

Diabetes Best Practice

Classification

- Type 1 diabetes (results from β -cell destruction, usually leading to absolute insulin deficiency)
- Type 2 diabetes (results from a progressive insulin secretory defect on the background of insulin resistance)
- Gestational diabetes mellitus (GDM) (diabetes diagnosed during pregnancy that is not clearly overt diabetes)

Pharmacological therapy in type 2 diabetes -Recommendations

- Metformin is the preferred initial pharmacological agent for type 2 diabetes.
- In newly diagnosed type 2 diabetic patients with markedly symptomatic and/or elevated blood glucose levels or A1C, consider insulin therapy, with or without additional agents, from the outset.
- If noninsulin monotherapy at maximal tolerated dose does not achieve or maintain the A1C target over 3–6 months, add a second oral agent, a glucagon-like peptide-1 (GLP-1) receptor agonist, or insulin.
- A patient-centered approach should be used to guide choice of pharmacological agents. Considerations include efficacy, cost, potential side effects, effects on weight, comorbidities, hypoglycemia risk, and patient preferences.
- Due to the progressive nature of type 2 diabetes, insulin therapy is eventually indicated for many patients with type 2 diabetes.

Macronutrients in diabetes management - Recommendations

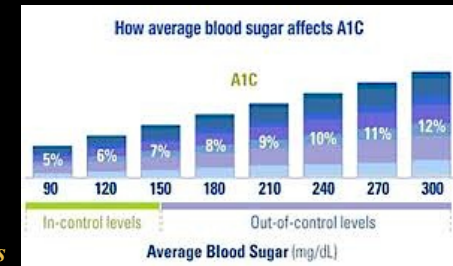
- The mix of carbohydrate, protein, and fat may be adjusted to meet the metabolic goals and individual preferences of the person with diabetes.
- Monitoring carbohydrate, whether by carbohydrate counting, choices, or experience-based estimation, remains a key strategy in achieving glycemic control.
- Saturated fat intake should be <7% of total calories.
- Reducing intake of *trans* fat lowers LDL cholesterol and increases HDL cholesterol; therefore, intake of *trans* fat should be minimized.
- Weight loss

Physical activity - Recommendations

- Adults with diabetes should be advised to perform at least 150 min/week of moderate-intensity aerobic physical activity, spread over at least 3 days/week with no more than two consecutive days without exercise.
- In the absence of contraindications, adults with type 2 diabetes should be encouraged to perform resistance training at least twice per week.



Reference: Standards of Medical Care in Diabetes (2013). Retrieved from http://care.diabetesjournals.org/content/36/Supplement_1/S11.full, Accessed 4-29-13.



A1C Recommendations

- Perform the A1C test two times a year in patients who are meeting treatment goals.
- Perform the A1C test quarterly after therapy change or if not meeting glycemic goals.
- Use of POC testing for A1C provides the opportunity for more timely treatment changes.

Prevention and Management of Complications

- Blood pressure should be measured at every routine visit.
- Advise all patients not to smoke or use tobacco products.
- Include smoking cessation counseling and other forms of treatment as a routine component of diabetes care.
- Consider aspirin therapy (75–162 mg/day) as prevention for increased cardiovascular risk (10-year risk >10%).
- In most adult patients measure fasting lipid profile at least annually. In adults with low-risk lipid values (LDL cholesterol <100 mg/dL, HDL cholesterol >50 mg/dL, and triglycerides <150 mg/dL), lipid assessments may be repeated every 2 years.
- Perform an annual test to assess urine albumin excretion in type 1 diabetic patients with diabetes duration of ≥ 5 years and in all type 2 diabetic patients starting at diagnosis.
- Measure serum creatinine annually in all adults with diabetes regardless of the degree of urine albumin excretion. The serum creatinine should be used to estimate GFR and stage the level of chronic kidney disease (CKD), if present.
- Dilated and comprehensive eye exam by an ophthalmologist or optometrist shortly after the diagnosis.
- Screened for distal symmetric polyneuropathy (DPN) starting at diagnosis of type 2 diabetes and 5 years after the diagnosis of type 1 diabetes and annually thereafter.
- Perform an annual comprehensive foot examination to identify risk factors predictive of ulcers and amputations.