

## MEDICATION AND WEIGHT LOSS SURGERY (CONT.)

- Not all medications are effected in the same way. After gastric bypass surgery, some medications may be absorbed into the blood stream more effectively, and others may be absorbed less effectively than before.
- Medications with a narrow therapeutic window, like Coumadin® or Digoxin, should be monitored closely. With these drugs, small differences in blood levels can make a big difference in their effectiveness.
- Extended release or sustained release drugs are designed to be absorbed more slowly than other medications: these could become less effective after gastric bypass surgery, and should be switched to immediate release formulations. We encourage you to see your prescribing provider for any needed adjustments and closely monitored follow-ups.

### *Medications Commonly Effected by Weight Loss Surgery*

**Oral Anticoagulant Therapy:** Many patients are on drugs like Coumadin® to prevent dangerous blood clotting. These drugs in particular have been found to be less effective following Roux-en-Y gastric bypass. This is likely due to a combination of the altered intestinal tract and lower ingestion of vitamin K following surgery, which is necessary for the drug to work. If you take anticoagulant medications, talk to your provider about post-operative monitoring.

**Psychiatric Medications:** Many psychiatric medications are designed to be extended, sustained or controlled release. For this reason, psychiatric drugs have been found to be absorbed less effectively following Roux-en-Y gastric bypass. If you take any psychiatric drugs, speak with your prescribing provider about alternatives and follow up plans.

**Oral Contraceptives:** Some studies have found that birth control pills are less effective following Roux-en-Y gastric bypass, and pregnancy should absolutely be avoided for the first 18 months following surgery. For this reason, along with the increased risk of blood clots associated with oral contraceptives, you should discuss an alternative form of birth control with your provider.

### *In Conclusion: Medication Safety and Recommendations*

- In the first eight (8) weeks following surgery, liquid or chewable versions of medications are preferred. If these forms are not available, pills should be cut into two pieces or crushed when possible. **Note: some medications cannot be safely broken or crushed. Talk to your provider or pharmacist before doing so.** Pills that must be taken whole should be no larger than an M&M™.
- Extended release or sustained release drugs (typically denoted by XR, XL, SR, ER or CR) and enteric coated (EC) medications should be switched over to their immediate release formulations. Please discuss these medication changes with your prescribing provider.
- You should discontinue oral contraceptives (birth control pills) and use an alternative form of birth control for the first 18 months following weight loss surgery. Please discuss these options with your prescribing provider or OB/GYN.
- Psychiatric medications are likely to be absorbed differently after weight loss surgery. Work with your mental health provider to make safe, appropriate adjustments.
- **All NSAIDs (ibuprofen, naproxen, Motrin®, Aleve®, Advil®, etc.), salicylates (aspirin), steroids (prednisone, prednisilone, dexamethasone, etc.) and bisphosphonates (Actonel®, Fosamax®, Boniva®) and COX-2 Inhibitors should be avoided. These medications are likely to cause marginal ulcers.**
- As always, you should keep an up-to-date list of all the medications you are currently taking, both prescribed and over the counter. If any medication changes occur, this list should be updated accordingly. Bring this list with you to any routine appointments or hospital visits – it will help your healthcare team provide you with the best care possible.

**We encourage you to share this document with your healthcare team, including your primary care provider and any specialists you receive care from. If you ever find yourself confused or unsure about medication safety, reach out to our team, your providers or your pharmacist: we're here to help.**



## Your Guide to Vice Advice and Medication Safety

This guide has been prepared to assist you and your family with understanding what behaviors and you should avoid following bariatric surgery.

### VICE ADVICE

Kicking bad habits – and avoiding the formation of new ones – can play a pivotal role in determining your success following bariatric surgery. In addition to habits, this guide will discuss behaviors and medications you should avoid for the sake of your health and long-term success.

