

Action

Promotes cellular uptake of glucose

Converts glucose into glycogen

Stops release of fats

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Stops gluconeogenesis

Starts producing glycogen & fat

Converts amino acids into proteins

Converts fatty acids into triglycerides

Moves Potassium into cells

Indication

Type 1, 2, or gestational diabetes

(DOC in pregnancy due to limited adverse effects and inability to cross placenta)

Cautions

Elderly

Renal patients b/c insulin can accumulate

Contraindications

hold medication if blood glucose <50

Routes of Administration

Timing: varies depending on type of insulin

SubQ all types

IV/IM only regular insulin (short acting)

Insulin pump only rapid acting

Inhaled only rapid acting

Administration Timing Guide

Types	Onset	Peak	Duration
Rapid	10-20 min	0.5-2 hr.	3-5 hr
Short	30-60 min	2.5 hr	6-12 hr
Inter-mediate	1-1.5 hr	4-14 hr	24 hr
Long-A-cting	60-70 min	None	24 hr

Patient Education

Educated about sick day rules

Educated about long-term complications of diabetes

Rotate administration sites to prevent lipodystrophy

Life-long treatment (T1D)

Wear a medical alert bracelet

Store unopened insulin in fridge

Discard insulin after 30 days of use

Drug Interactions

Beta Blockers mask signs of hypoglycemia

Steroids decrease effectiveness of insulin

Alcohol Can cause increased or decreased blood glucose levels

MAOIs

Thiazide

Adverse Effects

Hypoglycemia

Lipodystrophy

Hypokalemia

DKA

