



[The Dangers of Liposuction](#)

Note from P.D. Mangan: I was recently contacted by a woman who wishes to remain anonymous. She told me several horror stories about liposuction and sent me this article, which she researched and wrote. After reading it I asked her whether I could publish it, and she agreed. The article explains the dangers of liposuction, something of which I was unaware, and it appears that these dangers are all but unknown to the public. The dangers of liposuction, as presented here, are genuinely shocking, and the practitioners of this procedure seems to have little oversight, as a result of which there's little tracking of poor outcomes, which can include death. This is a long article, but in the public interest, it deserves to be published in full.

The Dangers of Liposuction

by S. L. ©2017

TABLE OF CONTENTS

- INTRODUCTION
- THE HISTORY AND CURRENT STATE OF LIPOSUCTION
- SOME COMMENTS ON THE FAT REDISTRIBUTION STUDY
- MULTIPLE NAMES FOR SUCKING OUT FAT – NONE PROVED SAFE
- UNJUSTIFIABLE RISK
- LACK OF CLEAR, INFORMED CONSENT
- COMPETING DOCTORS INCREASE PUBLIC CONFUSION
- BOARD CERTIFIED PLASTIC SURGEONS CREATE UNDUE HARM
- UNSOUND PROCEDURE MARKETED BY PLASTIC SURG BOARDS
- PROCEDURE
- THE MISNOMER OF 'NON-ELASTIC' SKIN
- WHAT IS FAT?

- FAT DISTRIBUTION
- THE HARMFUL EFFECTS OF VISCERAL FAT
- THIRD SPACE SWELLING
- LONG-TERM DAMAGE
- THE CLIENT EXPERIENCE
- COM – MISLEADING TO POTENTIAL PATIENTS
- ERIC SWANSON – STUDY, 2012
- SURGICAL GUESSWORK
- VIOLATED CONSENT
- THE ZONES OF ADHERENCE
- SURGEONS CODE OF ETHICS
- FDA APPROVAL
- OVER RESECTION
- REGULATION ISSUES
- LEGAL CHALLENGES – LIPOSUCTION AND THE LAW
- FINANCIAL CONFLICT OF INTEREST
- CONCLUSION

INTRODUCTION – 1

Liposuction – the surgical removal of fat – is a nontrivial procedure that may involve a painful recovery and serious complications, [\[1\]](#) including but not limited to: an increase in toxic visceral fat, long-term fat mobilization, metabolic syndrome, increased insulin resistance, disturbing adipose tissue re-distribution, painful skin adherence, over-resection, muscle resection, infertility, various other structural damages, and death.

This text will explain these complications and point to studies and evidence that illustrate why the Health Technology Advisory Committee issued this caution: *“Death and disfigurement due to the cosmetic surgical procedure of liposuction should be a matter for serious public concern.”* [\[2\]](#)

According to the ‘*Evidence-Based Patient Safety Advisory: Liposuction*’, “Liposuction is considered to be one of the most frequently performed plastic surgery procedures in the United States, yet despite the popularity of liposuction, there is relatively little scientific evidence available on public safety issues.” [\[3\]](#) In 2006, liposuction was the most common plastic surgery performed with over 400,000 patients. “The increasing number of liposuction procedures has led to a growing number of iatrogenic (medically induced) fat tissue deformities, in addition to those of traumatic and disease-related nature.” [\[4\]](#)

Patients experience a **spectrum of harm** from liposuction surgery and blog online and flock to surgeons to consult about possible revisions, desperate for solutions and relief. Complaints range from disturbing fat regrowth to having skin painfully grafted to bone, and even to having muscle tissue

siphoned out. Regardless of the serious complications, there is no database in which to record them in a consequential way. [5] Countless stories are not shared online because many people may not wish to publicize their personal horrors. What's more, when reported to doctors, client complaints are often marginalized.

Disfiguration by liposuction may lead patients to risky and expensive fat grafting and/or skin excision surgeries. Dr. Juan Brou, a Board Certified Plastic Surgeon in Oklahoma, wrote a consumer warning in which he explains that "clever, misleading advertising has increased the popularity of liposuction, as well as the reports of unfavorable outcomes". Unfavorable outcomes, he explains, are difficult and sometimes impossible to correct, *especially if all of the fat stores have been removed*. Dr. Brou says "patients who have experienced unsatisfactory results are often too humiliated to come forward, which could help warn others in hopes of preventing similar negative outcomes". [6]

Dr. Brou's 2010 consumer warning goes on to say, "Last year at the meeting for the ASAPS (American Society for Aesthetic Plastic Surgery), a lot of emphasis was placed on how to correct deformities after liposuction." Recall, he said that fat grafting *becomes even more challenging if all or most of the patient's stores have already been removed*. [7]

Some patients notice physical disfiguration immediately, or as soon as the swelling begins to subside. Post surgical swelling, may distort the cosmetic outcome for 6 months or more, thus short-term 'honeymoon phase' results may be misleading. Case histories must be followed long-term. It can take at least a year often more for the some patients to understand that changes in their fat deposit patterns ruined, (and continues to ruin), their figure and/or health. [8] Patients who report early cosmetic satisfaction may go on to report ongoing pain, numbness, striated and fibrous adhesions, chronic hematomas, loose skin, diminished metabolic and hormonal health, and disturbing weight re-distribution weeks, months, and years later. Thus, patients who initially link certain complications as being *temporary effects of surgical* may come to realize these specific problems are *permanent*.

According to the report by the Health Technology Advisory Committee (HTAC), "*since liposuction is an elective, pay-out-of-pocket procedure, data is not collected as to how many liposuction procedures are performed, the complexity of procedures, or the resultant complications*." [9] Clear, important statistics on fatalities and complications from private offices or surgeon-owned surgery centers may be withheld. [10]

The HTAC stated, "The publicity generated by reports of deaths in the popular press has prompted national and state medical societies to publish 'Guidelines of Care for Liposuction' in an effort to ward off national or state regulation". [11] So, rather than being drawn up for patient safety, 'Guidelines of Care' were drawn up to *ward off regulation*.

THE HISTORY AND CURRENT STATE OF LIPOSUCTION – 2

"On February 17th, 1926, Charles Dujarier, a fully qualified French surgeon,

operated on a young model, Mademoiselle Geoffre, who wished to improve the looks of her unbecoming legs. The operation was a disaster. Suture tension was responsible for gangrene that required amputation of the operated leg. The outcome of the lawsuit was severe for Dujarier who was required to pay 200,000 francs compensation, *but even more so for plastic surgery that was practically outlawed*. Two years later, Dujarier's sentence was confirmed, but plastic surgery was cleared and considered licit on condition that the patient's informed consent be obtained." [12]

The original procedure used tools that scraped and cut at the fat and caused dangerous bleeding and poor results. When liposuction was introduced to the U.S. in 1982, *the metabolic effects that surgically removing stores of lipid had on the body had not been thoroughly studied*. Further 'advances' in liposuction introduced methods aimed at limiting blood loss during the procedure by pumping the body full of fluid. A long list of techniques have been 'innovated' by experimental surgeons for the decades. But, are these advances and increases in practice a good thing?

Recall, after being considered so dangerous that it was practically outlawed, plastic surgery was then considered licit on the condition that the patient's informed consent be obtained. *But do potential patients truly understand the outcomes before they agree to this aggressively marketed surgery?* In other words, is consent truly informed? This text will explain that patients are being widely deceived, and doctors have an **affirmative duty** to be unequivocally clear about the dangers, yet they are not disclosing the harm.

The laws don't limit the amount of liposuction incisions a surgeon can make. The current "Standards of Care" in the plastic surgery field, (as practiced by "top" Board Certified Plastic Surgeons), is that it's acceptable to cut a patient and leave them bleeding out of *countless* incisions. The laws don't require that surgeons explain to the patient where they will cut them or how specify or explain how much tissue they will take.