### ADDICTION TRANSFER

For many, food can be an addiction. After bariatric surgery – when this source of comfort, distraction, reward or escape is taken away from those who once used it as a coping mechanism – addiction transfer can occur. This means that compulsive behavior is shifted from one focus to another. For example, instead of food, the new addiction could be a "process addiction," like gambling or shopping, or it could be a "substance addiction," like alcohol or drugs.

For this reason, we work closely with our psychiatry and health psychology team to identify and manage risk factors. Some risk factors may include a personal or family history of eating disorders, substance abuse, emotional or sexual trauma, depression, anxiety and other mood disorders, and isolation or lack of support. It is important for you to be aware of any potentially addictive tendencies following surgery, and to know that our team is here to help you.

### TOBACCO

It's no secret that smoking is bad for your health, but choosing to undergo bariatric surgery makes it more important than ever to stop smoking and using tobacco products. Before surgery, this is necessary – and required – as smoking can cause an increase in surgical risks and post-operative complications, including:

- Blood clots
- Heart complications
- Adverse drug reactions
- Ulcers and bleeding complications
- Pneumonia and breathing complications
- Reduced blood flow to stomach and other organs
- Decreased immunity and increased risk of infection

After surgery, you must continue to avoid smoking – even for years to come. In addition to the commonly discussed negative health impacts of tobacco use, choosing to smoke after your procedure will put you at an increased risk for:

- Leaks and stricture, or abnormal scarring, at the surgical meeting place of your stomach and small intestine. These complications may be serious, and will require additional procedures and/or surgery to resolve.
- Ulcers, which can cause pain, nausea and bleeding complications. Ulcers require medical treatment to heal.
- Abdominal pain, inflammation of the stomach lining (gastritis) and heartburn.

**Fairfield Medical Center's Tobacco Cessation Program can help you break the habit. To learn more, call the tobacco cessation coordinator at 740-689-4404, email [tobaccocessation@fmchealth.org](mailto:tobaccocessation@fmchealth.org), or visit [fmchealth.org](http://fmchealth.org).**

## ALCOHOL

**Consuming alcohol during the rapid weight loss period following surgery is dangerous and should be avoided entirely.** Once your weight loss begins to slow and stabilize, you may talk to your team about safely consuming small amounts of alcohol in moderation.

### *Consume with Caution*

While alcohol should always be consumed responsibly, this is especially true for weight loss surgery patients. Following bariatric surgery, alcohol is absorbed into the blood stream more rapidly than before, this – coupled with significant weight loss – means that the effects of alcohol are felt much more quickly (and for a longer period of time) after consuming only a small amount. In some patients, less than one drink can lead to a notable increase in blood alcohol levels, putting them above the legal limit and causing them to exhibit the telltale signs of drunkenness.

Never drink and drive after bariatric surgery, even after consuming minimal amounts of alcohol.

### *Alcohol and Low Blood Sugar*

Drinking responsibly is about more than protecting others from harm: it's about protecting yourself. **Consuming alcohol – particularly during the rapid weight loss period – can have serious consequences, including brain damage, coma and death.** Here's why:

The brain requires sugar to function, and the body typically keeps a supply of this fuel, known as glycogen, in muscles and tissues. Unfortunately, rapid weight loss, low carbohydrate intake – both of which are typical for bariatric surgery patients – and alcohol consumption can all deplete these stores. When these three circumstances are combined, your blood sugar can drop dangerously low.

Low blood sugar, also known as hypoglycemia, is a serious medical condition, and can lead to loss of coordination, confusion, slurred speech and vision changes. If it is not corrected, it can progress to more serious conditions, like those mentioned above. The symptoms of low blood sugar can be easily confused with intoxication, delaying treatment and making for an even more dangerous situation.

Do not drink during the rapid weight loss period. If it is determined safe to drink, you should not do so on an empty stomach: consume a proper meal first, and be mindful of your alcohol intake.

