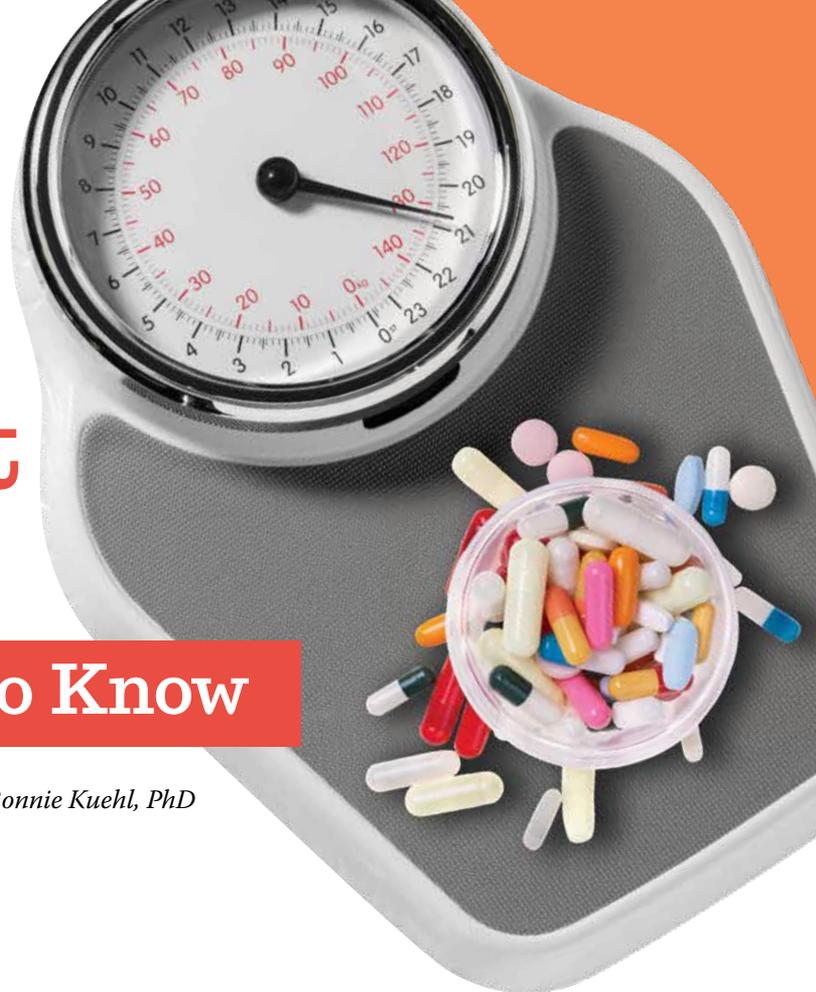


Prescription Medications & Weight Gain

– What You Need to Know

by Ted Kyle, RPh, MBA, and Bonnie Kuehl, PhD



How can I be gaining weight? I'm eating smarter, I'm walking more. What am I doing wrong?

You might not be doing anything wrong. Certain prescription medications, not all, such as those used to treat diabetes, high blood pressure, mood disorders, seizures and even migraines, can actually cause weight gain – even several pounds a month. Whatever you do, don't stop taking the medication without speaking with a healthcare professional first. In most cases, a healthcare professional will be able to switch you to another medication that helps your condition but does not cause weight gain and, in some cases, the medication may even help you lose a few pounds.

What causes medication-related weight gain?

Sometimes it is not the drug itself causing weight gain; however, it is the side-effects from the drug. Some drugs stimulate your appetite, and as a result, you eat more. Others may affect how your body absorbs and stores glucose, which can lead to fat deposits in the midsection of your body. Some cause calories to be burned slower by changing your body's metabolism. Others cause shortness of breath and fatigue, making it difficult for people to exercise. Other drugs can cause you to retain water, which adds weight but not necessarily fat.

How much weight is gained varies from person-to-person and from drug-to-drug. Some people may gain a few pounds throughout the course of a year, while other people can gain 10, 20 or more pounds in just a few months. Because many of these medications are taken for chronic conditions, you may use them for several years with their use contributing to significant weight gain throughout time.

What can you do?

1 Ask - When a healthcare professional prescribes a new medication, ask them if the drug is known to cause weight gain. Discuss your concern about weight gain with your doctor and ask for a medication that will not cause weight gain.

