THE LUSTGARTEN FOUNDATION FOR
PANCREATIC CANCER RESEARCH

ask an Expert:

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managing your new life after surgery

Nicole Goetz, MS, APRN-BC

Virginia Cravotta (VC):
Let's begin with the hospital experience. What can patients expect in-hospital recovery to be like after pancreatic surgery?

Nicole Goetz (NG): After pancreatectomy and other major operations on the pancreas, patients can expect to be in the hospital anywhere from five days to three weeks, depending upon the type of surgery performed. In general, an average hospital stay is seven to ten days. Most patients can expect a brief stay in ICU, or an extended stay in the recovery room (meaning overnight). Even though they will be hydrated with intravenous (IV) fluids, patients won't be eating solid food until just before they go home (or for at least five to seven days from surgery). Most patients are out of bed within two days. We try to get patients ambulating as soon as possible.

VC: **I would imagine that the recovery process doesn't always progress as hoped. What kinds of medical complications can occur while in the hospital?**

NG: Because the pancreas is a gland, one of the most common complications with pancreas surgery is **pancreatic leak.** In order to determine if there is a leak, a surgeon will usually insert something called a **Jackson-Pratt (JP) Drain.** If there is a leak, treatment may involve leaving the drain in longer than we'd typically like to do. Only on rare occasions will we have to re-operate for a leak.

Another type of complication is called delayed gastric emptying. Because there's a new connection between the stomach and the small bowel, food and bodily fluids like bile and saliva can sit in the stomach for prolonged periods of time, delaying emptying into the small bowel and throughout the rest of the GI tract. This can cause nausea and vomiting for some patients, and if they are unable to eat for prolonged periods of time they may have to be fed intravenously, requiring **Total Parenteral Nutrition (TPN).** This situation is usually self-limiting, meaning that it resolves itself in about six weeks. Of course, six weeks can feel like an eternity to a patient.

Other concerns can include standard abdominal surgery complications, such as wound infections, **deep venous thrombosis (DVT),** pneumonia, urinary tract infections and other infections. Although pain can be an issue, it is usually controlled well with intravenous pain medication.

VC: **Eventually, patients leave the safety of the hospital. As much as we hate being in a hospital, it usually feels like a safe place to be after a major operation. What kinds of issues can arise after discharge, and how can these affect one's willingness to "get back into life?"**

NG: Most patients are anxious to get out of the hospital. They've been in the hospital for what feels like a very long time, and they want to go home. Once they arrive home, however, they may start to feel overwhelmed. Family members may also start to feel overwhelmed, especially those who are preparing to serve as primary caregiver. Some patients will have a visiting nurse, but the nurse is not with them every day, or even for the whole day. So, it can be scary to both patients and family to be home.

At the time of discharge, patients usually have only a day's worth of meals in them. Often, this is not enough to be acquainted with their "new" digestive tract. Patients may experience vomiting upon their return home. This doesn't speak to the success of the surgery, just to the return of normal rhythmic contractions in the small bowel and stomach. A small percentage of patients will have to be readmitted for

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vomiting, dehydration, and/or inability to eat. Dehydration may occur when patients restrict fluids because they feel full, or because they are focusing on eating rather than drinking. Other complications that may occur at home are the same as those that can occur in the hospital. Sometimes, complications begin after discharge. For patients who remain at home, we will maintain regular phone contact. As part of pre-operative education, we stress that the first two weeks home can be really anxiety provoking, and encourage patients to call the surgeon and/or nurse with any questions.

The other issue that makes patients very anxious is weight loss. At Columbia, we see an average of 15 pounds of weight loss for our patients after pancreatic surgery, but the range can be anywhere from 7 to 30 pounds. This can be quite disconcerting for patients who have cancer, because they feel their weight is far from where they were before surgery. Remember, many of these patients have already lost substantial weight from the cancer and/or treatments before surgery, so additional weight loss can be scary.

VC: **Are patients given strategies for dealing with, and perhaps even preventing, these kinds of complications?**

NG: At Columbia, we provide patients with pre-operative counseling, which includes a customized diet developed by a surgeon and me. Nutritionists are also available to speak with patients in the hospital. I also walk patients and family members through what to expect after surgery. We find it is helpful to have the family involved in these discussions, since they will be involved in aftercare.