### *Other Impacts of Alcohol Consumption*

In addition to the dangers listed above, consuming alcohol may lead to increased vomiting and poor absorption of vitamins and minerals. Some vitamin deficiencies (like thiamine, or vitamin B1) can lead to conditions that cause nerve, tissue and muscle damage.

You should also be aware that drinking alcohol can lead to addiction; this is more likely if you struggled with food addiction or used food as a coping mechanism prior to surgery.

Lastly, drinking alcohol may reduce your weight loss success. Alcohol has little to no nutritional value, but often contains a high number of calories, preventing weight loss or even leading to weight gain.

- 12 oz. can of beer – 150 calories
- 3.5 oz. of wine – 70 calories
- 1.5 oz. of gin, rum, vodka or whiskey – 97-125 calories
- 1.5 oz. of liqueur – 160 calories



## COFFEE AND CAFFEINE

There is a lot of discussion around coffee following bariatric surgery, with the majority of concerns revolving around caffeine and its effects on the body. Here you'll find our conclusions and recommendations:

**Caffeine and dehydration:** While caffeine is a diuretic, meaning it increases the amount of fluid expelled from the body through urine, it does not typically lead to dehydration – especially when you are meeting your daily water intake goals. Drink water often, and consume coffee in moderation (no more than three [3] cups a day). Do not include coffee in your daily fluid intake log.

**Caffeine and calcium absorption:** Caffeine does mildly decrease calcium absorption. For this reason, we recommend avoiding coffee for at least 30 minutes before and after taking your calcium supplement.

**Caffeine and insulin:** If you are diabetic, caffeine may affect how your body responds to insulin; this can make it difficult to keep your blood sugar in a healthy range. Each person responds differently, and you should be aware of how coffee impacts you.

**Caffeine and appetite stimulation:** Caffeine has no significant effect on appetite.

**Caffeine and ulcer formation:** There is no evidence that drinking coffee increases the risk of ulcer formation.

In conclusion, it is okay to consume coffee and caffeine in moderation. You should continue to avoid drinks high in sugar, like cappuccinos and specialty coffees.

## DIET SODA, ARTIFICIAL SWEETENER AND CARBONATION

Similar to coffee and weight loss surgery, diet soda is a topic of debate – particularly with concerns toward artificial sweeteners and carbonation. Here you'll find our conclusions and recommendations:

**Artificial sweetener and increased appetite:** Research suggests that artificial sweeteners and sugar substitutes do not cause an increase in appetite, overall calorie intake or weight gain.

**Artificial sweetener and your "sweet tooth":** For some, sugar or sweet tasting foods can be addictive. While there is little research support for it, there is continued concern that frequent use of sugar substitutes may lead to a "need for sweets." If you are historically prone to being tempted by sweets, you should keep this in mind.

**Carbonation and weight loss surgery:** Some are concerned that carbonation may cause the stomach to stretch and expand, resulting in loss of "restriction" and leading to weight gain. This is unlikely. Carbonation may cause some discomfort, bloating and belching, but it does not have any significant long-term effect on your "new" stomach.

In conclusion, diet soda is an acceptable substitute for sugar-sweetened beverages. You should avoid carbonated beverages for at least six (6) weeks following surgery, these drinks should not be included in your fluid intake for the day, and they should be consumed in moderation. Limit yourself to no more than a single serving per day.

## MEDICATIONS AFTER WEIGHT LOSS SURGERY

When you take a medication by mouth, your stomach and small intestine work together to break it down, allowing it to be absorbed into your blood stream and used by the body. After surgery, it's possible for the reduced size of your stomach and (if you've had gastric bypass) the re-routing of your intestines to change the way your body responds to certain medications. Here's what you should know:

- Regardless of which procedure is performed, the most medications will not be significantly impacted by weight loss surgery. You may need to make some adjustments in the first few weeks following surgery –read on to learn more.
- Because most medications are absorbed in the small intestine (not the stomach), the gastric sleeve procedure is less likely to affect medication absorption. The re-routing of the intestines associated with gastric bypass may cause changes to some.