

Suction Assisted Lipectomy (Liposuction)

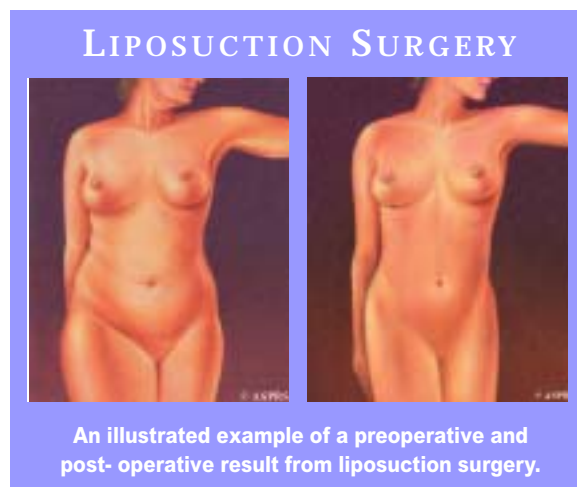
During his eight years of advanced training and twelve years of independent practice as a plastic surgeon, Dr. Cook has directly participated in the developments that have led to today's refined techniques of body contour surgery. As our society has become more athletic and more interested in physical form, there has been an explosion of interest in the field of body contour surgery. Although this is generally for the good, patients are not always helped when inexperienced or poorly trained individuals attempt to carry out sophisticated surgical techniques.

Dr. Cook offers his patients extensive experience in all major techniques of body contour surgery. He also is committed to an artistic vision which emphasizes the creation of artistic lines rather than simply focusing on the removal of fat. As in the entire practice, there is a deep commitment to patient service. This includes proper patient education about the role of diet and exercise in maintaining a quality long-term result.

At the center of our patient care is an individualized approach to each person who comes to our office. This includes in-depth evaluation of the fat distribution of the body, skin tone, lifestyle and patterns of activity, general health, and expectations regarding the surgery. Liposuction should not be regarded as a "quick fix." If it is integrated into a holistic pattern of patient care, the results will offer long-term value to our patients. A commitment to long-term value is one of the defining philosophies of our practice.

[Click here to read an interview with Dr. Cook answering many of the questions you may have about Liposuction.](#)

If you have a question that is not addressed in this interview, please contact our office.



This is an artist's rendering and does not represent actual patient results. Individual results may vary.

An Interview with Dr. John Q. Cook (JQC)

Q *I recently looked at the statistics from the American Society of Plastic Surgeons about the different cosmetic surgery procedures performed in the United States. Liposuction has been the fastest growing area. Why do you think this is the case?*

JQC I think there are really several reasons for this. First of all there have been some wonderful refinements in the techniques of body contour surgery and these have led to improved results. Over time when results from surgery improve, patients tend to speak about their experience positively and this probably affects the overall level of interest in the society for a given surgical operation.

I also think that there are changes in our society overall which contribute to this. Certainly in the last decade or so there is an increase in emphasis on physical form in our culture. We have certainly come a long way from the old pattern where people kept themselves in shape in their 20's, then they got married and began an inevitable downhill course. Once you had your kids, it was expected that you would just sag and turn into mush. The woman would hide everything under bulky dresses and the men would wear loose fitting business suits. Now many of my patients deliver babies and the first question out of their mouth is "when can I get back to the gym to work out." Even the casual dress movement has probably contributed to this, especially for men in the work environment since they can't hide all that extra fat as well.

Obviously I am being a little light-hearted in my description here but we really have witnessed what I view as a wonderful trend in our society where people view exercise as an important part of their lives and keep up with it well into their 70's and 80's. The benefits of this are obvious. People are healthier, sleep better and have more energy but we probably also get a little pickier about our appearance when we invest so much energy in it. As you push the exercise to certain point depending upon your genetic make-up, you may find that despite everything you do there are certain zones that are quite simply resistant to diet and exercise. This is where liposuction can be helpful.

Q *Could you describe for me your ideal patient?*

JQC This would probably be someone in their 20's or 30's. They exercise regularly and are careful about their diet and have not experienced major weight fluctuations. They are close to their ideal body weight. Despite these measures, they have certain zones of fat that have been resistant to diet and exercise and the skin tone in these areas is excellent. Their goal is to improve the visual harmony of the body as well as to improve the fit of clothes across certain zones of the body. Of course, the person should be in excellent health.