In studying the history of liposuction in depth, one can see how the field evolved without being put through rigorous tests. One can see how the lack of a National or Global Registry, (as well as the limited ability to pursue malpractice with regards to liposuction), keeps the public unaware of true statistics. *Even the doctors are in the dark about the true statistics*. [13] Also, once out, it's hard to stuff the genie back in the bottle.

Recent studies done on adipose tissue highlight the fact that *"We are just beginning to understand fat."* [14] Scientific studies on liposuction, (such as the one from the University of Colorado titled: 'Fat Redistribution Following Suction Lipectomy: Defense of Body Fat and Patterns of Restoration'), [15] conclude that the fat removing procedure has negative health consequences not transparently discussed by doctors, *although many adverse affects have been concluded through studies with rodents and animals for a long time*. [16]

The fat redistribution study done at UC Denver found that fat came back after it was suctioned out; it took some time, but it all returned regardless of diet and exercise. The fat did not reappear in the same place as the fat

cells were removed, however, other parts of the body grew disproportionately large. [17] It's well accepted among animal researchers that fat removal results in fat redistribution. Indeed, animal studies suggest rapid adipose tissue (AT) re-accumulation after lipectomy is common and may even be accompanied by unfavorable changes in disease risk. [18]

The procedure has been linked to increase in visceral fat, which is linked to metabolic disturbances and increased risk for cardiovascular disease and type II diabetes. [19] Studies have also shown that liposuction may be linked in skin and other cancer. [20]

SOME COMMENTS ON THE FAT REDISTRIBUTION STUDY – 3

Dr. Felmont Eaves III, a plastic surgeon in Charlotte, N.C., and president of the American Society for Aesthetic Plastic Surgery, said the fat redistribution study was "very well done," and the results were surprising. [21]

The finding raises questions about plastic surgery. Liposuction has been around since 1974 and is heavily advertised. Why did it take so long for anyone to do this study? *"Maybe it's because such a study is very difficult"*, said Dr. Samuel Klein, director of the Center for Human Nutrition at the Washington University School of Medicine. *"It takes a team of researchers, and money. Fat must be measured precisely, with scans."* [22]

Regardless, the study says, *"The outcome did not depend on the surgeon. It depended on the biology of fat"*. [23] Obesity researchers say they are not surprised that the women's fat came back. The body, they say, "defends" its fat. If you lose weight, even by dieting, it comes back. [24] *"It's another chapter in the 'You can't fool Mother Nature' story,"* said Dr. Rudolph Leibel, an obesity researcher at Columbia University. [25]

Then there are the studies with laboratory rodents that had fat surgically removed. *The fat always came back.* And, like the women in the new study, the rodents got their fat back in places other than the place where it was removed. [26].

MULTIPLE NAMES FOR SUCTIONING OUT FAT – NONE PROVED SAFE – 4

Jonathan Moreno, an ethicist at the University of Pennsylvania who has studied the field, mentioned in a New York Times article that different surgeons have different skills and different techniques. His analogy was that surgery is not like taking a drug, where one pill is just like every other. So, *"instead of doing rigorous studies"*, he said, *"Surgeons tend to innovate, inventing their own procedures and publishing anecdotes about patients, a practice that can be misleading."* [27]

As surgeons continue to invent their own liposuction procedures, new, untested methods are continually introduced into the marketplace. [28] A dizzying list of liposuction techniques – each promising to revolutionize the industry – creates considerable confusion for the public, but none of them make an *unsound procedure sound*.

Fat, it seems, is so misunderstood and despised by society that doctors keep coming up with new ways to suck it out, melt it with lasers, or freeze the cells to death.

The perplexing list of names associated with liposuction includes: traditional, tumescent, dry, wet, super-wet, ultrasonic (UAL), vaser, power assisted (PAL), laser, Ultrasound, SmartLipo, SlimLipo, CoolLipo, ProLipo PLUS, LipoLite, LipoTherme, LipoControl, Lipodissolve, Liposculpture, Lipoplasty, Lipo-etching, Lunchtime Lipo, Tickle Lipo, Micro-Liposuction, Water Jet assisted, Hi-definition, Lipectomy, Lisonics, Laser Lipo Strawberry, 3D liposuction, and so on. [29]

'*The Complications of Liposuction*' (described as an important document by the American Academy of Cosmetic Surgery, and issued as an update on the 'Guidelines of Liposuction'), states: "The advent of new techniques and technologies is not free of complications and each of these developments has been associated with a subgroup of problems that should not be overlooked." [30]

Negative outcomes of liposuction, however, have to do with the biology of fat, not the doctor or technique; based on that foundational understanding, the complications associated with each subgroup simply presents new problems into a field that is not sound to begin with. The FDA is lax on it's testing of liposuction devices, [31] which allows the problems to go unchecked. Please see 'FDA approval, section 25' for more information.

UNJUSTIFIABLE RISK – 5

An article in the Anesthesiology News, 2012, is entitled: "As Liposuction Deaths Mount, Study Exposes Cracks in Safety". The article states that, *a quarter-century after the nation's plastic surgeons received what amounted to carte blanche to perform liposuction, a new analysis suggests that the procedure is no safer than it was back then.* http://www.anesthesiologynews.com/ViewArticle.aspx?ses=ogst&d_id=1&a_id=21743 .

Death rates are reported to be as high as 1 in 5,000 patients. This compares to 1 in 100,000 deaths for plastic surgeries overall. [32] These are just the deaths that are reported, since *no central database exists to accurately follow mortality or iatrogenic injuries caused by liposuction surgery, we don't know how much worse the statistics are.* [33]

The author of 'Liposuction 101' cites that *lack of learning from mistakes, inaccurate data, and collective ignorance* are all ongoing problems in the field of liposuction. He suggests the idea of a Central Registry to report complications. [34]

Suctioning fat out of the body with vacuum cannulas presents complications distinctly *unlike* that of any other surgical procedure and leads to long-term metabolic, cosmetic, and other complications. Whether in the media, during private consultations, or in written consents, doctors are not being clear and transparent about the far-reaching negative health impacts of

liposuction. This is brazenly misleading the public and anathema to the surgeon's creed to 'do no harm'.

LACK OF CLEAR, INFORMED CONSENT – 6

The informed consent form put out by the American Society of Plastic Surgeons in 2009 is nine-pages long, [\[35\]](#) however, the form fails to explain to prospective patients the true long-term harmful disease processes or give an accurate representation of the devastating structural outcomes that may result from liposuction. *The consent form has expanded since 2005, and – rather than protecting patients – this will help indemnify doctors even further against the harm they are causing.*

The consent process begins in the public marketing dialogue that plastic surgeons and their boards have with the public. Patient "consent" continues into the private spoken consultations. *The written consent forms do not contain full, transparent information in language that conveys risks in an appreciable way to the layperson.*

According to '*The Complications of Liposuction*', complications of liposuction includes: deep venous thrombosis and pulmonary embolism, hypothermia, lidocaine and epinephrine toxicity, cardiopulmonary arrest and fluid shifts, infection and sepsis, fat emboli, perforation of abdomen and viscera, hematoma and seroma, surface irregularities, skin excess, cutaneous hyperpigmentation, skin necrosis, changes in skin sensation, etc. [\[36\]](#)

Neither the Liposuction Consent Form (put out by the Society of Plastic Surgeons) nor 'The Complications of Liposuction' document includes the health problems that studies conclude exist long-term. Doctors 'sugar coat' the potential risks to sell surgery to trusting patients who have no real idea what they might be getting into. For example, in the University of Colorado study, every patient experienced adipose re-accumulation in untreated areas, and yet this assured detrimental effect is not cleared with each candidate.

True transparency would require full health disclaimers be given in clear layman's terms.

It looks to me like the 2009 consent form put out by the American Society of Plastic Surgeons has five more categories than their 2005 consent form did. Therefore, it seems to me that either liposuction is getting more dangerous, or the consent form is attempting to protect more doctors against the ills that are resultant from it.