> "I encourage patients to consider joining a community-based diabetes support group, because managing diabetes is one of the biggest lifestyle adjustments for post-pancreatic surgery patients. Web-based support groups are also a great option, because the nature and duration of recovery from this kind of surgery can sometimes make it difficult for patients to get out of the house."

VC: **In terms of family involvement, is there any particular kind of in-home care that families should be prepared to deliver, or that the patient needs to consider, after pancreatic surgery?**

NG: During discharge planning, hospital social workers serve as case managers, arranging for follow-up services. One excellent aftercare resource is a visiting nurse. Visiting nurses can be arranged if the patient's needs meet certain criteria, which is determined through a nursing assessment.

For example, if a patient develops a wound infection, or returns home with tubes or drains for leakage, this might qualify him or her for a visiting nurse. Often times, however, patients' medical needs do not warrant the services of a visiting nurse, and we will instead arrange for outpatient community services, such as physical therapy to help a patient gain strength and increase appetite. Geriatric and/or infirm patients who undergo pancreatic surgery usually require a stay in a **rehabilitation facility,** or some type of skilled nursing facility, upon discharge from the hospital and before they can safely return home.

VC: **What about medical follow-up? For how long does the surgical team care for patients after they leave the hospital?**

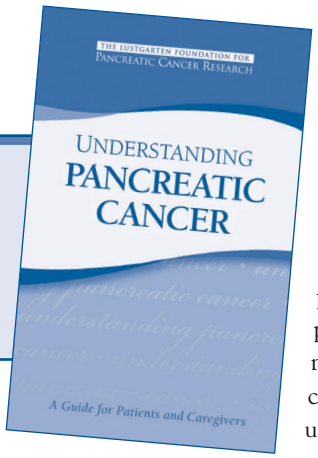
NG: It depends on the individual medical needs of the patient, but typically, if a patient is discharged after a one-week stay, they may have to return to have tubes or staples removed, and this can usually be done on an outpatient basis.

Otherwise, patients typically return to the surgeon's office at about the two week mark to have blood work, receive a weight check, examine their incision site, and receive a basic physical exam. The surgical team will have arranged this initial follow-up visit at discharge, and patients are given explicit instructions for the initial post-operative follow-up visit. The next visit is usually another two weeks later.

Typically, patients are seen at two-week intervals for the first six to eight weeks post-operatively. Patients with special medical needs will check-in weekly throughout the three-month point. Thereafter, patients are seen at three-month intervals for the first year. When patients are stable from a surgical perspective (usually two to three months after surgery), the patient's community medical oncologist will usually take over the care. We encourage patients to receive regular

SOME COMPLICATIONS OF SURGERY[2]

- Problems digesting different foods
- Insufficient pancreatic enzymes or hormones
- Leaking from the various connections made by the surgeon
- Infection
- Bleeding



**** Excerpted from Understanding Pancreatic Cancer: A Guide for Patients and Caregivers. (C) 2007 The Lustgarten Foundation for Pancreatic Cancer Research***

CT scans as advised by their medical oncologist, and to have them reviewed by the surgeon. We always leave the door open for patients to ask questions. And frequently, the patient is seeing a medical oncologist at our facility, so we'll informally "check in" with them when they're here for a visit. Some patients will continue to come into our office on a bi-yearly or yearly basis after the first year.

VC: **Even after "successful surgery," do most patients require further therapy?**

NG: Most patients with pancreatic **adenocarcinoma** will receive **adjuvant therapy,** which usually includes chemotherapy following surgery. Chemotherapy begins at about six to eight weeks after surgery. It is important to note that adjuvant therapy can further complicate gastrointestinal issues, such as nausea, diarrhea and weight loss, at a time when patients are still trying to recover from surgery and maintain a healthy weight.

VC: **A previous issue of 'Ask An Expert' mentioned that there are different 'schools of thought' with regard to adjuvant versus neoadjuvant therapy. Would some patients potentially receive chemotherapy and/or radiation *before* surgery? If so, could they receive it again after surgery?**

NG: There are different approaches regarding radiation therapy: Some institutions determine whether radiation is needed by a pathology report after surgery. The treatment team reviews the **margins**, and if the margins are good (meaning they don't see any cancer cells), they may start with chemotherapy alone, holding off radiation. If the margins are positive for cancer cells, the patient may be presented with the option to receive adjuvant radiation, as well as chemotherapy to target the area.

