

# Rapid Return to *Real Life*



# Real life doesn't stop for Bunions.

Our real lives are full with family, work and activities. Each of these demands our time, attention and energy. Slowing down is not an option.

Unfortunately, if you suffer from bunions, then you know the limitations bunions put on your life. The pain they cause frequently impacts work, family and fun activities (and requires ugly shoes!).

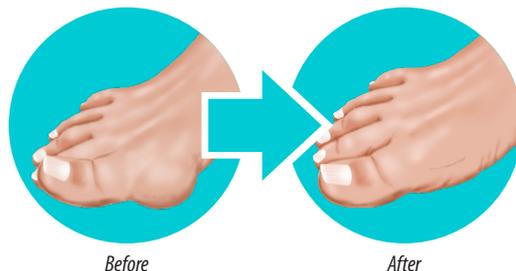
Not having the luxury of slowing down is the reason many people with bunions avoid bunion surgery. Traditional bunion surgeries require a long recovery which brings your life to a screeching halt.

## Introducing

### miniBunion<sup>®</sup>3D

MINIMALLY INVASIVE BUNION SYSTEM

For mild to moderate bunions, the miniBunion<sup>®</sup> minimally-invasive procedure gives patients the opportunity to have a walking recovery and quickly resume their lives. Unlike traditional open bunion procedures, the miniBunion<sup>®</sup> technique is performed through a one inch incision which preserves the soft tissues around the toe, spares the blood supply to the bones and can offer a faster recovery.



### dynaBunion<sup>®</sup>4D

4D Minimal-Incision Bunion System

The dynaBunion<sup>®</sup> 4D minimal-incision bunion procedure can allow you to quickly, comfortably and boldly return to your real life. Unlike traditional open scarf and lapidus bunion surgeries, this 4D procedure corrects the bunion in all four dimensions through a minimal-incision which can offer a walking recovery, less tissue damage, a smaller scar...and a return to stylish shoes.



# What Is A Bunion?

A bunion looks like a bony bump on the inside of the foot at the big toe joint. But in reality, the bump forms when pressure on the big toe joint causes the big toe to lean toward the second toe, forcing the joint of the big toe to get bigger and stick out. A bunion (or hallux valgus) is a progressive disorder in which the deformity gradually increases and the big toe joint may become stiff and painful.



*Healthy Toe*



*Bunion Toe*

Most bunions are caused by inheriting a certain foot type that makes a person prone to developing a bunion. While wearing tight shoes or high heels do not necessarily cause bunions, those shoes can cause pain and swelling in the big toe joint and accelerate the bunion deformity. This is why more than one third of American women get a bunion during their lifetime.

Unfortunately, bunions are a progressive deformity that doesn't go away and may get worse over time. To minimize the progression of a bunion, doctors recommend avoiding shoes that are too short, too tight or sharply pointed or those with heels higher than 2 ¼ inches.

## Bunion Treatment Options

### Conservative (non-surgical) Treatment

Conservative treatment is aimed at easing pain and slowing down the progression of the bunion. Your doctor may recommend changes in footwear, padding, orthotics, icing and/or pain relievers to minimize the discomfort you experience and to prevent the bunion from becoming more severe. If conservative treatment doesn't ease your pain, your doctor may recommend surgery.

# Bunion Procedures

The goal of bunion surgery is to alleviate your bunion pain. During the surgery the surgeon will realign the bone, ligaments, tendons, and nerves so your big toe can be brought back to its correct position. Usually, bunion surgery can be done as an outpatient procedure in a surgery center rather than a hospital and without a hospital stay. Patients are usually able to have surgery and go home within a few hours after surgery. Bunion surgery is typically covered by most insurance company policies

Since bunions come in different sizes and shapes, surgical treatment options will depend on the extent of your bunion – mild, moderate or severe, along with your age, x-ray findings, physical exam, and activity level. The surgeon will select the bunion procedure that is best suited for your bunion. The amount of time needed to recover from bunion surgery can vary greatly and a lot depends on the surgical procedure or procedures selected by your surgeon.



*Mild*



*Moderate*



*Severe*

## Technique

For mild or moderate bunions, the miniBunion<sup>®</sup> system is a minimally-invasive surgical technique for implanting a micro-titanium implant. Unlike traditional procedures, the miniBunion<sup>®</sup> technique requires a small incision 2 to 4-times smaller than a standard technique and involves much less trauma to the soft-tissues surrounding the toes. This technique spares the blood supply to the bones and allows less pain, a smaller scar, walking recovery and faster return to activities than open bunion surgeries.

### Step 1:

A small incision is made on the side of the foot.



### Step 2:

The toe is realigned and the miniBunion<sup>®</sup> micro-implant is inserted.



### Step 3:

The incision is closed with stitches.