Obviously someone who falls into this ideal category is likely to get an ideal result. I don't mean to imply that I don't operate on anyone outside of this category, but it is just that as we move further away from this ideal, clear and accurate communication between the doctor and patient becomes very important.

Q *Is there an age limit for body contour surgery?*

JQC I do not have arbitrary age limits. What I am looking at is the patient's goals, the quality of the patient's skin tone, and the patient's general health. There are patients in their 20's who I turn down for surgery and there are some in their 60's who are acceptable candidates. It all comes down to a matter of individualized assessment.

Q *What are the typical zones that respond well?*

JQC This varies between men and women and also, of course, depending upon family patterns. In general for women the classic zones include the outer portions of the thighs, the upper inner thighs, the knees, the upper posterior thighs just below the buttock, the hips, and the lower abdomen. For men, the zones are typically about the central portion of the body, especially the abdomen, flanks and the back of the waist. Other common zones in men include the neck and the chest area.

What we find is that even in people who are extremely athletic it may be very difficult for them to lose weight from these areas. They find that the only way to do so is to actually get themselves down to where the rest of their body looks unhealthy. As we have begun to study these areas scientifically we find that the fat cells in these areas actually have a different metabolism from the rest of the body. Fortunately, for plastic surgeons and patients alike, it is these precise zones where liposuction can give the best results.

Q *What happens if you perform liposuction outside of these areas?*

JQC In general, when you perform surgery outside of the classical zones the fat is organized in a different way and it is much more likely that there will be undesirable consequences of the surgery such as diminished skin tone or surface irregularities. I am not saying that I never perform surgery outside of the classic zones but it is just that you have to very carefully evaluate each patient. In the classic zones we will often perform what I refer to as finesse liposuction. This is in an individual who is already in very good shape and a relatively minor adjustment of contour may be done to further improve the artistic lines of the body. It would be a mistake to perform this type of surgery outside of the classic zones because the risk/benefit ratio would not be in the patient's favor.

Q *Are there any other things that you look for in a patient in order to predict the success of the surgery?*

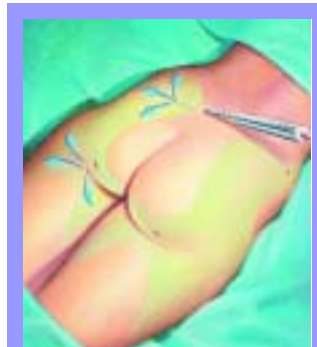
JQC Yes. When I look at my patient I always have in the back of my mind what I refer to as the four keys. The first is a classic zone of fat distribution with the rest of the body in relatively good shape. This is the one we have already talked about. The other important criteria are that the skin tone should be acceptable, that the patient should be in good health without significant medical problems, and that the patient's expectations should be realistic relative to what contemporary techniques can offer.

Q *Are there any other things that you look for in evaluating a patient?*

JQC I believe that the holistic approach to the patient seeking body contour surgery is absolutely essential. You can't separate a surgical procedure from the context of a patient's lifestyle and activities if you are truly interested in providing a good long-term outcome for your patient. A patient may appear to be a good physical candidate for the procedure but if you find out that this is the type of patient who really doesn't have a good exercise program and is constantly cycling up and down in their weight there is a very high probability that the result will be mediocre. It makes me sad when I see patients who haven't been dealt with honestly in this regard, where they have been promised some sort of a quick fix and no one has taken the time to try to figure out whether their lifestyle is an appropriate balance for the surgery. The patient's interest should always be put first even if that means telling the patient no.

Q *You mentioned that liposuction has gone through a process of technical refinement. Could you describe this a little more for me?*

JQC I have very much enjoyed witnessing and participating in the evolution of body contour surgery. When liposuction was introduced to this country in the mid 80's it was relatively crude. Nonetheless, it represented a significant advance over the only other option that was available at the time. The previous techniques of body contour surgery resulted in very long scars in common locations and this was unacceptable for most people in the United States. The great advance of liposuction came when it was realized that through relatively small incisions fat could be extracted using long hollow tubes called cannulas. The first liposuctions resulted in significant bleeding and bruising and the amount of fat that can be removed safely at a single surgery was quite limited. There were also problems with the finishing details of the work, since the initial cannulas were very large and tended to produce irregularities. We then entered into a refinement phase as people began to design the cannulas smaller and with different tip configurations, so that there was more finesse in the procedure.