Some institutions consider treating with chemotherapy and/or radiation therapy before pancreatic cancer surgery, whether or not they are surgical candidates when their illness presents. This is called **neoadjuvant therapy.** In this case, chemotherapy is given beforehand to shrink the tumor and make it more conducive to surgical resection. Patients typically undergo about three cycles of chemotherapy over a time frame of about nine weeks, with a break of about three weeks before surgery. It should be noted that neoadjuvant radiation may affect the quality of the tissue. Also, external beam radiation can only be given once to the pancreas – either before or after surgery, whereas chemotherapy can be given before and after surgery if necessary. In the pancreatic cancer community at-large, there are studies underway to compare neoadjuvant versus adjuvant treatment.

> "Many patients lead active lives, and they want to know that they can do those things that make them happy – whether it's working out at the gym, playing golf, or visiting with friends – they want to resume a normal level of activity."

VC: **What would you describe as "top patient concerns" following pancreatic surgery?**

NG: I think the biggest concerns are nutrition and diet, because as we mentioned before, patients are not eating much before they go home. Although we try to make sure they can tolerate food and digest well before they leave the hospital, I usually tell patients that by the time they go home, they're going to be eating maybe a quarter of what they normally eat. Appetite is significantly affected by the surgery, and it's going to take several weeks to months before patients are eating "normally" again.

After nutrition, another big concern is bathroom habits. The pancreas produces enzymes that digest food, and if a person's pancreas is not producing enough of those enzymes, they can experience diarrhea, and this is a big issue for patients. Yet another concern is weight loss. As I mentioned earlier, patients are very concerned about weight loss because they may have already lost substantial weight prior to surgery. They're worried about how they will 'weather the storm' of chemotherapy and/or radiation when they don't feel quite like the person they used to be.

Another concern I hear a lot about is getting back to routine activities and exercise. Many patients lead active lives, and they want to know that they can do those things that make them happy – whether it's working out at the gym, playing golf, or visiting with friends – they want to resume a normal level of activity.

VC: **Which leads us to the concept of "normal." What is normal after such an extensive procedure? How do you have to redefine yourself to feel that you are achieving quality-of-life after pancreatic surgery?**

NG: Much depends on the individual and the type of surgery. It's unbelievable to me how quickly and completely some individuals are able to bounce back after pancreatic surgery, with little change to their lifestyle. But most patients must strive to find a "new normal." Especially for patients who undergo total pancrea tectomy, this can be challenging. These folks must immediately learn to manage **pancreatic insufficiency** (enzyme dependency) and **insulin-dependent diabetes.** In my experience, the best way to prepare an individual for their "new" life after surgery is to explore the notion of "new normal" in a candid discussion before surgery.

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"For most patients, recovery includes striving to find a "new normal."

— Nicole Goetz, MS, APRN-BC

Sometimes, you can't know the extent of lifestyle and medical complications until after surgery, and this can be difficult for patients. I try to prepare patients for a two to three month recovery process, as well as the possibility of adjuvant treatment. Some lifestyle changes may have to be permanent; some patients can never again consume oily or greasy foods without having to go to the bathroom immediately afterwards. Patients should discuss their individual medical concerns with their health care provider. Together, they may be able to develop "tricks" to help them cope with lifestyle changes.

VC: **We know that no matter how successful the surgery, there is always a chance of recurrence. What options are available to patients in the case of recurrence, and how can patients learn more?**

NG: There are several options available to post-surgical patients who face a recurrence of pancreatic cancer. **Radiofrequency Ablation (RFA),** conducted by an interventional radiologist, may be an option if the tumor is localized. Radiofrequency ablation involves using a probe to "liquify" an isolated liver metastasis. **Radiosurgery** (ex. CyberKnife®) is a very targeted form of radiation (no cutting or penetration of the skin is involved), which is sometimes an option for treating isolated bone metastasis. For example, a patient of ours whose only recurrence was in one vertebrae of the spine was able to receive radiosurgery in that bone. If surgery is not an option, we refer patients back to their medical oncologist, because there are many chemotherapies (and other forms of therapy) being tested in clinical trials for pancreatic cancer. I can't stress enough that patients discuss the option of clinical trials with their oncologist.

