Keep injection sites healthy

What is lipohypertrophy?

Lipohypertrophy *(or **lipo**)* is a thickened, rubbery swelling under the skin that can happen to people who inject insulin or other medications. These lumps may be soft or firm. Because it is under the skin, you may not always be able to see lipo—you may have to press on your skin to feel it.[1]

Lipo and injections

If you inject into lipo, your body may not absorb your insulin smoothly and consistently. This can affect your blood sugar control.

If you have just stopped injecting into lipo

If your doctor just asked you to stop injecting into lipo, there are a few things to keep in mind:[2]

- You may find injecting into healthy tissue mildly painful at first. Using the shortest, thinnest needles can make injections more comfortable.[2]
- You may need to change to a lower dose of insulin when you start injecting into normal tissue.2 Your doctor will work with you to make sure you are receiving the right dose.
- Work with your doctor to develop an injection rotation pattern.
- Have your injection sites checked by your doctor at every visit, or at least once each year.

If you have any questions or concerns, speak to your healthcare professional.

There are two key strategies that diabetes experts recommend to help reduce your risk of developing lipo:

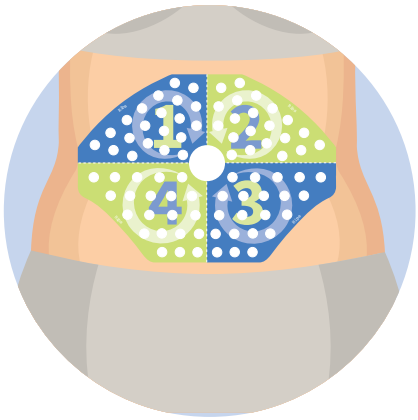
1. **Replace your needle every time you inject.**
In scientific studies, the more people reused their needles, the more likely they were to develop lipo.[1,2]

2. **Always rotate injection sites.**
Practicing proper injection site rotation gives your skin time to heal between injections.[1]

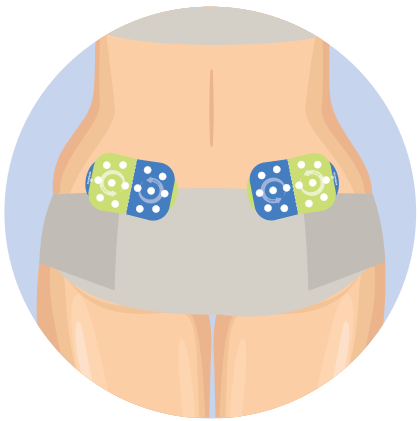
Keeping track of your lipo

Use the grids on the following pages to mark the location of the lipo you have now and any new sites as you find them. It is important to keep track of your sites with lipo so you can avoid injecting into them. Show the grids to your doctor at your next appointment.

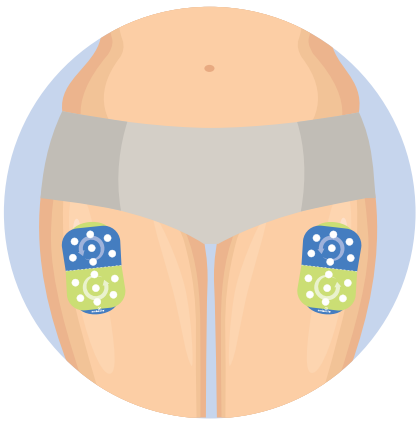
Arms



Abdomen



Buttocks



Thighs

References: 1. Blanco M, Hernández MT, Strauss KW, Amaya M. Prevalence and risk factors of lipohypertrophy in insulin-injecting patients with diabetes. *Diabetes Metab*. 2013;39(5):445–453. **2.** Frid AH, Kreugel G, Grassi G, et al. New insulin delivery recommendations. *Mayo Clin Proc*. 2016;91(9):1231–1255