COMPETING DOCTORS INCREASE PUBLIC CONFUSION – 7

A push-pull within sub-groups of the medical profession complicates the issues even more: Board certified surgeons fault dermatologists (who don't have hospital privileges) for using local anesthesia and not being plastic surgeons. Dermatologists fault board certified plastic surgeons for performing too much toxic, aggressive surgery at once via general anesthesia. [\[37\]](#) This internal finger pointing implies that the side effects are related to the doctor's training and technique, when in fact, the biology of fat is

at fault. [38] Not to be overlooked is also the invasive technique and guesswork that goes into liposuction.

In sum, several competitive groups of doctors who benefit handsomely from the surgery have convinced the public that – contrary to its poor track record and scientific studies proving otherwise – liposuction is safe. Of course, this does not make it so. The idea that doctors (board certified plastic surgeons or not) are above the fray should be earnestly questioned in order to prevent further widespread iatrogenic (medically induced) harm.

BOARD CERTIFIED PLASTIC SURGEONS CREATE UNDUE HARM – 8

The ABPS (*American Board of Plastic Surgery*) is self-described as the ‘gold standard for plastic surgery certification’. [39]

Something that is not well publicized is that ABPS board certified plastic surgeons may have a lifetime pass; that means that if they were certified before 1995, their certification is ‘valid indefinitely’ [40] and continuing education is not required. If initially certified after 1995, the ABPS only requires doctors to get re-certified every ten years. [41] This doesn’t seem to be near enough continuing education to keep up with the field of plastic surgery.

A little background: *Tumescent liposuction* was invented and developed in 1985. The word “tumescent” means swollen and firm. By injecting a large volume of very dilute lidocaine (local anesthetic) and epinephrine (capillary constrictor) into subcutaneous fat, the targeted tissue becomes swollen and firm, or tumescent. Tumescent liposuction uses *unprecedented* large doses of lidocaine and epinephrine. [42] When general anesthesia is added to the tumescent liposuction technique there are *increased complications*. [43]

The book ‘Liposuction 101’ explains that board certified plastic surgeons often put patients under general anesthesia and perform concomitant surgeries in the same operation. *Concomitant procedures radically intensify liposuction risk by increasing surgical time and trauma on the body, and by combining lidocaine on top of general anesthesia.* [44] Lidocaine toxicity, fluid shifts, and fat emboli have often been attributed as the cause of death in liposuction surgeries. [45]

Putting a patient under general anesthesia may give surgeons *the illusion* that they can ‘safely’ remove more fat at one time because the unconscious patient doesn’t feel the pain during surgery, however, hazards include but are not limited to: cosmetic and health catastrophes through over-resection, organ perforation, trauma, shock, lidocaine or anesthetic toxicity, and third-space swelling. [46] *Thus, contrary to popular belief, ABPS board certified doctors are in the position to pose significant threats via liposuction.*

While under general anesthesia, patients cannot provide feedback to a surgeon who might cut through gristle and muscle, nor can they challenge a doctor who operates beyond the realm of consent. Another alarming danger is that, while the patient is under anesthesia, some surgeons treat loose skin (ptosis) like

excess fat and suction out essential tissue.

On www.liposuctionruinedmylife.com, 'Tom' from Australia provides details and MRI photos to illustrate how surgeons vacuumed out part of his chest muscles. He says, "...I faded back under sedation and awoke again with my right arm above my head and could see that Dr. Massacre was again working on me. I could see the tissue on my right side from my shoulder to my chest being stripped away... I immediately worried about what was happening as this is an area I had purposely been building up with weight training – I knew there was minimal to zero fat on this area so knew that what was being stripped away had to be muscle and connective tissue. Worse still, even though sedated, I knew full well that I had never consented to any work on my shoulders, or my arms. [\[47\]](#)

UN SOUND PROCEDURE MARKETED BY PLASTIC SURGERY BOARDS – 9

The problem with liposuction is much larger an issue than whether doctors are certified by the ABPS, the ASAPS, or not. Recall, *the problem with liposuction is rooted in the biology of fat.* [\[48\]](#) There are not long-term studies proving that liposuction is physiologically sound. There are, however, studies (on both rodents and humans) that show that liposuction negatively affects metabolism, creates an increase in visceral fat, [\[49\]](#) long-term fat mobilization, [\[50\]](#) metabolic syndrome, [\[51\]](#) and an increase in insulin resistance [\[52\]](#) (possibly leading to type 2 diabetes). Liposuction, a non-curative surgery, also causes fat to deposit in untreated areas, and poses serious risks of structural damage.

PROCEDURE – 10

Dr. Rosemary Leonard (Britain's best known GP, and a distinguished Member of the British Empire honoree) explains that "*liposuction is not a gentle procedure... a large, hollow needle, which is attached to a powerful suction machine, is inserted in turn through several small cuts in the skin. It is passed into pockets of fat, where it is moved around with considerable force*". [\[53\]](#)

In the article for the NY Times (The Belly Finds What the Thighs Lose), Dr. Samuel Klein posits that '*Liposuction violently destroys the fishnet structure under the skin where fat cells live.*' [\[54\]](#)

"Liposuction is particularly dangerous because the surgery requires doctors to suction out fat by repeatedly jabbing a suctioning device deep into a person's body which increases the risk of accidentally perforating vital organs". [\[55\]](#)

According to a high profile plastic surgeon, in Orange County, "Fat is yellow rather than red, because it has a low density of blood vessels. The blood vessels are necessary to bring the healing nutrients and cells to a surgical wound. And, a lower density of blood vessels, will result in slower healing and increased susceptibility to complications." [\[56\]](#) In sum, *since fat isn't vascularized, recovery rates can be lengthy for liposuction surgery.*

The process may go something like this:

Heavily misled by a heavy marketing campaign that portrays liposuction as a safe, viable solution for 'diet and exercise resistant contour irregularity problems', a person (about 90% women) seeks out a doctor for a consultation. Anyone with a medical degree can perform the surgery. If a doctor deems the patient a candidate, the exam continues:

A doctor may examine the body by "pinching the tissue between their fingers" to estimate of how much essential subcutaneous fat to remove. The estimate is not always shared in advance with the patient. Since body composition is complex, it would seem that MRI scans would be a *minimum* requirement, but instead, doctors generally '*pinch and guess*'. [57] Then, a patient is given a non-transparent consent form to sign, and payment is collected. Since liposuction is an expensive, elective procedure, people pay with cash or credit, often financing their surgery. [58]

At some point before surgery, doctors may likely take 'before' photos with the patient either in a meager garment, (such as paper thong underwear), or fully naked. The photos seem cropped and lit in a way to show off pre-surgical flaws.

While standing there naked for the 'exam', the patient will be scrutinized by the doctor, who may suggest surgeries for contour issues that the patient hasn't even inquired about. A related example is that a woman needing breast reconstruction may be told that adding on a little liposuction will be no big deal, as she will be under anesthesia anyway.

If there have been adequate consultations, it would seem that the details would have been meticulously worked out well in advance, since the surgery *permanently alters the patient's body*, however, moments before surgery, the doctors take an ink pen and draw on 'target' areas of the patients body. Moments before surgery would not seem to be a good time to expect negotiations to be made on a possibly nervous pre-surgical patient.

There is an unrealistic burden placed on the patient to make decisions regarding their surgeries even though vital information is withheld from them. Liposuction is considered 'elective' which erroneously places the responsibility on the patients, (who are not surgical experts themselves), and takes the accountability off of the doctor, *no matter how ludicrous and physiologically unsound the surgery performed is*.

Doctors take 'after' photos – sometimes on the three-month checkup. At this point, many of the external bruises have faded, and the person's body does not yet show signs of altered fat depositing patterns created by the liposuction. Doctors may post these photos on their website to show a 'good outcome' in order to advertise and entice other people to come in and pay thousands of dollars for surgery that hasn't been proved to be safe or beneficial to one's long-term health – under any name.

If the surgery does *not* initially produce a 'good visual outcome', it's unlikely that doctors would post 'after' photos on their website or show them

to potential patients. Some bad 'after' photos can be viewed, however, because desperate patients post them online. Doctors may recommend additional surgeries (such as more liposuction, fat grating, skin reduction) to try to correct the bodies they have disfigured. [59] In most cases, the patient is expected to pay out-of-pocket for the supplemental surgery.