2 Be Aware - If you have been gaining weight after starting a new medication, ask your doctor if the new medication could be to blame. Most medications that cause weight gain will have their effect early – within six months of starting. Importantly, it is not just a matter of putting on a few pounds. Extra weight, regardless of where it comes from, can cause or worsen health conditions. Diabetes, high blood pressure, osteoarthritis, metabolic syndrome and high cholesterol all may begin or may be made worse by added excess weight.

3 Be Smart - Know about the medications that may cause weight gain. Common drugs that cause unwanted pounds include corticosteroids, antidepressants, diabetes medications such as insulin or those containing sulfonylureas, some heartburn drugs, hormone therapy/contraceptives, and anti-seizure drugs such as Depakote®. You should also be aware that while some medications don't cause you to gain weight, they may make it more difficult to lose excess weight.

To offset weight gain or to help work off excess weight, consider keeping a food diary tracking what you eat and when you eat. Becoming a mindful and aware eater is a great first step to managing your weight and keeping it off. You should also consider becoming more active; go for a walk with family and friends instead of watching TV or having coffee. Being active burns calories, which helps offset any drug-induced weight gain.

Throughout the rest of this article, you will find a table that details medications known to possibly cause weight gain and some possible alternative medications:

Drug Class/Type (and Potential Related Weight Gain)	Common Name	Proprietary or Brand Name	Alternative Drugs (Weight neutral or may promote weight-loss)
Diabetes Therapies (may cause up to 8 kg weight gain in an intensive 3-month treatment course)			
Insulin	insulin lispro insulin aspart insulin glulisine	Humalog® Novolog® Apidra®	metformin (Glucophage®, Glucophage® XR, Fortamet®, Glumetza®, Riomet®, generics)
Thiazolidinediones (TZDs)	pioglitazone	Actos®	Linagliptin (Tradjenta®) saxagliptin (Onglyza®) sitagliptin (Januvia®) exenatide(Byetta®) Liraglutide (Victoza®) acarbose (Prandase®, Precose®) miglitol (Glyset®)
Sulfonylureas (SUs) <i>usually ≤5 kg gain during 3-12 months of treatment</i>	glipizide glyburide glimepiride chlorpropamide tolbutamide	Glucotrol® Glucotrol® XL Diabeta® Micronase® Glynase® Amaryl® Diabinese® generics	<i>These combination products tend to have fewer side-effects and less weight gain:</i> metformin/pioglitazone (Actoplus Met®) glipizide/metformin (Metaglip®) glyburide/metformin (Glucovance®) glimepiride



Drug Class/Type (and Potential Related Weight Gain)	Common Name	Proprietary or Brand Name	Alternative Drugs (Weight neutral or may promote weight-loss)
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Psychiatric/Neurologic Therapies

Tricyclic Antidepressants

General gains of 0.4 to 4.12 kg/month minority of patients gain 15 to 20 kg in 2 to 6 months



amitriptyline	Elavil® Endep® Vanatrip®
doxepin	Adapin® Dilenor® Sinequan®
imipramine	Tofranil® Tofranil® PM
nortriptyline	Aventyl® Pamelor®
trimipramine mirtazapine	Surmontil® Remeron® Remeron® SolTab®

Bupropion (Aplenzin®, Wellbutrin®, Wellbutrin SR®, Wellbutrin XL®, Zyban®) *Black Box warning for increased risk of seizure.

nefazodone (generic†) †Black Box warning for liver failure and suicidal thoughts.

Selective Serotonin Reuptake Inhibitors (SSRIs)

Initial weight-loss followed by gain within 6 months in a minority of patients

sertraline	Zoloft®
paroxetine	Paxil®, Paxil® CR, Pexeva®
fluvoxamine	Luvox®, Luvox® CR



Lithium

Gains in 11% to 65% of treated patients; up to 10 kg or more in 6 to 10 years

Eskalith®,
Eskalith CR®,
Lithobid®

Antipsychotics (most likely to cause weight gain)

haloperidol loxapine	generics Oxilapine®, generics Clozaril®, FazaClo®
clozapine chlorpromazine fluphenazine risperidone	Thorazine® generics Risperdal®, Risperdal® M-TAB®
olanzapine quetiapine	Zyprexa® Seroquel®, Seroquel® XR

Ziprasidone (Geodon®)

Drug Class/Type (and Potential Related Weight Gain)	Common Name	Proprietary or Brand Name	Alternative Drugs (Weight neutral or may promote weight-loss)
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Antiseizure / anticonvulsants