"We find it helpful to match patients with survivors before the surgery because it gives patients perspective about the road ahead. It can be empowering to connect with someone who has been through this experience, and many patients continue these friendships long after the surgery and hospital stay."

VC: **We've talked about medical complications, but what kinds of emotional changes can occur after pancreatic surgery? Is depression common after surgery, and if so, how do you approach this issue with patients?**

NG: It is not uncommon for patients to experience feelings of depression after surgery, especially as they try to adjust to significant lifestyle changes. This kind of 'situational depression' is common when a patient was not expecting an extensive surgical procedure, or wasn't anticipating becoming diabetic. (Any pancreatic operation carries a lifetime risk of developing diabetes.) Patients who become diabetic after surgery often develop insulin-dependent diabetes. It can be very overwhelming to think, "Here I am, losing weight. I have cancer, I'm diabetic, and on top of it all, I can no longer eat the foods I enjoy." After surgery, patients face a two to three month recovery period, followed by six months of chemotherapy and/or radiation. In total, patients are looking at almost a year of their lives spent fighting this disease. So, just the burden of treatment can be overwhelming. (*For discussion of depression and pancreatic cancer, please refer to 'Ask An Expert: Depression' and 'Ask An Expert: Coping with Pancreatic Cancer.'*)

VC: **With almost every disease, there are community support groups available to patients. Many pancreatic cancer patients are not eligible for surgery, which narrows the potential pool of survivors. Is there any way for patients who have undergone pancreatic surgery to 'connect' with other survivors, who can help them cope with everything they're going through?**

NG: At Columbia, we try to match patients with survivors before the surgery. We find this helpful because it gives patients a peer perspective about the road ahead. It can be empowering for patients to connect with someone who has been through this experience, and we find that many patients continue these friendships long after the surgery and hospital stay.

ADDITIONAL RESOURCES

The Pancreas Center at Columbia University/ NewYork-Presbyterian Hospital
www.pancreasmd.org

CancerCare
1-800-813-HOPE (4673)
www.cancercare.org
Offers telephone - and internet-based support groups for pancreatic cancer patients and caregivers.

Johns Hopkins Discussion Forum
http://pathology.jhu.edu/n.web?EP=N&FL=PANCREAS_CHAT
Unmoderated discussion forum allowing patients to post messages and communicate about various aspects related to pancreas cancer.

Michael Rolfe Pancreatic Cancer Foundation
312-492-7337
www.rolfefoundation.org
Supports pancreatic cancer support groups in Illinois.

PanCAN
1-877-272-6226
www.pancan.org
PanCAN offers a Survivor and Caregiver Network and a listing of in-person support groups.

The Wellness Community
1-888-793-WELL (9355)
http://www.thewellnesscommunity.org/support
Offers internet-based support group for pancreatic canc

Also, our hospital nurses and social workers facilitate support and informational groups for pre- and post-pancreatic surgical patients. A potential benefit of these kinds of in-hospital groups is the opportunities they offer for developing long-term connections with other patients – many times, forming lifelong supports. And, there is also the option of individual psychotherapy with the hospital social worker, psychologist, or psychiatrist. I also want to add that I encourage patients to talk with significant others/caregivers about what they're going through. While a significant other/caregiver cannot and should not take the place of a qualified mental health professional, it's important to include them to the extent that patients feel comfortable. This can help both patients and their loved ones to avoid feelings of isolation. Often, patients want to protect loved ones from the fact that they have a serious disease, and don't want to burden them with how badly they're feeling because they want (or feel they need) to remain positive for the people they love. *(For discussion about issues related to coping with a diagnosis of pancreatic cancer, please refer to 'Ask An Expert: Coping with Pancreatic Cancer.')*

Unfortunately, because the occurrence of pancreatic cancer is not common,* and because the overall five-year survival rate is not as high as many other cancers, there aren't as many support groups in general. If a patient is having difficulty locating a support group, I would suggest speaking with the social worker or nurse from the surgical team, or the community medical oncologist, to inquire about local support services. I sometimes encourage patients who have undergone a total pancreatectomy to join a diabetes support group, because they are easier to find and because managing diabetes is one of the biggest lifestyle adjustments for post-pancreatic surgery patients.