### Step 4:

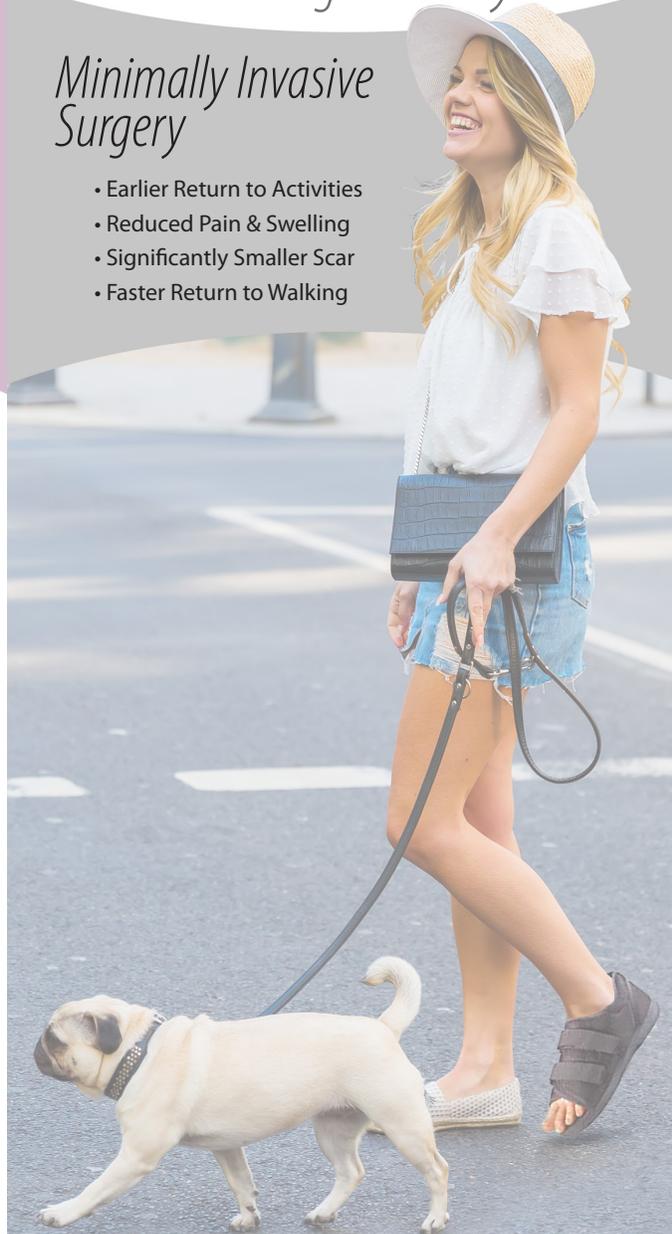
The stitches are removed and the small scar fades over time.

The procedure is typically covered by most insurance policies.

## Walking Recovery

### Minimally Invasive Surgery

- Earlier Return to Activities
- Reduced Pain & Swelling
- Significantly Smaller Scar
- Faster Return to Walking



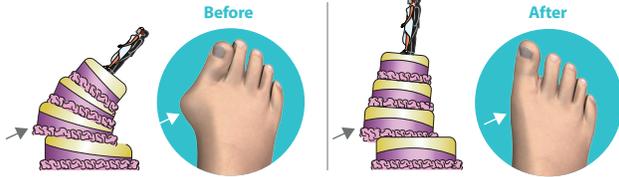
Your surgeon will provide you with recovery instructions which may include rest, ice, and elevation to help with swelling and pain. It's possible that you will be able to walk on your foot in a post-op shoe. However, it is very important that you fully comply with your doctor's recovery instructions.

The dynaBunion® 4D minimal-incision bunion correction allows your surgeon to carefully correct and secure your bunion in all 4 dimensions through a small 1 ½ inch incision. In contrast to traditional open bunion procedures, the 4D correction, continuous compression and secure fixation may lead to faster healing and a runway recovery.

Bunions are caused by a mis-alignment of the toe bones in multiple dimensions. To understand the benefits of correcting each dimension, it is easiest to think of your bunion as a wedding cake that has started to lean-over. When you analyze the cake layers, you quickly realize that the problem actually begins at the bottom layer. If the bottom layer is angled, it will make the rest of the cake lean. To correct the cake, the bottom layer must be re-aligned in 4 different dimensions. The same is true for your bunion.

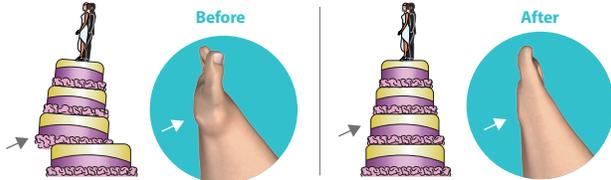
### 1st Dimension

Straighten the layers to the upright position



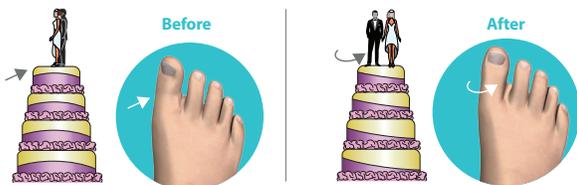
### 2nd Dimension

Center the layer from front to back



### 3rd Dimension

Rotate the layer so the cake topper faces the front



### 4th Dimension of Continuous Compression

Secure the layers for activities



## Runway Recovery

### 4D Minimal-Incision Surgery

- Earlier Return to Activities
- Reduced Pain and Swelling
- Significantly Smaller Scar
- Faster Return to Walking







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4D Minimal-Incision Bunion System



Discover more at  
[www.minibunion.com](http://www.minibunion.com)

Patient results may vary.  
Please consult your physician to determine if this procedure is right for you.

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