Variable gains of up to 15 to 20 kg	valproic acid (sodium valproate, divalproex sodium)	Depakote® Depakene® Depakote® ER Depakote® Sprinkle Stavzor®	topiramate (Topamax®) zonisamide (Zonegran®) lamotrigine (Lamictal®)† † Black Box warning for serious rash.
Gains of up to 15 kg during 3 months of treatment	carbamazepine	Carbatrol® Eptol® Equetro® Tegretol® Tegretol® -XR	
	gabapentin	Horizant® Neurontin®	

Steroid Hormones

Oral Corticosteroids (used to treat systemic anti-inflammatory diseases) Polymyalgia rheumatica: 2 to 13 kg Gains in >50% patients receiving 1 year daily prednisone	prednisone cortisone	Prednisone Intensol® Sterapred® Sterapred® DS	NSAIDs (where appropriate)
Inhaled Corticosteroids (used to treat asthma)	budesonide ciclesonide fluticasone	Pulmicort® Alvesco® Flovent®	
Hormone Therapy/ Contraception <i>hormone therapy (used to treat menopausal symptoms and contraceptive agents to prevent pregnancy)</i>	estrogen progestagens		

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Drug Class/Type (and Potential Related Weight Gain)	Common Name	Proprietary or Brand Name	Alternative Drugs (Weight neutral or may promote weight-loss)
Miscellaneous Agents			
Antihistamines <i>(Taken for sleep in patients affected by obesity, Benadryl® can mask sleep apnea; also used as allergy medication)</i>	diphenhydramine	Aler-Dryl® Benadryl® Diphenhist® Nytol® PediaCare Children's Allergy® Siladryl® Silphen® Sominex® Unisom® generics	decongestants and inhalers 
Beta-Adrenergic Blockers <i>(used to lower blood pressure)</i>	propranolol metoprolol atenolol	Inderal® Inderal® LA InnoPran® InnoPran® XL Pronol® Lopressor® Toprol® Toprol XL® Tenormin®	ACE Inhibitors: ramipril (Altace®†) benazepril (Lotensin®†) enalapril (Vasotec®†) lisinopril (Prinivil®†, Zestril®†) Angiotensin II Receptor Blockers: losartan (Cozaar®†) candesartan (Atacand®†) † Black Box warning for use during pregnancy Ca⁺⁺ Channel Blockers

Conclusion

If you are gaining weight and suspect that your current medications may be the cause, it is important that you do not stop taking the drug or switch to a lower dosage without first speaking to your doctor. Stopping or changing your medication may result in a potentially serious health condition going untreated, which may put your health at risk.

In most cases, there are other medications available that your doctor can switch you to that offer the same beneficial effect but will not cause excess weight gain. If the drug cannot be switched, then your doctor can provide you with advice on diet changes that might help and will likely encourage you to increase your aerobic exercise to offset any weight changes.

About the Authors:

Ted Kyle, RPh, MBA, is a pharmacist and health marketing expert and is also Vice-chairman of the OAC National Board of Directors.

Bonnie Kuehl, PhD, is CEO and founder of Scientific Insights® Consulting Group Inc. a scientific and medical research and communications company. Scientific Insights® specializes in the interpretation of scientific, medical and clinical information and technology – translating science into English. Bonnie has a PhD in cell and molecular biology from the University of Toronto and post-doctoral experience from The University of Dundee in Scotland and McMaster University in Hamilton, Ontario.



ABOUT THE OBESITY ACTION COALITION (OAC)

The Obesity Action Coalition (OAC) is a National non-profit organization dedicated to giving a voice to individuals affected by obesity and helping them along their journey toward better health. Our core focuses are to elevate the conversation of weight and its impact on health, improve access to obesity care, provide science-based education on obesity and its treatments, and fight to eliminate weight bias and discrimination.



VIBRANT COMMUNITY



NATIONAL AWARENESS CAMPAIGNS



ANNUAL CONVENTION



ADVOCACY



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LEARN, CONNECT, ENGAGE

The OAC knows that the journey with weight can be challenging but we also know that great things happen when we learn, connect and engage. That is why the OAC Community exists. Our Community is designed to provide quality education, ongoing support programs, an opportunity to connect, and a place to take action on important issues.

Through the OAC Community, you can get access to:

- Weight & Health Education • Community Blogs
 - Community Discussion Forum
 - Ongoing Support • Meaningful Connections
- AND MUCH MORE**



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