Fat grafting requires additional liposuction in order to 'harvest' fat for the graft. Fat does not come with its own blood supply, so only a percentage of fat transferred will be assimilated. Fat grafting is shrouded in a stigma of variable results, and of course, more surgical risk. [60] Skin excision is of course an invasive, risky, and expensive surgery.

Regardless of the immediate visual outcome, recall that the UC Denver study concluded that the post-liposuction body will begin to store visceral fat in order to try to re-achieve homeostasis. So, what might initially look to be a visual improvement actually leads to long-term health consequences: a regrowth of fat in weird places; fat mobilization; metabolic syndrome; increased insulin resistance; and more, yet *doctors regularly trivialize, ignore, or refute scientific studies in public forums and private consultations. This leaves the consumer with an incomplete, inaccurate understanding of liposuction.*

Doctors who perform this physiologically unsound surgery take an active part in creating long-term harm. Is this how we (and other doctors in reputable fields of medicine) want doctors to lower the standards for the profession as a whole?

THE MISNOMER OF 'NON-ELASTIC' SKIN – 11

When doctors suction out too much fat, serious outcomes are likely. The skin may adhere to the underlying structure, [61] or the client may be left with loose sacks of hanging skin. [62] The doctors may refer to this as 'non elastic' skin, and say that the skin has to 'snap back'. But skin doesn't snap back after emptied of its fat stores. [63]

The natural weight loss community is proof that skin often cannot keep up with the changes the body has been through; skin may not shrink back to the same size as the body, leaving unsightly and uncomfortable excess skin behind. This distressing outcome of fat loss is why people look into having serious body lift/skin excision surgeries after losing weight in a much slower way through diet and exercise. [64]

If, during consultation, a doctor feels that skin on their patient isn't 'elastic', *then liposuction is clearly contra-indicated and should not be performed.* If, however, a doctor feels that skin on their patient is elastic, yet they vacuum out fat causing the skin to be loose, *that is iatrogenic harm, caused by negligent surgery.* Either way, referring to 'non-elastic skin' as the problem lets doctors off the hook. If *all* of the subcutaneous fat stores are removed in an area, the skin painfully adheres to the underlying muscle fascia. [65]

A doctor, who creates the need for skin reduction surgeries or suctions out

all of the fat stores in a patient who walked into their office as a healthy person before liposuction, should be held accountable. *Ethics, common sense, and sound medical judgment should serve as guideposts for doctors to understand when to abstain from surgery.*

WHAT IS FAT? – 12

Fat serves important, essential biological purposes; it stores excess calories in a safe way so you can mobilize the fat stores when you're hungry; it pads, protects, and insulates the body; helps to transport vitamins; and releases hormones that control metabolism. Fat is $\frac{3}{4}$ fat – the rest is collagen fibers that hold in place veins, nerves, stem and immune cells.

- Subcutaneous fat is close to the surface of the body. This is the fat that can be pinched in your fingers; it poses less of a health hazard than visceral fat.
- Visceral fat is the internal fatty tissue that wraps itself around the heart, liver, kidneys and pancreas, and streaks through muscles and most of its actions are harmful to the body. Dr. David Haslam of the National Obesity Forum says, "Visceral fat is known to cause inflammation in the colon and artery walls, and is a major cause of heart disease, diabetes and some cancer" Diet and exercise can reduce visceral fat; liposuction does not reduce visceral fat, but may increase it. [66]

Unlike subcutaneous fat, visceral fat reduces the body's sensitivity to insulin, the hormone responsible for maintaining normal blood-sugar levels. It boosts levels of triglycerides and low-density lipoprotein (LDL); it also lowers levels of cardio-protective high-density lipoprotein (HDL) cholesterol. Liposuction reduces subcutaneous fat, but diet reduces visceral fat." [67] Studies show that liposuction creates more visceral fat at least a year or more after the procedure.

When liposuction was introduced to the U.S. circa 1982, the effects that surgically removing fat had on the body had not been comprehensively studied. Scientific studies over the past decades, however, have concluded many serious long-term results. Aaron Cypess, PhD., Harvard Med School states: "We are just beginning to understand fat." [68]

Liposuction can harm healthy people, and it does not make an obese person healthier. Fat is an important endocrine organ. The removal of benign subcutaneous fat stores may make you worse off in terms of metabolic health. [69] In sum, fat (not obesity, but fat) in biological terms is useful, essential, and complex, the fullness of which we don't understand yet, but liposuction is not a cure, and it is dangerous. Why are surgeons removing this essential tissue?

FAT DISTRIBUTION – 13

In 2008, Dr. Rallie McAllister, MPH wrote: "Excess body fat is a health hazard, but *the distribution of that fat may be the best predictor of future health risks.* The results of a study published in the *American Journal of Clinical Nutrition* indicate that how much fat a person has is less important

than the location of fat when it comes to determining risk for cardiovascular disease. For the study, researchers evaluated body fat distribution in nearly 400 adults between the ages of 47 and 86. They found that the amount of non-subcutaneous fat – the fat deposited around organs and between muscles – was directly correlated to the amount of hard, calcified plaque present in the body. Calcified plaque is associated with the development of atherosclerosis, a condition that increases the risk of heart disease. Among Americans, heart disease is the leading cause of death.” [70]

Liposuction procedures are aggressively marketed towards women who have “slight contour issues” and stable weight through healthy diet and exercise. Now, if we consider that a woman is at her stable weight, doesn’t it make sense that her body has achieved equilibrium? And if fat were then removed to “contour” her body, would her body then not naturally attempt to return to it’s equilibrium?

The UC Denver study concluded that once fat cells were removed in one area, the fat cell size increases disproportionately in other areas. [71] In other words, removing fat from the abdomen has caused women to regain, significantly, fat in other areas, like arms, breasts, thighs, buttocks, etc. Beyond the unsettling appearance problems this creates, we must also consider the re-distribution in terms of dangerous visceral fat.

The typical female pattern of accumulating fat in the hips and thighs may not simply be benign with respect to disease risk, but may in fact protect against cardiovascular disease risk. Removing a portion of this important fat depot (via **liposuction**) could increase disease risk. [72]

It would seem that surgical experts would be required to comprehend fat distribution in great depth and unequivocally communicate the grave resulting harm to their patients. Creating compensatory fat regrowth in non-treated areas is a *non-curative, harmful result* cosmetically as well as in terms of the physical and emotional health of the patient.

THE HARMFUL EFFECTS OF VISCERAL FAT – 14

Visceral fat, the fat increased as a result of liposuction surgery, is the internal fatty tissue that wraps itself around the heart, liver, kidneys and pancreas, and streaks through muscles. Visceral fat behaves differently than the largely benign fat that lies just below the skin (the sort you can pinch). Visceral fat is dangerously toxic.

Recall, Dr. David Haslam, clinical director of the National Obesity Forum says, “*Visceral fat may seem to be an inert lump of lard, but it’s actually highly active and constantly pumping poisons into the bloodstream. Visceral fat is known to cause inflammation in the colon and artery walls, and is a major cause of heart disease, diabetes and some cancer.*” [73] Research suggests that visceral fat affects mood by increasing production of the stress hormone, cortisol, and reducing levels of feel-good endorphins. Along with killing you, visceral fat, it seems, can make you feel low.” [74]

To be clear: Liposuction causes a long-term increase in visceral fat, which

increases the risk of developing diseases, such as Type 2 diabetes, heart disease, non-alcoholic fatty liver disease, high blood pressure, cancer, stroke and Alzheimer's disease. Researchers have identified a host of [chemicals that link visceral fat](#) to a surprisingly wide variety of diseases.

THIRD SPACE SWELLING – 15

Third spacing is the physiological concept that body fluids may collect in a "third" body compartment that isn't normally perfused with fluids. Third-space fluid shift is the mobilization of body fluid to a non-contributory space rendering it unavailable to the circulatory system. Third spacing swelling can cause many life-threatening complications including hypovolemic shock and dehydration. [75] Needless to say, suctioning out liters of fat, blood, and fluid from a human body is risky and traumatizing.

