Table 4.1. American Diabetes Association Diagnostic Criteria for Diabetes Mellitus

Diagnostic Test	Test Result Diagnostic Criteria
Fasting plasma glucose	≥126 mg/dL (7.0 mmol/L)
Random plasma glucose	≥200 mg/dL (11.1 mmol/L)
2-hour plasma glucose (after 75 oral glucose load)	≥200 mg/dL (11.1 mmol/L)
HbA1c (glycated hemoglobin)	≥6.5%

Table 4.2. Standard Insulins and Insulin Analogs

Insulin	Onset	Peak	Duration
Standard			
Regular	30–60 minutes	2–3 hours	8–10 hours
NPH	2–4 hours	4–10 hours	12–18 hours
Lente (zinc insulin)	2–4 hours	4–12 hours	12–20 hours
Ultra Lente (extended)	6–10 hours	10–16 hours	18–24 hours
Analogs			
Lispro (Humalog®)	5–15 minutes	30–90 minutes	4–6 hours
Aspart (NovoLog®)	5–15 minutes	30–90 minutes	4–6 hours
Glargine (Lantus®)	2–4 hours	None	20–24 hours
Glulisine (Apidra®)	20–30 minutes	30–90 minutes	1–2.5 hours

Table 4.3. Oral Antidiabetic Medications

Medication Class/Drugs	Action
Sulfonylureas	Stimulate insulin secretion
Glyburide	
Glipzide	
Glimepiride	
Meglitides	Stimulate rapid insulin secretion
Repaglinide	
Nategline	
Biguanides	Block liver production of glucose
Metformin	
Thiazolidinediones	Improve insulin sensitivity
Rosiglitazone	
Proglitazone	
Alpha-glucosides	Slow carbohydrate absorption
Acarbose	
Meglitol	
Combination agents	Multipurpose

Table 4.4. Characteristics and Relative Potencies of Glucocorticoids

Glucocorticoid	Approximate Equivalent Dose/ Anti-Inflammatory Effectiveness (mg)	Daily Dose above which HPA Axis Suppression Is Possible[a] (mg)		Half-Life (Biologic) Hours
		Male	Female	
Short acting				
Cortisone	25	25–35	20–30	8–12
Hydrocortisone (cortisol)	20	20–30	15–20	8–12
Intermediate acting				
Methylprednisolone	4	7.5–10	7.5	18–36
Prednisolone	5	7.5–10	7.5	18–36
Prednisone	5	7.5–10	7.5	18–36
Triamcinolone	4	7.5–10	7.5	18–36
Long acting				
Betamethasone	0.6	1–1.5	2.5–5	36–54
Dexamethasone	0.8	1–1.5	1–1.5	36–54

[a] Intended as a guide only. The dose in an individual depends on total body surface area.
HPA, hypothalamic–pituitary–adrenal.
Adapted from Dubois.[18]

Table 4.5. Hormones Secreted by the Thyroid and Their Normal Ranges

Hormone/Test	Normal Range	Function
Thyroxine (T4)	4.5–11.2 mcg/dL	This iodine-rich hormone is primarily protein bound in blood, and it acts as a prohormone for T3.
Triiodothyronine (T3)	100–200 ng/dL	T3 is largely free in blood and four times more active in life functions than T4.
Calcitonin	<10 pg/mL	Calcitonin interacts with parathyroid hormone to regulate serum calcium and phosphorus levels.

Table 4.6. Characteristics of Thyroid Diseases

Category	Hypothyroidism	Hyperthyroidism
General	Weakness, lethargy, hoarse voice, weight gain	Fatigue and weakness
Metabolic	Cold intolerance, decreased basal metabolic rate, weight gain	Heat intolerance, increased appetite, weight loss
Central nervous system	Slurring of words, sleep apnea, decreased concentration, mental slowness	Tremor, emotional lability, nervousness, sleep disturbances
Skin	Decreased sweating, coarse hair, nonpitting edema (myxedema)	Excessive perspiration, warm moist skin, fine hair or alopecia
Cardiac/pulmonary	Dyspnea, bradycardia, diastolic hypertension	Dyspnea, palpitations and tachycardia (associated with widened pulse pressure)
Other	Macroglossia, salivary gland enlargement, chronic constipation, muscle cramps and pain, cretinism (children)	Menstrual dysfunction, enlargement of thyroid gland, proptosis or exophthalmos