VC: **What about internet-based support groups? Are there advantages to Web-based support groups for individuals who have undergone pancreatic surgery?**

NG: Web-based support groups are a great idea because the nature and duration of recovery from this kind of surgery can sometimes make it difficult for patients to get out of the house. Also, patients may be hesitant to go too far from home because of issues related to diabetes management or enzyme regulation to control bathroom habits. Organizations such as *CancerCare* and *The Wellness Community* offer online support groups for pancreatic cancer patients. *(See Resource Box)* Perhaps the most important point I can make is to encourage pancreatic cancer patients to keep reaching out to others after surgery so they can gain access to the information and support they need to begin their journey into a new life.

**According to ACS, an estimated 37,700 people were diagnosed with pancreatic cancer in 2007.*

Glossary

Adenocarcinoma – Cancer that begins in cells that line certain internal organs and that have gland-like (secretory) properties

Adjuvant Therapy – Treatment given after the primary treatment to increase the chances of a cure. Adjuvant therapy may include chemotherapy, radiation therapy, hormone therapy, or biological therapy.

Deep Venous Thrombosis – Deep venous thrombosis is a condition in which a blood clot forms in a vein that is deep inside the body.

Insulin-dependent Diabetes – A form of diabetes (when the body no longer produces enough insulin to break down sugars and carbohydrates) in which the patient is completely dependent on insulin to control their blood sugar.

Jackson-Pratt (JP) Drain – Drain inside the body with multiple drainage holes, connected to clear plastic tubing usually sutured to the skin. The drain pulls excess fluid out of the body.

Margins – The edges of the organs (pancreas, small bowel, bile duct) that are removed during surgery.

Neoadjuvant Therapy – Treatment given before the primary treatment. Examples of neoadjuvant therapy include chemotherapy, radiation therapy, and hormone therapy.

Pancreatic Insufficiency – Not enough of the digestive enzymes normally secreted by the pancreas into the intestine.

Pancreatic Leak – Leakage of pancreatic fluid (that the pancreas creates) from an area of the pancreas that was recently operated on.

Radiofrequency Ablation – The use of electrodes to heat and destroy abnormal tissue.

Radiosurgery – A type of external radiation therapy that uses special equipment to position the patient and precisely give a single large dose of radiation to a tumor. It is used to treat brain tumors and other brain disorders that cannot be treated by regular surgery. It is also being studied in the treatment of other types of cancer. Also called stereotaxic radiosurgery, stereotactic radiosurgery, and radiation surgery.

Rehabilitation Facility – A typically short-term residential facility that is geared toward patients with generalized weakness or debilitation, or a disability specifically in a body part (ex., hip, back, knee) after surgery.

Total Parenteral Nutrition – Intravenous feeding that provides a patient with all of the fluid and the essential nutrients they need when they are unable to feed themselves by mouth.

Sources: NCI Dictionary of Cancer Terms (www.cancer.gov/dictionary), Medline Plus (www.nlm.nih.gov/medlineplus), MedicineNet (www.medicinenet.com)

"my perspective"

Contributed by Nancy Platt, Survivor

Although I lost both my mother and daughter to pancreatic cancer and was myself diagnosed with chronic pancreatitis, I did not dwell on the possibility that I would develop this feared disease. I was seeing a trusted gastroenterologist (GI) on a regular basis and had confidence in him. So it came as a real shock when my GI doctor explained that the pancreatic cysts he had been watching for years were starting to show signs of turning cancerous.

At his urging, I visited the multi-disciplinary Pancreatic Cancer Clinic at Johns Hopkins, where much early detection research is being conducted. There, I met Dr. Marcia Canto and learned about her Early Detection Screening Study. On March 30, 2007, I made the difficult decision to undergo a total pancreatectomy, which included the removal of my gallbladder and duodenum. Fortun-ately, my surgeon was able to spare my spleen.

The date of my surgery was the birthday of our daughter, Debbie, who succumbed to pancreatic cancer. At first, the thought of undergoing pancreatic surgery on this date made me uneasy; in retrospect, I think it was a good omen, which has given this new meaning to this difficult date.