LONG-TERM DAMAGE – 16

Liposuction causes negative affects with regards to visceral fat, hormones, lymphatic system, fat mobilization, metabolism, disturbing (and often disfiguring) weight re-distribution, ongoing pain, numbness, scarring, hard fibrous adhesions, loose baggy skin, skin adherence, damage to underlying structure, metabolic syndrome, and an increase in insulin resistance (which can lead to type 2 diabetes) and so on.

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0108717>.

According to this study published in 2014: *Eight weeks post lipectomy, animals had significant higher body and liver weights, weight gain, liver to body weight ratio, and revealed significant higher hepatic triacylglycerol and serum insulin level.* Here are some more specifics:

VISCERAL FAT

The study done at UC Denver in 2011 concluded that after liposuction, *fat re-deposits in unhealthy ways*, creating more visceral fat. In online blogs, desperate patients describe the way fat re-deposits in disturbing, disfiguring ways after liposuction. What patients likely don't realize is that their fat re-distribution has affected the visceral fat deposits. [76]

FAT EMBOLUS SYNDROME

[Hyperlipidemia](#) is the presence of elevated or abnormal levels of [lipids](#) and/or [lipoproteins](#) in the [blood](#), and is a major risk factor for [cardiovascular disease](#). Fat embolus syndrome (FES) is a disorder caused by fat particles that enter the circulatory system and is characterized by respiratory, hematological, neurological, and skin symptoms. [77] Liposuction causes mechanical trauma to fat deposits, which leads to systematic fat mobilization. Studies conclude that FES occurs after liposuction. One clinical study done on rats published in the 'Aesthetic Plastic Surgery Journal' in 2009 revealed that: *"Although there were no fat particles in the blood before liposuction, blood specimens obtained following the procedures and in the long-term had fat particles."* [78]

INCREASE IN INSULIN RESISTANCE

Insulin resistance (IR) is a physiological condition in which cells fail to respond to the normal actions of the hormone insulin. Insulin resistance can contribute to hypoglycemia, and contribute Type 2 Diabetes. [79] A study done in Brazil in 2013 concluded that “Insulin resistance shows significant increase in liposuction, and it is correlated to the volume of aspirated fat”. In other words, insulin resistance increased with liposuction as the volume of aspirated fat increased: over 1500 g there was an increase of 123% and less than 1500 g there was an increase of 53 % from the baseline data. [80]

METABOLIC SYNDROME AND DIABETES

Metabolic syndrome is the name for a group of risk factors that occur together and raises your risk for coronary artery disease, stroke, and type II diabetes. [81] The American Journal of Physiology published an article that concluded that hamsters that underwent lipectomy developed a metabolic syndrome with significant hypertriglyceridemia, relative increase in intra-abdominal fat, and insulin resistance. *“We propose that subcutaneous adipose tissue (SQAT), via disposal and storage of excess ingested energy, acts as a metabolic sink and protects against the metabolic syndrome of obesity.”* [82]

HORMONAL ISSUES

Liposuction may cause hormonal imbalance. For women, one way in which estrogen is synthesized in the body is through fat cells. Removing these healthy stores of fat can confuse and harm the body. [83] If you take away estrogen-dominant fat areas, such as inner thighs or love handles, you are potentially taking away your bank of extra estrogen storage needed during menopause as well as creating an unpredictable outcome of your body shape. In our studies, we found woman of all ages reporting various problems with their menses after liposuction and hormone levels in the long-term after lipectomy.

Fat communicates with the brain and immune system. Leptin, “the saturation hormone,” fat’s most powerful messenger, was discovered in 1995 – decades after liposuction had been in full swing. Leptin is tied closely to regulating energy intake and expenditure including appetite, metabolism and hunger. So when you lose a lot of weight quickly, via liposuction or serious calorie restriction, your leptin levels plummet. Subsequently, you get hungrier, your thyroid decreases output and your metabolic rate drops. This can cause slow one’s metabolic rate way down, and cause one to gain more weight. [84]

When women lose fat in the hips, buttocks and thighs, (areas of high estrogen concentration), they gain it disproportionately in the belly. Visceral fat in the belly is the toxic type of fat discussed earlier in this paper. Even small changes in hormone distribution can have dramatically different effects on our fat. Pg. 140, The Secret Life of Fat

INFERTILITY

A woman’s BMI between 19 and 25 is best for fertility. Liposuction has caused cessation of menstruation and impeded or ended fertility for even young,

healthy women.

HYPERTROPHY AND HYPERPLASIA

Liposuction causes cells in untreated areas to grow larger (hypertrophy), and / or the number of cells to increase (hyperplasia). As mentioned in another article, smaller cells are more efficient than larger cells, and either visceral fat or subcutaneous fat growing in untreated parts of the body can be unsightly, and unhealthy.

In just a quick, initial search using “lipectomy hyperplasia” – on Google Scholar the following studies were found:

1) Adipose Tissue Regeneration Following Liposuction: This one refers to adipose mass and number being restored 7 months after removal. Many plastic surgeons assert that only an increased mass occurs, but this study proves otherwise. [\[85\]](#)

2) Photoperiod-dependent fat pad mass and cellularity changes after partial lipectomy in Siberian hamsters: In LDs, lipectomized hamsters showed compensatory mass increases in retroperitoneal WAT (RWAT) due to hyperplasia. IWAT mass also was increased by approximately 40% in LD-housed EWATx hamsters because of non-significant increases in adipocyte size and number at weeks 6 and 12, respectively. Hyperplasia = increased number, not size. [\[86\]](#)

3) The regulation of total body fat: lessons learned from lipectomy studies: This article suggests that the increased fat is mostly due to mass increase, and not number. This write-up challenges the assertion of plastic surgeons in their effort to blame patients eating habits on post-lipo weight gain. [\[87\]](#)

THE CLIENT EXPERIENCE – 17

People who have undergone liposuction report the following issues:

- Major (negative) body contour changes;
- Disturbing regrowth of fat in weird places;
- Disturbing areas of loose skin;
- Painful adhesion of tissue to the underlying structure
- Claims of surgeons exceeding consent;
- Long-lasting and chronic pain;
- Loss of health;
- Ongoing numbness;
- Ongoing problems with hematomas and seromas;
- Ongoing problems with swelling;
- Ongoing sciatic and other nerve pain
- Significant hormonal issues, including cessation of menses and infertility
- Thyroid problems
- Increased Vascularity
- Cessation of menses, Infertility
- Lumpy, bumpy, hard and fibrous adhesions and/or striated tissue;

- Inability to keep weight regulated post surgery, even with good diet and exercise;
- Feeling of anger, depression, and despair over having their bodies disfigured;
- Feelings of betrayal by their doctors
- Loss of confidence
- Loss of feminine curves
- Loss of social life and strained relationships due to the surgery

There are thousands of these complaints on websites such as www.RealSelf.com, www.MakeMeHeal.com, and so on. What is more disturbing are the absolutely despairing posts from people who cry out for help after their surgeries, and then the trail of their posts stops. The reader is left to assume the worse. Here are a few examples:

1. <http://www.realself.com/review/11-weeks-after-liposuction-and-still-extreme-pain>. A woman in Philadelphia calls out for help nearly 3 months after her procedures. She says: "I am still in extreme pain for majority of the time. I am unable to work or take care of myself. I am becoming psychologically worn out from this debilitation. I was told that I would miss 3-4 days of work. What is wrong, and who do I go to for help?"
2. <http://www.realself.com/user/20087> A single 27-year-old in D.C. cries out that she has considered suicide due to the devastating effects of liposuction. Her buttock was operated on against consent, her body dented, disfigured, and she has no butt. "I am so deformed and this has taken over my life... I cry all the time and have thought of suicide because I can not live with this pain anymore."
3. <http://www.realself.com/review/give-anything-undo-lipsuction> A 21 year-old in Las Vegas posts several times desperately looking for help. "A year after the procedure I kept trying to tell myself it was better than it has been, but I just can't lie to myself anymore. At times it makes me not want to live anymore, please think twice before lipo. I just want it fixed but I have no idea how".