An illustration demonstrating the use of a cannula during the liposuction procedure.

The next big advance came in the early 90's when it became widely appreciated that there was an advantage to introducing fluid into the area of liposuction prior to the fat extraction. This fluid, which is the same solution used in an IV, was mixed with a local anesthetic and a vasoconstrictor known as Epinephrine. The advantages of this, to those of us who were working with the technique at that time, were very apparent. I found that the fat came out more easily and more uniformly. There was also much less bruising and blood loss, so that it became possible to contour several zones at the same time.

By the mid 1990's I became very intrigued with the technique known as ultrasonic liposuction. This was pioneered by an Italian surgeon. Here the concept of fat removal was fundamentally different

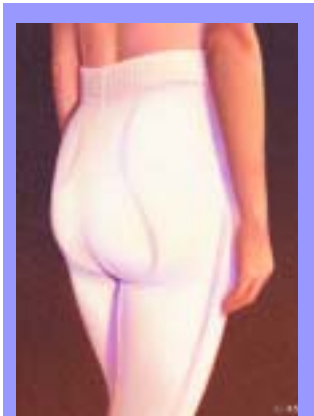
from what had come before. Earlier techniques of liposuction essentially are a mechanical disrupt of the fat and using suction to withdraw it. With ultrasonic liposuction, ultrasonic energy of a specific frequency is used to break apart the fat cells and other specialized cannulas are used then to remove the fatty material. I was intrigued when the early pioneers of this technique began to present results that, quite frankly, were better than what I was obtaining at the time. Any time this sort of thing happens I become very interested because I always want to advance the state of the art for my patients. As with any new idea, it is important to figure out whether this is just hype or whether there really are advantages. After carefully investigating this, I began to use the technique in selected patients. I was one of the earliest adapters of this technique in the Chicago area, and as I worked with it I found that, especially in certain zones, the results that I was obtaining really were better than what I had obtained with the classical techniques.

Q *So then you use ultrasonic liposuction for all of your patients?*

JQC Absolutely not. And here is where experience is so important. To make progress you always have to look carefully at your own work and results, not just the best and try to figure out when technology is beneficial and when it is not. I have found that there are certain zones where ultrasonic liposuction predictably increases the quality of the result, at least in my hands. These include the abdomen, flanks and back in the male patients, certainly the chest area in male patients, and the outer thighs and abdominal region and hip regions in female patients. In other zones I think I get a better result with a classical fine cannula technique. This means that for the patient in whom I am treating several zones I may very well use a blend of several different techniques.

Q *Could you describe for me what the surgical experience is like?*

JQC One of the most important steps in the surgery actually occurs before the operation. This is when I meet the patient in the preoperative area and make detailed topographical markings on the body to guide me during the surgery. After that, from the patient's perspective there is very little recollection what goes on. The surgery is mostly carried out under a very light general anesthetic so that there will no memory of the actual events of the surgery. The patient will wake up in a private recovery room. He or she will be wearing the appropriate support garment, usually with some extra padding in place to put pressure on the zones where I have extracted the fat. Most patients tell me they feel a little chilly but are not particularly in pain. This is because the solution that I put in prior to the liposuction has a local anesthetic. Most patients will be able to go home after an hour to an hour and a half. The next few days are essentially spent in couch potato type activities. It is okay to get up and go for a short walk, in fact this is encouraged but we don't want excessive motion across the areas of surgery. Most patients will come back to see us



An illustration of the support garment patients are to wear after surgery.

in 3-4 days at which time the preliminary support garment is removed and they are fitted with a fresh support garment. From that point forward the patient may shower as he or she desires and return to work as long as it does not involve extremely stressful activity. Usually by the middle of the next week the patient is able to resume gentle exercise such as walking, treadmill and stairmaster. I don't want to see exercise that causes a shearing motion across the zones of liposuction or extremely violent exercise for several weeks. I do believe that the support garment is very important. This is essentially a glorified girdle with zippers on either side that applies compression to the zones of the surgery. I think that this helps to squeeze the swelling out and hold the skin in place so that it will settle into a good pattern.

