

Type 2 diabetes medication adjustment with fasting

The most important consideration is to prevent unsafe levels of low blood sugar during fasting. How this is done may differ for each individual, depending on the length of the fast and how well blood sugar is controlled at baseline. In addition, all individuals with type 2 diabetes who use intermittent fasting need to be comfortable checking their blood sugar levels multiple times a day.

Drug group (example)	Drug action	Hypoglycemia risk?	Suggested action
Long-acting insulins (Insulin glargine)	Long-acting exogenous insulin	YES	REDUCE by 33-50% on fasting days, depending on level of concern for maintaining strict glucose control.
Short-acting insulins (Insulin aspart)	Short-acting exogenous insulin	YES	STOP all short-acting insulin when fasting
Combined long- and short-acting insulin	Mixture of long- and short-acting exogenous insulin	YES	STOP and convert to long-acting insulin with the appropriate adjustments.
Sulfonylureas (glyburide)	Increase pancreatic insulin secretion	YES	STOP (can consider continuing, if lowest blood sugar is still >200mg/dl).
Meglitinides (repaglinide)	Increase pancreatic insulin secretion	YES	STOP when fasting.
SGLT-2 inhibitors (canagliflozin)	Increase renal glucose secretion	No	STOP for fasts longer than 24 hours; no need to stop for time-restricted eating.
Biguanides (metformin)	Reduce insulin resistance	No	No need to stop for fasting.
GLP-1 agonists (liraglutide)	Slow gastric emptying Increase glucose-dependent pancreatic insulin secretion	No	No need to stop if for fasting.
Thiazolidinediones (pioglitazone)	Reduce peripheral insulin resistance	No	No need to stop if for fasting.
DPP-4 inhibitors (sitagliptin)	Inhibit DPP-4 enzyme	No	No need to stop if for fasting.
Alpha-glucosidase inhibitors (acarbose)	Delay digestion of starch and sucrose	No	STOP . There is no benefit to the drug when not eating.

Note: This information is intended as general information for clinicians. It is not meant as advice for individuals to manage their own medications. Any medication adjustments need to be done under the direction of the prescribing healthcare practitioner.