Although there are many self-reported, severe complications, there is *no official medical database* to follow or record these needless health disasters. Patient complaints are often whitewashed and they are made to feel the bad result was somehow a result of their own 'unrealistic expectations', rather than the doctor's negligent judgment along with *the inevitably bad outcomes from suctioning fat out of the body with a vacuum*.

As mentioned, studies show the body defends its fat, and fat then grows in areas that were not treated. Short-term visual results are not indicative of long-term results. Liposuction is marketed to people who are already

observing healthy diet and exercise habits, and are at their best weight and fitness, but the patients regrow fat in other areas of the body even as they maintain their healthy life-style habits. The same fat distribution patterns were documented with rats in laboratory studies. So, instead of clearly warning women of this known affect before obtaining their money and *uninformed consent*, women are blamed for having it happen to them. Some women report going on dangerous diets after liposuction to try to keep fat from growing in uncomfortable, unattractive ways.

There's an assumption in the public that people who seek out liposuction are vain, ignorant, or lazy people who 'deserve what they get'. However, most everyone can identify with some feeling of not being satisfied with his or her body, or can understand why a person may consider a breast reduction or breast reconstruction after cancer vital to their well-being. There are many reasons why a person's body might store fat in what might be seen as an undesirable way: some have a genetic propensity to uneven fat pads, fat deposits accumulates due to childbirth, disability, gynecomastia in men. People in the weight loss community hope to surgically improve the look and feel of body flab after diet and exercise.

Patients trust the extensive liposuction marketing campaign by doctors and surgical boards who market themselves as "experts" and "the gold standard". Publicly and privately, these doctors describe liposuction as being a safe solution for 'stubborn diet and exercise resistant contour areas' and convince patients it is routine and "no big deal".

The clients are hopeful, encouraged by doctors to believe in a good outcome, *but they are not equipped with adequate information that separates truth from hype because doctors and surgical boards withhold the information patients need to make an informed choice.*

After the doctors perform the unsound procedure, it is the patient that is subsequently blamed for the bad to horrific results. "They asked for it."

REALSELF.COM – MISLEADING TO POTENTIAL PATIENTS – 18

When many questions about liposuction, breast reduction, and so on are entered into some of the top Internet Search Engines such as Google, one of the main websites that comes up is RealSelf.com. RealSelf proclaims to reach 3.5 million consumers. [\[88\]](#)

Real Self is an online arena that serves as an advertisement forum for plastic surgery. Real Self describes one of their features: "*Board-certified doctors and experienced specialists answer questions posted by members.*" [\[89\]](#) On their 'Q and A' forum, 5,000 doctors answer questions about plastic and reconstructive surgeries. *Since participating doctors have a financial interest in promoting themselves and the procedures, this poses an innate ethical conflict of interest.* Doctors who answer the most questions have the most exposure, so the doctors are using the site as self-promotion, and trying to win over customers. One would think that doctors who warn too directly of dangers would not get the business, because rational people don't want to risk their life for surgery.

A woman who appears to be slender posted several photos of her body, and inquired about getting liposuction for her abdomen, waist, and flanks. She explained that two plastic surgeons in private consult had recommended that she not have liposuction. They both suggested forgoing the procedure and, instead, intensify her exercise routines. Her diet, she explained, is already strict.

Here is her question, with photos:

<http://www.realself.com/question/good-candidate-for-u-l-abdominal-waist-and-flank-liposuction>

But some of the doctors on RealSelf were quick to point out that she was a 'good candidate' for liposuction. One of the top rated doctors stated, "Yes, your physique is good, but I could still remove 2 liters or so". The photos show(ed) a slim woman, yet the doctor didn't mention concern for the fact that her body might biologically need those critical two liters of fat to perform the necessary functions that fat provides. Another doctor encouraged her to find a surgeon that can 'see things from her point of view.' Recall, her diet is already strict, so if she further restricts calories and nutrients, her health will suffer, but if she doesn't, the essential fat will regrow in other places. [90]

If this woman listens to these doctors and moves forward with liposuction, it may be the end of her healthy body and therefore, of her well being. If obvious over-resection is apparent right away, she may then opt to get fat grafting or a risky surgery to remove 'excess skin' – a problem she currently does not have. Obvious over-resection, or organ and muscle perforation may be evident immediately. Additionally, she may experience disturbing fat regrowth a year or more later. Her risk may be increased for metabolic syndrome, type II diabetes, and other known resultant long-term complications of liposuction, *without ever understanding what caused these problems.*

In one such typical answer after another on the site, the doctors continue to hype liposuction as a good remedy for 'contour irregularities', but are not transparent about the real risks. If prospective patients without medical degrees of their own (but with a learned trust in doctors,) review the Q & A forum, *they can be indoctrinated into believing that suctioning out fat is a good idea, sanctioned by the top-rated doctors, who are sanctioned by medical boards.* Prospective patients don't search extensively for scientific studies because they believe the doctors, and *may not even be aware that such studies exist.*

Pando Daily states: "RealSelf makes money with a subscription ad product for the doctors, not unlike the Zillow model for realtors. If you hold a four or five-star rating and are in good standing with the community, you can buy a presence in search results." [91] According to the Puget Sound business journal, *RealSelf.com made 2.4 million dollars in revenue in 2011.* [92] Advertising plastic surgery is very big business as evidenced by the impact that surgery has on the stock exchange. [93]

RealSelf.com also describes their site as "a community of people helping each other make good decisions." [94] There are many sad stories to be found on

the site, which can provide a useful education for anyone who takes the time to read extensively, but unfortunately, prospective patients are more inclined to be hopeful and to read the seemingly positive reviews. Likewise, prospective patients will often pay more heed to the doctor's comments, even though the doctors are not being transparent about all of the risks or the negative long-term affects. The doctors may not indeed even truly understand the issues.

Some of the 'thumbs up' reviews change their tone when followed in the long-term. It's also not possible to tell if some of the short, glowing reviews of 'the perfect surgery, and the perfect result' are reviews paid for by the doctors. On RealSelf.com, women without surgical backgrounds are encouraging other women to get risky plastic surgery before their own results are even experienced; it's a very dangerous group mentality.

1. STUDY, 2012 – 19

One of the doctors on Real Self conducted a study in 2012 that concluded "*fat cells neither return to treated areas nor get redistributed to untreated areas of the body after liposuction.*" [95] His conclusions are in opposition to the study done by scientists at UC Denver, (and other studies). His conclusions also refute countless online cries from liposuction patients that point to the fact that fat distribution patterns change after the procedure, and other areas grow larger as a result.

Dr. Raffi Gurunluoglu, of the University of Colorado Health Sciences Center, challenges his analytics noting that "*the photographic documentation in these patients was not originally designed to measure changes in shoulder width, mid-humeral width, and upper abdominal width, and this weakens the conclusions regarding fat redistribution.*" Gurunluoglu also notes that further research needs to be conducted "to determine the effects of liposuction on the regrowth of fat, as well as on anatomic patterns of fat redistribution." [96]

SURGICAL GUESSWORK – 20

Figuring out the gross composition of the human body (including how much fat the body has, and where the fat is located) is a complex process according to 'Exercise Physiology' by McArdle, Katch & Katch. "*In a living organism, it isn't possible to differentiate between essential and non-essential fat.*" [97]

Doctors do not typically precisely measure fat with scans before and after liposuction. Doctors explain that pinching the fat and skin between their fingers before they stick cannulas into the body and 'guess' how much tissue to vacuum out, is good enough. Here is a link to in which they talk about their experience in pinching fat and skin between their thumb and fingers: <http://www.realself.com/question/body-fat-accurately-concretely-measured-before-suctioning-through-liposuction>

Even if doctors' use calipers rather than their fingers, it's a very crude way to guess at the complex fat makeup of the body. The Mayo Clinic and Livestrong.com have pointed out that calipers may not be very accurate. On a person with loose skin, even more so, the calipers can pinch skin and measure it as fat.

