Drug Information Table

Insulin – lispro (Humalog), regular (Humulin R), NPH (Humulin N), insulin glargine (Lantus)

THERAPEUTIC USE	Diabetes mellitus (type 1, type 2, gestational)
ADVERSE DRUG REACTIONS	 Hypoglycemia Injection site reactions – lipodystrophy or Lipohypertrophy Hypersensitivity to insulin Allergic response
INTERVENTIONS	 Monitor for signs of hypoglycemia (with abrupt onset: tachycardia, palpitations, diaphoresis, shakiness; with gradual onset: headache, tremors, weakness). Check blood glucose level to confirm, then give glass of orange juice or 2–3 tsp of sugar, honey, or corn syrup dissolved in water or an appropriate number of glucose tablets as needed for hypoglycemia. For unconscious clients, administer glucagon parenterally. Monitor skin for subcutaneous fat accumulation. Monitor potassium levels. Monitor ECG. Monitor for indications of hypokalemia.
ADMINISTRATION	 Injection considerations Give subcutaneously (using an insulin syringe) or IV (Humulin R). Select an appropriate needle length for injecting insulin into subcutaneous tissue versus intradermal (too short) or intramuscular (too long). For insulin suspensions (cloudy insulins), gently rotate the vial between your palms to disperse the particles. When mixing short-acting insulin with longer-acting insulin, draw the short-acting insulin into the syringe first, then the longer-acting insulin. Do not mix insulin glargine or insulin detemir with any other insulin. Do not administer short-acting insulins if they appear cloudy or discolored. Instruct clients to self-administer insulin subcutaneously in one general area for consistent absorption rates. Storage of insulin Keep vials in use at room temperature for 1 month. Refrigerate unopened vials of a single type of insulin until their expiration date. Keep insulins premixed in syringes for 1 to 2 weeks under refrigeration and vertical, with the needles pointing upward. Prior to administration, resuspend the insulin via gentle motion. Expect dosage adjustments in response to caloric intake, infection, exercise, stress, growth spurts, and pregnancy. Make sure adequate glucose is available at onset and peak insulin times.

CLIENT INSTRUCTIONS	 Wear a medical alert bracelet. Watch for symptoms of hypoglycemia. Test blood glucose to confirm, then consume a snack of carbohydrates, and retest in 15 to 20 min and repeat treatment if still low. Carry a carbohydrate snack at all times. Report recurring episodes of hypoglycemia to provider. Rotate injection sites systematically and space them 1 inch apart. Do not inject cold insulin. Report weakness, nausea, palpitations, or paresthesia.
CONTRAINDICATIONS	Hypersensitivity to insulin
PRECAUTIONS	Older adultsFeverStressAltered nutrition
INTERACTIONS	 Sulfonylureas, meglitinides, beta blockers, salicylates, and alcohol increase hypoglycemic effects. Thiazide and loop diuretics, sympathomimetics, thyroid hormones, and glucocorticoids increase blood glucose levels, thus counteracting hypoglycemic effects. Beta blockers mask manifestations of hypoglycemia (tachycardia, tremors).