Cancer comes down to size

4 Clinical specialists tackle once-formidable diagnoses, helping people with cancer to put the disease in the rear-view.

6 Most healthcare organizations can’t treat cancer patients who are pregnant. Northwell’s new center specializes in just that.

8 After opting for seed therapy to treat prostate cancer, a Manhasset duffer’s back in the swing in a couple of ways.

10 A bold new take on a very complex surgery helps fulfill a Brentwood mom’s birthday wish.

Bouncing back, big-time

12 A retired technical designer and her tireless taskmaster team up to restore mobility after a stroke.

14 Brendan Duffy’s skull got caved in from a warehouse accident. Now working and attending college, he’s amazed at the speed of his recovery.

16 A rapid series of heart attacks, cardiac failure, a stroke – and nine lives. This teacher’s assistant is back to work, with a family that has grown to include her cardiac care team.

18 At high risk for stroke, this Massapequa resident chose a new option to maintain his health.

20 Outpatient brain surgery is real, and offers a “brilliant” solution for those with Parkinson’s tremors.

Stay vital

22 A new inroad to ending endometriosis anguish.

24 Protect your bone health.

26 Play it safe — winterize yourself.

28 Healthy recipes for family gatherings.

30 Fighting fatigue.

Your community resources

31 Get help with complex medical decisions.

32 New York magazine “Best Doctors” directory.

34 Family health and safety events.

36 Step up to prevent substance misuse.

Family health and wellness news, delivered

Subscribe to any Northwell magazine by visiting bit.ly/health-wellness-news or emailing PR@northwell.edu. There’s no obligation, and you can unsubscribe at any time.
Fast forward

Can regular fasting really be good for you?

People have fasted for millennia, but intermittent fasting gives the practice a new spin

Unlike traditional fasts — not eating for extended periods — intermittent fasting (IF) limits food intake within shorter blocks of time.

According to a 2015 review of 40 clinical trials published in *The Journal of Molecular and Cellular Endocrinology*, some individuals have found IF effective for weight loss. IF increases the body’s response to insulin, a hormone that regulates blood sugar, according to a recent study published in *Cell Metabolism*. A pilot study in *The Journal of Immunology* indicated that intermittent fasting can alleviate mild asthma symptoms in adults.

IF works with healthy eating plans and is adaptable to vegetarian, vegan or gluten-free menus. Proponents like that flexibility.

The safest format restricts all food intake to within a daily window of eight, six or four hours. You don’t eat for the balance of the day, but can still drink calorie-free beverages. Other IF formats restrict calories severely for two or three nonconsecutive days. Though the early research is promising, we don’t recommend jumping into such a drastic change in diet without consulting a registered dietitian, nutritionist or physician.

Many intermittent fasters avoid refined carbs and alcohol. If you try IF, be sure to drink water and other calorie-free beverages to help reduce hunger levels. *The American Journal of Clinical Nutrition* published data suggesting that increased water consumption helped people lose weight.

More studies need to be completed to determine IF’s effectiveness in the long term. One ongoing clinical trial is studying how IF calorie restriction affects insulin-resistant women between 55 and 70 years old. Furthermore, researchers at Intermountain Medical Center in Utah have been studying how IF may reduce the risk of developing Type 2 diabetes and heart disease, and help reduce cholesterol levels in people who are prediabetic.

IF is not recommended for pregnant women, children, teens, seniors or those with a history of eating disorders or Type 1 diabetes. Please check with your doctor before starting intermittent fasting or any other new eating plan.

Find out if intermittent fasting is right for you. Search for “registered dietitian” on bit.ly/my-pcp.
Cancer is personal

Cancer survivors are living longer and have an improved quality of life — the benefits of stunning advances and individualized therapies

For many years, treating cancer was an all-out war. With the odds in cancer’s favor, aggressive treatments to eradicate the disease — sometimes at the cost of healthy tissue — were the first priority.