Body Mass Index – which is determined by this equation: person's weight divided by his or her height squared – can be grossly misleading because muscle is more dense than fat. According to the 'Exercise and Physiology' text, goal weight should be based on body composition, not stature. [98] Body Mass Index and weight can be misleading, and are not truly accurate assessments of how much lean versus fat mass a body has. [99]

When performing liposuction, doctors may suction out essential tissue, because loose skin can feel soft and similar to fat, yet recall: these doctors state that because they are educated and experienced, their 'guesses' are good enough. In the Discovery Channel documentary, "Cosmetic Surgery Gone Wrong", a physician described increases in corrective surgeries in her practice. She also states that in some 'weekend certification courses', physicians practice on a tomato, which of course is much different than working on real patients. [100]

Doctors can't be sure what percent of white fat cells, brown fat cells, blood, or other essential connective tissues are suctioned out, however, it's been proved that brown adipose tissue lipectomy leads to increased fat deposition in carcass fat. [101] The brown fat cells, recall, are the ones that assist with metabolism; removing them is not positive for the long-term health of the patient. After lipectomy, (liposuction), the tissue is commonly disposed of as "biohazard" rather than being sent to a laboratory for analysis.

Also, liposuction removes fat cells from certain parts of the body, *causing the remaining fat cells to increase in size as the body "defends it's fat"*. Smaller cells do a better job biologically than larger cells, so doctors are harming people's health by performing this procedure. [102]

The pinch and guess "technique" is so ridiculous. It indicates a primitive understanding of fat (skin and fat). And if they don't understand it why are they allowed to do it?

VIOLATED CONSENT – 21

A thorough search online regarding claims revealed a PUB Med report: "*Two-thirds of the liposuction malpractice claims, (67 percent), arose from informed consent or breach-of-contract issues, far higher than the 26 percent aggregate claims norm.*" [103]

A signature on a consent form does not constitute true *informed* consent since the information given to patients regarding liposuction is not complete, and the information that is there is not communicated in a way that most lay people can appreciate. Doctors are dismissive of the traumatic and long-term consequences of liposuction, and do not convey to their patients the true

ramifications of the surgery.

Charts are not generally drawn up in advance, as doctors prefer not to be pinned down to where they can operate. Doctors operate on parts of the body against the patients consent while the patient is unconscious under general anesthesia. Here are a few examples:

1. <http://www.realself.com/review/marietta-ga-liposuction-bad-lipo-result>
"I consulted for ab/flank lipo and was 10 lbs. over my ideal weight. He recommended a little inner/outer thigh since it wouldn't be much more and it would "smooth out" the silhouette. I regret the day I ever met him. He performed lipo in an area I did not consent to and ruined my thighs and butt. He gave me a DOUBLE GLUTEAL fold under both cheeks, which is the result of overaggressive lipo."
2. <http://www.realself.com/user/318375> "...Plastic surgeons should never touch an area not agreed upon. I was lipoed in 3 areas that I didn't agree upon and now have 3 problem areas. My doctor acted as if she was doing me a favor...no she didn't, she caused 3 problem areas."

THE ZONES OF ADHERENCE – 22

Doctors sometimes suction tissue out of the non-violate 'Zones of Adherence', areas of the body where there is minimal or no deep fat layer. In these areas, the superficial layer and its overlying dermis are thin, making them even more susceptible to contour deformities than other areas of the body. [104] In other words, *there is little to no fat in these areas, and surgeons should not suction tissue out.*

These zones include:

1. The gluteal crease (crease under the buttocks)
2. Lateral gluteal depression (on the side of the body near the hipbone)
3. Middle medial thigh (mid inner thigh)
4. Inferolateral illiotibial tract (about midway down the side of the thigh)
5. Distal posterior thigh (the lower area on the side of the thigh) [105]

Operating on the non-violate infragluteal crease often causes irreversible harm to the functional structure of a person's buttock. In Lipo 101, Dr. Klein explains, *"If you remove too much fat, it will result in pain when the patient sits on a hard surface because of insufficient fat overlying the ischial tuberosity."* [106] In addition to affecting one's ability to sit, damage to the buttock via liposuction may damage gluteal ligaments, which is irreversibly painful, and will interfere with a person's ability to walk or move normally.

SURGEONS CODE OF ETHICS – 23

The medical boards give credence to doctors who are not required to stay current in their profession. Also, doctors are misleading patients without

full disclosure of facts; the doctors do not tell patients that, regardless of the immediate cosmetic outcome, liposuction is fraught with guesswork, and causes negative long-term harm.

According to the American Society of Plastic Surgeons Code of Ethics, (under the auspices of the American Medical Association), doctors have an affirmative duty “to provide the public with information about the scientific progress in plastic and reconstructive surgery”, to “render services to humanity with full respect for human dignity”, and to “merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.” [\[107\]](#)

FDA APPROVAL – 24

Murad Alam, MD, chief of cutaneous and aesthetic surgery at Northwestern University Feinberg School of Medicine said, “Several obstacles prevent conducting large-scale research trials on cosmetic procedures and devices. Because the FDA’s approval mechanism for devices is less rigorous than for drugs, the agency doesn’t compel pharmaceutical companies to do large trials. Thus, companies may test a device on as few as 50 or 100 patients. As soon as a mechanism gets approval, companies aren’t motivated to do more testing or to compare one procedure to another.” [\[108\]](#)

FDA approval is not even required for liposuction equipment although some companies do pursue that approval. The FDA “approved” some of the PAL MICROAIRE cannulas (and equipment) on a 501(k) submission, while others were completely exempt. I believe the 501(k) means that it got a 90-day approval letter and was compared to a predicate. [\[109\]](#)

The Complications of Liposuction cites that “Care should be taken when using power assisted cannulas and even ultrasonic or laser technologies since the tissue resistance changes making easier the penetration of undesired structures.” [\[110\]](#) In other words, when a suctioning device is inserted into the body, it can penetrate organs, muscles, nerves, etc.

The FDA points out that the short-term effects i.e., free fat entering the blood stream and long-term ultrasonic effects on tissues are not known. [\[111\]](#)

This being so, neither the FDA nor doctors warn the public of the unreasonable risks they’re consenting to. It can take prospective patients great effort to find the scientific studies they may not even be aware of. So, who’s looking out for the patients well being?

OVER-RESECTION – 25

‘The Complications of Liposuction’, journal articles such as ‘The Zones of Adherence’ and other medical texts warn about the issue of over-resection via liposuction. Distressing patient reports detail what it’s like to live with some of these effects.

Producing a loose, hanging buttock – on even the youngest women – is discussed in both the professional and personal arenas. Over resection not only looks bad, but also can be so severe as to cause skin to painfully

adhere to the underlying bone and muscle. The lower buttock can be particularly problematic. The area is referred to as 'the Bermuda Triangle of the buttock' due to the fact that liposuction can severely damage the supportive gluteal ligaments. Damage to this area negatively affects sitting and moving.

Removing too much fat has adverse, dire consequences and possibly leads to diabetes: A study done on a transgenic (genetically modified) mouse in 1998 concluded: "The physiological consequences of having no white fat tissue are profound. The liver is engorged with lipid, and the internal organs are enlarged. The mice are diabetic, with reduced leptin (20-fold) and elevated serum glucose (3-fold), insulin (50- to 400-fold), free fatty acids (2-fold), and triglycerides (3- to 5-fold). *The A-ZIP/F-1 phenotype suggests a mouse model for the human disease lipotrophic diabetes (Seip-Berardinelli syndrome), indicating that the lack of fat can cause diabetes.*" [\[112\]](#)

REGULATION ISSUES – 26

The medical industry cannot regulate itself. Surgeons often refuse to stand up against a fellow in their field, and they don't wish to legally challenge the type of surgery they perform. The idea of expecting a doctor who makes his or her living from doing liposuction to testify against another in the same misguided field, is ineffective and allows all involved in the field (doctors, medical boards, the equipment manufacturers, and the FDA) to evade accountability. This sets the stage for continued harm.