Q *It seems to me that one of the hardest things in doing the surgery would be to judge just how much fat you want to take. Is that the case?*

JQC I think this is one of the most important aspects of body contour surgery and there is absolutely no substitute for the experience of the surgeon in this regard. To rephrase your question a little bit, not only is it important to consider how much you take but even more so, how much you leave. Some of the newer techniques such as ultrasonic liposuction are very, very powerful. Unfortunately, in inexperienced or in judicious hands, this can lead to some very sad outcomes.

Q *What happens if you overdo it?*

JQC You lose the beautiful curves of the body and you get loose skin. I always find it interesting to take a look at the advertisements in magazines both here in Chicago and in other cities that I travel to. Some of these doctors put in before and after pictures. There are two things that I see that are very interesting, to say the least in these pictures. One pattern is the woman who is perhaps a little full but has generally nice curves, and then in the after picture there is this very straight outer thigh, almost like that of a boy's. This, to me, is a very strange concept of feminine form. I have spent a lot of time studying the history of art and representation of the female form and there has not been a single culture that I am aware of where this is viewed as attractive. It certainly doesn't look attractive to my eye. Another good tip-off is to look for those advertisements where the patients are wearing tights in their pre and postoperative pictures. Usually this is a tip-off that the patient had sucked too much fat removed, and if the skin isn't supported by some sort of garment there is going to be all sorts of awful irregularities. I guess it all comes down to a matter of artistic vision. For me, body contour surgery is about adjusting the curves, not eliminating them.

Q *What can the patient do to make sure that not only does she have a good outcome but a safe one?*

JQC That's another very important question. I am sure you are aware of several reports regarding some very unfortunate outcomes with this type of surgery. There was one very good article in the Wall Street Journal a few months ago. In general there are several factors, which, in my opinion, significantly increase the riskiness of the procedure that every patient should be aware of. The first problem can occur when an injudicious surgeon chooses to extract very large volumes of fat,

especially in the outpatient setting. Under these circumstances, between the fluid that is added to the body prior to the liposuction and the amount of fluid and fat that is removed, there can be some very significant changes in the patient's physiology, not unlike those that occur with trauma. Unfortunately, we now see people taking weekend courses and proclaiming themselves experts in this type of surgery when they haven't even studied the basics of surgical physiology or have any practical exposure to this in their training. This leads them to underestimate the risks of what they are putting their patients through and really pushing the envelope. I for one am not interested in using liposuction to extract massive volumes of fat from people. Most of these people have an eating disorder, and they are just going to put the fat back on, even if the procedure could be done with safety.

A second problem comes up when the surgeon is not strict in his or her criteria for patient selection. If, for example, a patient has a heart problem why should you go do elective surgery like this? Of course, if you combine poor patient selection with large volume liposuction they you are really flirting with disaster. A third issue is the quality of facility at which the procedure is performed. We are very strict in our criteria as to where we will do the surgery on our patients. This does add a little to the cost but there is no substitute for safety. Some of the more marginal practitioners will perform this surgery either in office facilities or in free standing surgery centers that really aren't properly equipped to do the job. It may be okay to take a mole off in a setting like this but it is definitely not okay to do liposuction surgery. Under such circumstances, if the patient develops a relatively small problem intraoperatively, and the equipment is simply not there to correct it, a minor problem can turn into a major problem.

Last but not least, there is the issue of quality of the surgeon and his or her training. It is a matter of considerable personal sacrifice for an individual to obtain the full training necessary to be a board-certified plastic surgeon. There are always individuals who will want to cut corners and take the short cut. They figure that they can invest their time and money in marketing to make up for a deficiency in training. The problem with people who take weekend courses is that they may be seduced into believing that they really are doing a simple piece of surgery and not understand in any way the physiology of what they are doing. This is where truly frightening things can occur.

