

can become infected, in the short-term (acutely) or in the long-term (chronically). **NuFill** is made up of a material that has been FDA approved for use in AIDS patients. This NuFill product may provide longer-term, yet only carries temporary filling qualities with it, according to early studies. Unfortunately, NuFill is made up of the same material that makes up absorbable sutures. This product can cause tissue reactions in many patients. Many materials that are used as fillers can grow lumpy. This is especially the case if they are based on bone fragments, contain synthetic material in them, or are not living.

**Fat injections** have become the most popular method for the filling in of defects, wrinkles or tissue augmentation. Fat injections involve the use of autologous fat (fat that is derived directly from the patient and that will be injected back into the same patient). Any method that involves the use of material that comes directly from the patient is extremely appealing.

With the LiveFill™ method, there is no risk of disease transmission (e.g. HIV or hepatitis) since the tissue is taken out of and used on the same patient. Also, there is no fear of the development of autoimmune diseases

(e.g. lupus, rheumatoid arthritis) that has been "associated" with the use of foreign bodies and "synthetic materials". The possibility of developing an allergic reaction to your own tissue is unheard of. You are highly unlikely to reject your own tissue. Unfortunately, the process that is used to obtain fat for filler injection leaves many of the fat cells disrupted and/or dead. The exact number of fat cells that actually survive this harvesting process has been hotly debated in the plastic surgery world. The fat cells that live vary from between 5% to 50% (according to the plastic surgery literature). This means that from between 50% to 95% of the "fat" that we inject into patients is actually composed of a combination of cellular debris, free fat, dead cells and blood cells. Plastic surgeons need to over-fill or over-correct the concavity, deformity or defect with fat injection due to this poor "take" of the fat cells.

**What difference does it make that dead fat cells are being injected into patients?**

Well, our bodies act in a variety of ways in response

**Preoperative photograph:  
54 year-old white female  
before facial rejuvenation  
with LiveFill.**



**Postoperative photograph:  
6 months after Livefill to her  
nasolabial folds, marionette  
lines and upper and lower lips.**

