If drug treated individuals do not reach the above goals on maximal tolerated statin therapy, a reduction of 30-40% in LDL may be an alternative goal.
- 3. Smoking:** Advise all patients to stop smoking.
- 4. Coronary Heart Disease:** In patients with known CVD, consider use of aspirin, statin, and ACE inhibitor therapy to reduce risk of cardiovascular events.
- 5. Nephropathy:** Need to reduce the risk of nephropathy by optimizing glucose control as well as blood pressure control. Annual urine albumin excretion screening should be done on all type 2 diabetic patients. ARBs or ACE inhibitor should be used in our diabetic population. Reduce protein intake to 0.8-1.0 g/kg body weight per day in diabetics with early kidney damage. Reduce protein to 0.8g/kg/body weight per day in diabetics with later stages of kidney damage. Refer to a nephrologist if uncertain about the etiology of kidney disease or difficult /advanced kidney disease.
- 6. Retinopathy:** Need to reduce the risk of retinopathy by optimizing glucose control and optimizing blood pressure control. Patients with type 2 diabetes should have a dilated and comprehensive eye exam with an optometrist/ophthalmologist shortly after diagnosis. Subsequent exams should be performed annually. Promptly refer patients with any level of macular edema, retinopathy to ophthalmologist.
- 7. Neuropathy:** Screen for distal symmetric polyneuropathy annually
- 8. Foot care:** Perform annual comprehensive foot exams including assessment of foot pulses and testing for loss of protective sensation. Provide general foot self-care education for patients with diabetes. Refer to podiatrist if diabetic patients smoke or have any neuropathy or lower extremity complications.

