



Drugs with Weight Gain as a Side Effect

Understanding the Impact on
Patients



Introduction

Overview: Discussing the impact of weight gain caused by medications.

Purpose: Educate about drugs that can cause weight gain and strategies to manage this side effect.



Categories of Drugs That Cause Weight Gain

Diabetes Medications: Insulin and certain sulfonylureas.

Beta-Blockers: Such as Metoprolol and Propranolol.

Antidepressants: Examples include SSRIs, TCAs, and MAOIs.

Antipsychotics: Notable ones are Olanzapine, Risperidone, and Clozapine.

Antiepileptics: Examples are Valproate and Carbamazepine.

	Weight gain	Weight neutral	Weight loss
Diabetes	Insulin Sulfonylureas TZDs	DPP4 inhibitor	Metformin GLP-1 agonist SGLT2 inhibitor
Anti-depressants	Mirtazapine, Amitriptyline, Paroxetine, Nortriptyline, Citalopram	Fluoxetine, Sertraline, Imipramine, Escitalopram, Duloxetine	Bupropion
Anti-seizure	Carbamazepine, Gabapentin, Oxcarbazepine, Pregabalin, Valproate	Lacosamide, Phenytoin, Clonazepam, Lamotrigine, Levetiracetam	Topiramate Zonisamide
Anti-histamine	Diphenhydramine, Hydroxyzine	Desloratadine, Fexofenadine, Levocetirizine	
Antipsychotics	Olanzapine, Clozapine, Quetiapine	Haldol, Ziprasidone, Aripiprazole	

Weintraub MA, Ameer B Drug-associated weight gain and clinical alternatives, *Handbook of Obesity*

Diabetes Medications

Insulin: All types can cause weight gain

- Increased Fat Storage
- Hypoglycemia and Overeating
- Anabolic Effects

Sulfonylureas (ex: Glipizide, Glyburide) and Meglitinides (ex: Repaglinide, Nateglinide)

- Increased insulin secretion
- Hypoglycemia and overeating

Thiazolidinediones (ex: Pioglitazone, Rosiglitazone)

- Increased Fat Storage
- Fluid Retention



Beta-Blockers

Metoprolol (Lopressor) and Propranolol (Inderal)

- Reduced metabolic rate
- Decreased physical activity
- Changes in fat metabolism
- Fluid retention
- Increased appetite
- Altered glucose metabolism



Antidepressants

SSRIs (ex: Paroxetine), TCAs (ex: Amitriptyline, Nortriptyline), MAOIs (ex: Phenelzine, Tranylcypromine)

- Increased Appetite and Cravings
- Metabolic Changes
- Sedation and Reduced Physical Activity



Antipsychotics

Olanzapine (Zyprexa), Risperidone (Risperdal), Clozapine (Clozaril)

- Neurotransmitter effects
- Metabolic Changes (Insulin resistance)
- Sedation and Reduced Physical Activity
- Fluid retention



Antiepileptics

Valproate (Depakote), Carbamazepine (Tegretol)

- Neurotransmitter impacts
- Insulin resistance and hyperinsulinemia
- Lipid metabolism
- Sedative effects
- Fluid retention
- Hormonal shifts



Management Strategies

Medication Review: Assess the necessity and dosage of weight-gain-inducing drugs.

Alternative Medications: Switching to drugs with a lower risk of weight gain.

Regular Monitoring: Track weight and metabolic health parameters.