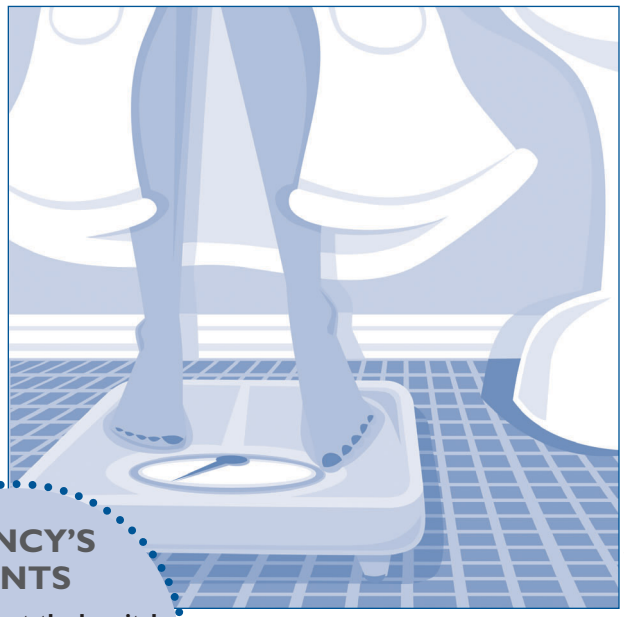
I received wonderful care from the surgeon, gastroenterologist, and all of the staff at Johns Hopkins. I knew I had made the right decision to have the surgery. That said, the first week in aftercare was by far the most difficult. A pain pump and other pain medications helped, and although it wasn't easy, I was able to get out of bed and walk a little each day.

I was glad I thought to bring some of the comforts of home with me to the hospital, including my favorite pillow. Here's a hint: bring a bright pillowcase so the hospital staff doesn't mistake it as one of their own. Also, a comfortable pair of slippers is important, and I took both a warm and a cool robe to cope with changing temperatures.

I had read that people lose a good bit of weight after this surgery, and was actually looking forward to some weight loss. But the first time I stepped on the hospital scale, I had actually gained weight! I quickly realized that the extra weight was fluid retention (a by-product of the surgery). I was glad that I had left my jewelry at home, since my swollen fingers would have caused problems. After a couple of days, the fluid weight dropped, and I continued losing weight. Now, ten months later, I have kept the weight off (35 pounds) and have even lost a few pounds more. For me, this is an achievement, and for the first time in my life, my doctor has asked me not to lose more weight! However, I do appreciate the concerns that this kind of weight loss can cause for someone who is already thin before surgery.

Nancy Platt was featured in the August 7, 2007 *New York Times* article, *Deadly Inheritance, Desperate Trade-Off*. Mrs. Platt lost both her mother and 37-year old daughter to pancreatic cancer, and eventually joined Dr. Marcia Canto's Screening Study at Johns Hopkins for individuals at high-risk of the disease. Specialized ultrasound revealed that her pancreas was riddled with cysts.

My appetite in the hospital was poor, and to date, I rarely feel hungry. Food tasted odd at the beginning; some days everything I ate tasted like pepper had been poured over it, and for a few days, a taste of burned popcorn lingered in my mouth. My advice: Don't be alarmed, as these idiosyncrasies will pass. Today, most food tastes about the same as it did before, although some foods still lack taste. I think each patient has to navigate her "new stomach" following surgery.



I felt the weakest and most tired during the first few months following surgery. By the two-month mark, I was able to attend a retirement party for a friend, and could stay the entire evening. After that, I started noticing positive changes each week. Three months later, I was able to return to my exercise routine of biking, albeit slowly.

NANCY'S HINTS

When staying at the hospital:

- **BRING A BRIGHT PILLOWCASE**
- **A COMFORTABLE PAIR OF SLIPPERS**
- **A WARM AND A COOL ROBE**

It is very important to take your enzyme pills, if prescribed, with each meal and snack. For me, "less" seems to be more, although I know of some folks who require more. It took a while for my GI tract to start working properly again. At first, I was constipated and bloated. Once this resolved, I found I always needed to be near a bathroom – or at least always know where one was! Occasionally, I still have the need to run to the bathroom on short notice, but this generally happens when I eat something I know I shouldn't, or when I forget to take my enzymes.