Q *How do you select a doctor to perform this type of surgery?*

JQC I would certainly recommend that anyone considering this surgery should check the doctor's educational credentials very carefully. If that doctor doesn't have a strong background in surgery and surgical physiology, then you might want to think seriously about looking elsewhere. The reason for this is simple. These doctors may not even be aware of the potential for danger and so blunder into situations that a more knowledgeable physician would avoid. Look for doctors who are certified by the American Board of Plastic Surgery and members of the American Society of Plastic Surgery, since they have gone through many years of advanced training. Ask about a doctor's hospital admitting privileges. After you have lived in an area for a while you have a general sense of which are the better hospitals and even doctors who perform surgery in their offices must maintain hospital affiliations. I would also recommend that a perspective patient should be very sensitive to the way they are treated by a doctor and the doctor's

staff. This includes the initial contacts with the office on the telephone as well as, of course, the interview process with the surgeon. If your instincts tell you that you are talking to someone who is really much more interested in selling you a product than in providing you with a valuable service then you have probably gone to the wrong office. Unfortunately, this is an area that because of its rapid growth, has attracted a number of unscrupulous practitioners.

Q *Earlier you mentioned that skin tone is very important in your evaluation of the patient. How does this affect the result?*

JQC This is probably one of the easiest traps for the inexperienced surgeon to fall into. If you evaluate a patient without assessing skin tone she may appear to be a very good candidate for the surgery; yet when you extract the fat the skin does not contour in properly. It may even hang loose in folds or have other irregularities that will be very annoying to the patient.

Q *What causes patients to lose their skin tone? Is it mostly a function of aging?*

JQC Well, aging may be a part of it but actually that is not the most important thing. We often see this in people who have a history of very significant weight fluctuation where they go up and down in their weight and engage in crash diets. This often breaks the elastic fibers of the skin and leaves them in a position where liposuction really won't produce a very artistic result. Some patients also lose skin tone in the abdominal area when they go through one or several pregnancies. Of course, there are some patients who can carry six children and yet have beautiful skin tone, so this is a highly individual matter. There is also just a genetic component. Some people have very stretchy skin and this will affect the result on anything that I do, be it a facelift or body contour surgery.

Q *Will exercise help skin tone?*

JQC I am always the biggest fan of exercise, but if the skin tone has really been harmed, exercise alone won't do it. Of course, I will still encourage patients to exercise because of all the other benefits including tightening of the deeper support structures, which can be beneficial in body contour with or without surgery.

Q *Can anything be done surgically to help patients who have diminished skin tone?*

JQC Absolutely. This is where the advanced techniques of body contour surgery can be a very real benefit to the patient. These include techniques such as abdominoplasty, where not only is extra fat removed, but the skin is tightened as well as the deeper supporting structures of the abdominal wall. These are more involved techniques, however, and require a longer recovery period than what is typically seen with liposuction.

Q *What about the patient who does have some loss of skin tone but just wants clothes to fit better. Is there any role for liposuction in this patient?*

JQC This, of course, would be an important issue to discuss with the patient. If the skin tone isn't great the result won't be great either, but sometimes there are zones that are more accommodating than the others. One area that frequently bothers patients is the hip region and this can sometimes respond well to liposuction even with moderate skin tone loss. It all gets back to placing the patient's needs first and communicating accurately with her.

Q *What about cellulite? Are there any cures for this on the horizon or any techniques that work currently?*

JQC This is something that seems to come up every few years. So far all of the miracle cures and treatments haven't worked very well. I remember a few years ago when there was a fad involving a medicine called Aminophylline that people were rubbing on their thighs. It amazed me at the time to see how many doctors in our neighborhood were prescribing this for their patients even though there had been absolutely no scientific evidence to suggest it really worked. Of course, this was abandoned after it became apparent that patients did not have any significant benefits. At the present time there are a number of mechanical devices which essentially apply vibrating mechanisms or suction rolling devices to different zones of the body. I always learn from my patients and I have asked them about their experience when they tell me that they have had these treatments. The word that I get from most of them is that if you do in once a week for the treatment it will improve the appearance but only on a temporary basis. In other words, once you stop these relatively expensive weekly treatments, you are pretty much back to where you started. Most patients seem to give up on this after a while because of the inconvenience factor, but I suppose if you want to give yourself a little weekly treat there is no harm in doing this.

Q *What do you see as the next area for innovation in body contour surgery?*

JQC That, of course, is always difficult to predict ahead of the fact and usually these discoveries take us by surprise. One area that may turn out to be very beneficial for patients is the potential promise of technologies that can tighten skin tone. This would make liposuction available to a wider group of patients. Some of the work that is going on with long wavelength lasers, for example, is very interesting in this regard and we will just have to see how this turns out.