But recent breakthroughs have provided new strategies. Now, doctors can tailor treatment to your unique circumstances and individual preferences. They can target cancer with a laser focus rather than a total blitz.

“The era of personalized medicine is upon us,” said Richard Barakat, MD, physician-in-chief and director of the Northwell Health Cancer Institute. Gene sequencing has prompted many recent advances, including the ability to pinpoint genes involved in some types of cancer. “There has been an explosion in our knowledge of cancer genetics that has led to targeted agents and improved outcomes.”

People with cancer have improved survival rates due to personalized medicine combined with advances in early detection and more effective treatments. The US death rate from cancer has declined during the past few decades, falling 23 percent between 1991 and 2012, the American Cancer Society has reported.

There’s now a generation of survivors who are living with or beyond cancer. And chances are good that the ranks of survivors will continue to grow, aided by unprecedented advances in immunotherapy and targeted drugs.
What is precision medicine for cancer?

Unlike traditional chemotherapy, which destroys not only cancer cells but also surrounding healthy tissue, targeted drugs can home in on cancer cells and spare healthy ones. These precision medications work by singling out specific molecules that are involved in the growth and spread of cancer. According to the National Institutes of Health, the FDA has approved about 30 molecularly-targeted agents for many types of cancer including breast, leukemia, kidney, colorectal, lung, multiple myeloma and non-Hodgkin lymphoma. These new medications provide more choices for treatment.

“A cancer survivor wants a better quality of life, and that includes having children.”
— Dr. Barakat

“Targeted drugs offer you more hope and options than standard drugs, particularly for those with cancer that is resistant to traditional therapies,” said Dr. Barakat. “Rather than treating cancer with chemo alone, we analyze mutational profiling of the tumor itself, and treat you with drugs that target proteins that are overexpressed or mutated in the cancer cells.”

A gynecologic oncologist, Dr. Barakat has seen improvements in outcomes for patients with ovarian cancer, which can often be treated with anti-angiogenics. These drugs starve tumors by helping to inhibit the growth of blood vessels that feed them. Another targeted therapy, poly (ADP-ribose) polymerase (PARP) inhibitors, makes cancer cells die by blocking an enzyme that helps them repair the DNA that is normally damaged over the course of a cell’s life. PARP inhibitors can also improve ovarian cancer survival rates.

Immunotherapy uses your own immune system to fight cancer. For example, a laboratory creates chimeric antigen receptor (CAR) T-cells by collecting white blood cells called T cells, modifying them to attack cancer and infusing them back into the body. Dr. Barakat said that CAR-T renews hope for people with cancer, especially those younger than 25 who have acute lymphoblastic leukemia or adults whose B cell lymphoma has stopped responding to conventional therapies. Northwell is one of a handful US healthcare providers to offer CAR-T treatment.

Accelerating progress

The number of cancer survivors will grow from 15 million today to 20 million by 2026, according to the American Cancer Society. Northwell Health is working to bolster that projection by pioneering new treatments and improving survival rates.

“We’re always looking for new advances,” said Dr. Barakat, citing the development of innovative pancreatic cancer treatments. For example, Cold Spring Harbor Laboratory scientists are using patient-derived organoids (hollowed-out tumor cells that are removed through biopsy) to test drug response in a laboratory. “It’s like a living model of chemo,” said Dr. Barakat. “Wouldn’t it be great to test chemo outside the body?”

Northwell Health recently opened the Center for Cancer, Pregnancy and Reproduction, a boon for women whom other cancer organizations refuse to treat (see page 6). And that’s just the beginning.

“We’re creating a registry for babies whose mothers were treated with chemotherapy, giving us the ability to learn a lot because we have a large health system,” said Dr. Barakat.

Northwell Health brings about 40,000 babies into the world annually.

The health system is also addressing cancer patients’ fertility issues by harvesting eggs or banking sperm before treatments begin. “Cancer survivors want a better quality of life, and that includes having children,” Dr. Barakat said.

Support for survivorship

As treatment innovations continue to advance, cancer survivors are living longer. That lengthened survivorship brings more need for supportive or palliative care — whole-person care at any stage of illness.