Occasionally, there is a passing news story about a 'non-board certified' doctor or a spa performing harmful liposuction surgeries; [\[113\]](#) this erroneously puts the focus on these surgeons as 'bad seeds' instead of calling out the whole procedure as unsafe, which I believe I am showing that it is. True regulation doesn't mean doing less of a harmful non-curative surgery; true regulation would mean completely doing away with the procedure.

The idea that liposuction is not well regulated is cited in multiple sources, including in Dr. Klein's book, 'Liposuction 101' (Chapters 2, 3, and 5 are good sources). [\[114\]](#) [\[115\]](#) [\[116\]](#)

There are no clear industry standards – just fuzzy guidelines. Board certified or not, surgeons are just guessing about how much to resect, and they're also guessing how invasive, unnatural removal of fat affects the health of their patients. Recall, "*We're just beginning to understand fat.*" [\[117\]](#) Recall, also, those 'industry guidelines' were created (according to the HTAC report) *in an effort to ward off regulation.* [\[118\]](#)

LEGAL CHALLENGES – LIPOSUCTION AND THE LAW – 27

In Florida, a state that has been touted as a national example for its regulations on plastic surgery, at least eight deaths were reported in less than two years. [\[119\]](#) Those statistics do not include disfigurement, chronic pain, or other complications of liposuction, nor do they explain that liposuction changes the fat distribution patterns of each individual, causes long-term fat mobilization, metabolic syndrome, and increase in insulin

resistance.

Based on public outrage following these deaths, the Florida legislature set some parameters as to how much fat aspirate can be suctioned out of each individual at one time. Instead of the 5 liters of aspirate (fat tissue, blood, and serous fluid) that most other states allow, Florida reduced the amount: 5 liters is still okay in hospital or Ambulatory Centers; 4 liters in spas; 1 liter when liposuction is performed with another procedure. [\[120\]](#)

Liposuction in the US is recommended for fit, healthy people with 'slight contour irregularities'. The legal amount in many states is 5 liters to remove 'at-one-go' – with or without unrelated surgeries (picture 5 liters of water as reference). But, how many fit people with slight contour irregularities have 5 liters of tissue 'to spare'? Also, stating the number as a legal 'one-size-fits-all- figure is not equitable; a petite, fit person has a very different body make-up than a large, tall and/or obese person.

In the UK, government regulations limit the amount of liposuction aspirate to be removed to three and $\frac{1}{2}$ liters at a time. [\[121\]](#) Regulations that limit the amount of liters of fat can be removed in one session may lessen a few complications – such as intense fluid imbalance and so on, but the current regulations aren't good enough; they still don't protect people because '*less of a harmful procedure is still a harmful procedure.*

Even in situations when harm due to liposuction is recognized as being egregious, it's difficult to get a malpractice lawyer: Lawyers say that juries are prejudiced against people who have cosmetic surgery and there is a "white coat of silence" (i.e. it's hard to find surgeons willing to stand up against fellows – especially as outing the offending doctor may bring to light questions about the dubious nature of liposuction). Medical Injury Compensation laws exist in about 37 states. These laws limit financial settlements for victims of surgical harm making it challenging and unappealing for lawyers to take on cases that require costly (and unwilling) 'surgical experts'. [\[122\]](#)

When doctors are not held legally accountable, unsound medical practices remain unchallenged. In America, it is possible to be the victim of surgical battery via liposuction but due to the legal roadblocks, the offending surgeon might get off without penalty – without even a trial – and remain free to maim the next unsuspecting patients.

Many state medical boards are not doing their jobs effectively enough; the laws don't support the kind of strong patient protection that should be established. In May 2013, it was reported on a Los Angeles news segment (KCAL news) entitled, '*Doctors from Hell*', that Attorney General Kamila Harris was thinking of taking over the job of repudiating unsavory doctors after dozens of liposuction victims stepped forward to complain about being disfigured. Also in May, 2013, My Fox LA, aired a news report entitled, '*Bad Liposuction.*' How many more disturbing news reports do we need?

According to PubMed, the major stock indices are affected by liposuction consumption. [123] In other words: liposuction is very big business. Doctors (and others) are financially invested in covering up the harm caused by liposuction, which is a procedure that has proven to be unsafe, resulting in negative, long-term health consequences. Studies done by doctors who make a living by performing liposuction may be biased in comparison to studies done by scientists whose financial incentives aren't tied to the results.

CONCLUSION – 29

Liposuction surgery is an invasive, non-curative, harmful surgery. The complications from this surgery are not accurately followed. Because the reporting of adverse affects is not mandatory, [124] and doctors may have a different criterion to classify a 'bad outcome' than patients, patient self-reporting can give a more accurate representation.

The HTAC issued this caution in 2002: "*Death and disfigurement due to the cosmetic surgical procedure of liposuction should be a matter for serious public concern.*" [125] Sadly, the liposuction politic has continued on since then, and patients are still being harmed on a widespread basis. Even patients who initially feel satisfied with a cosmetic outcome have had their bodies irreversibly changes in ways that will negatively affect their long-term physical and mental health, and their overall well-being.

No matter how often it is renamed, or how the medical community spins it, liposuction is unsound. Scientific studies remind us that, regardless of the surgeon, *the problem of liposuction has to do with the biology of fat.*

Since liposuction increases visceral fat, causes long-term fat mobilization, increases insulin resistance, and instigates metabolic syndrome – and all of these affects are so detrimental to one's health – then isn't representing liposuction surgery as being a valid medical procedure actually *false advertising*?

Is the role of our doctors to attain and maintain a high standard of medical and ethical conduct, or to remove healthy fat that is vital for metabolism and other bodily functions? Liposuction is responsible for a **spectrum of harm** including:

- Permanent damage to muscles, nerves, underlying organs
- Painful skin adherence which is disabling and limits sitting and mobility
- Disturbing fat regrowth causing unnatural, disfigured appearance
- Possible increased in visceral fat which is linked to slowed metabolism and disease conditions known to shorten life
- Infertility and difficulties with lactation
- Loose sacks of skin that require risky skin excision and fat grafting
- Sunken pockets of divots
- Lack of transparent, clearly-communicated consent
- Problems of exceeded consent
- Financial hardship and even ruin
- Chronic pain, loss of quality of life

- Lidocaine toxicity, third-space swelling, Death

With the many known problems attributed to liposuction, barring being outlawed, a National Liposuction Registry should be created that requires mandatory reporting of each procedure. The registry should require reports of mortality, and include a venue for patients to provide their *own* data at any time post-surgery, since the full aggregate of complications does not present immediately. Also, detailed scans should be required.

With regards to liposuction, a doctor may only consider such events as death or a lawsuit to be a 'poor outcome' but a patient may consider a 'poor outcome' to be chronic pain, lessened or ruined quality of life, the disfiguration of his or her body via fat distribution, and the unexpected shortening of his or her lifespan due to the disease processes.

Our bodies require healthy fat to function. Liposuction is marketed for '*slight deposit contour*' issues on people at their best and stable weight. The literature on liposuction states it is not intended to assist obese individuals as a form of weight loss, yet surgeons suction *liters* of tissue from healthy bodies. Instead of solving '*slight contour*' issues, liposuction creates significant problems including pain and disfigurement for life.

Since the cosmetic issues to be 'fixed' are more benign than the resultant adverse long-term aesthetic and health complications of liposuction, there doesn't seem to be a compelling reason to harm healthy individuals. Certainly some surgeons (board certified or not) are worse than others, but the procedure is dangerous and inherently flawed leaving many patients desperate, disfigured, or dead.

The question posed here is, '*Why is a procedure that is so incredibly harmful to the patients health being performed at all?*'

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THIS PAPER IS STILL A WORK IN PROGRESS ~ Add these endnotes –

As Liposuction Deaths Mount, Study Exposes Cracks in Safety

by Michael Vlessides, Oct. 4, 2012 (Cut and paste this title info and that will take you to think link – they made it difficult to access this link.)

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