I admit, I went into my surgery somewhat naïve about what life would be like with Type 1 diabetes, and managing this condition has proved my biggest challenge. I would suggest to people who are facing my kind of surgery that they do as much research as possible to help prepare themselves for the challenges of life afterwards. I'd also suggest finding an endocrinologist to speak with beforehand. Additionally, it is good idea to keep a calorie/carbohydrate/fiber counting book on hand. I keep one in my kitchen, and one handy for travel.

At ten months post-surgery, I can honestly say that I feel great, and I have no regrets. Even with diabetes, I can do everything I used to. I am so grateful to the wonderful people at Johns Hopkins, to my local gastroenterologist, and to The Lustgarten Foundation for giving me many healthy years to look enjoy.

> "My family and I are so grateful to The Lustgarten Foundation for providing much of the funding for Dr. Canto's work. It is a direct result of her research that I have been saved from pancreatic cancer. It is our hope that our children and grandchildren can be tested throughout their lives, so this horrible disease does not take a single member from us. Thank you."
>
> – E-Mail sent by Nancy Platt to The Lustgarten Foundation

Nancy's Recommended Resources

Think Like a Pancreas
By Gary Scheiner

www.calorieking.com
This site lists many foods that are not listed in books and seems to be updated regularly.

ask an Expert: contributors

Nicole Goetz MS, APRN-BC earned her undergraduate and graduate degrees in Nursing as a Family Nurse Practitioner at Pace University. She is currently pursuing a Doctorate of Nursing Practice at the University of Medicine and Dentistry of New Jersey.

After completing her training, Ms. Goetz served as the coordinator of health services at Ramapo College of New Jersey, where she was an adjunct faculty member. Following her work in this academic setting, Ms. Goetz was engaged as a family health nurse practitioner at Immedicenter, where she provided primary and emergency healthcare services. At the same time, she served as a clinical preceptor for Rutgers University's Nurse Practitioner Program. Ms. Goetz relocated to New York, where she worked at Rockland Pulmonary and Medical Associates, providing both primary and emergency care to her patients.

Currently, Ms. Goetz is a nurse practitioner in the Division of Upper GI and Endocrine Surgery at Columbia University Medical Center—New York Presbyterian Hospital. She manages patients' surgical experiences, and conducts pre-op, post-op, episodic, emergent, and routine follow-up office visits. Ms. Goetz is also an assistant clinical professor of nursing at Columbia University.

VIRGINIA CRAVOTTA

Award-winning journalist Virginia Cravotta has been Senior Affairs Correspondent for News 12 Long Island since 1995. A noted expert in the field of long-term care, she reports on medical and social issues that impact the aging process.

About The Lustgarten Foundation

The Lustgarten Foundation For Pancreatic Cancer Research is a not-for-profit organization dedicated to advancing the diagnosis, treatment, cure and prevention of pancreatic cancer. The Foundation was named for Marc Lustgarten, Vice-Chairman of Cablevision Systems Corporation, who was diagnosed with pancreatic cancer.

The Lustgarten Foundation concentrates on stimulating the scientific community to conduct the research necessary to find a cure for pancreatic cancer. The Foundation has sponsored international research conferences, launched a national public awareness campaign, and committed $20 million in support of promising pancreatic cancer research. Today, The Lustgarten Foundation is the nation's largest private supporter of pancreatic cancer research.

To help support these activities, the Foundation has established a Scientific Advisory Board of renowned researchers and clinicians to help direct its research funding activities, and a Corporate Advisory Board of leading cable and media executives to support a national pancreatic cancer public awareness campaign. Former President Jimmy Carter, Honorary Chairman of the Foundation's Corporate Advisory Board, and veteran actor Matthew Modine, lead the Foundation's public awareness campaign with public service announcements (PSA's) that appear on major television and cable networks nationwide, and print versions of the PSA that appear in major print vehicles.

The Lustgarten Foundation also distributes a comprehensive handbook for pancreatic cancer patients and their families. "Understanding Pancreatic Cancer" offers up-to-date information on the disease. Copies are available free-of-charge by request to The Lustgarten Foundation.

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Genentech BIOONCOLOGY™

1111 Stewart Avenue
Bethpage, NY 11714
516-803-2304
www.lustgarten.org