Northwell’s palliative care specialists and oncologists collaborate closely to help provide quality of life as defined by each cancer patient. Emotional support, wellness care and social work practice can all play a part, as can managing side effects such as neuropathy (nerve pain) or lymphedema (swelling). These pain relief elements are a primary focus of palliative care.

The positive results of palliative care are well documented. The New England Journal of Medicine has reported that it enhances quality of life with a lower incidence of depression and fewer hospitalizations.

Cancer often overlaps other ailments that require specialized, ongoing care. For example, older cancer patients may also have Alzheimer’s or Parkinson’s disease, and younger adults may be living with diabetes or cardiovascular conditions. Northwell’s on-site specialists — such as cardiologists, endocrinologists and neurologists — can treat comorbid conditions during cancer treatment and beyond.

“Our standard is comprehensive medical care for all of our patients’ needs,” said Dr. Barakat. “We have amazing resources here.”

Cancer’s personal for you. It’s personal for us, too. Please connect with us at bit.ly/personlized-care or call (855) 442-4809.
Treating cancer in the second trimester
A new mother and her baby are thriving, thanks to the Northwell Cancer Institute’s Center for Cancer, Pregnancy and Reproduction

By Chris Gasiewski

Two dates will forever be etched into Michelle Cohen’s memory: April 2, 2018 — her son Franklin’s birthday — and July 11, 2018, when she learned she was cancer-free.

Ms. Cohen’s joy over her pregnancy soon turned to anxiety when she learned she had ovarian cancer. Yet she and Franklin now lead a fulfilling life. Comprehensive care from the multidisciplinary team at the Center for Cancer, Pregnancy and Reproduction made it all possible.

Part of the Northwell Health Cancer Institute, the new center cares for women turned away by other cancer facilities.

“Motherhood is amazing!” Ms. Cohen said. “Until you live it, you don’t know what it means. It’s just amazing to have him here with me.”

Devastating diagnosis

After trying to get pregnant for months, Ms. Cohen and her husband Josh were elated when they got the big news on the way to a family reunion. Everything went smoothly until late December, when she began to feel pain in her lower left side.

Suspicious sonogram results led her to be admitted to North Shore University Hospital (NSUH), where doctors identified a large mass near her left ovary.

Ms. Cohen was able to return home, with her medical team monitoring the mass to determine next steps. When the pain had not subsided two weeks later, Ms. Cohen’s ob/gyn, Wendy Fried, MD, sent her back to NSUH. The mass had doubled in size and tripled in volume.

It needed to be removed. At 26 weeks, Ms. Cohen had ovarian cancer.
Surgery, chemo — and pregnancy

On January 15, 2018, Lisa Dos Santos, MD, a gynecologic surgeon at NSUH, removed the malignant ovary — the first of three surgeries she performed on Ms. Cohen.

“Michelle’s first surgery was technically challenging because of the cancer diagnosis and the size of the mass,” Dr. Dos Santos said. “Because it was the end of the second trimester, we knew [would be] difficult to access during surgery. Minimally invasive surgery was not feasible.

“Franklin was monitored before, during and after the procedure. Neonatology [specialists were] on hand to make sure he was OK. We were able to successfully remove the tumor and pathology confirmed ovarian cancer.”

After her mass was removed, Ms. Cohen was placed on bed rest and under the care of Veena John, MD, medical oncologist, and Northwell maternal/fetal specialists.

Ms. Cohen wondered if chemotherapy was safe for her baby. The pharmacy team at North Shore University Hospital confirmed that Ms. Cohen could receive chemo.

“Before I even met Michelle, we had multiple meetings to formulate a plan and identify the best approach,” Dr. John said. “All of this went smoothly. As you can see, treating cancer while pregnant is extremely complex. Northwell has the one-stop shop to make sure it happens safely.”

Meant to be

When Ms. Cohen began to lose her hair, she and Mr. Cohen had their heads shaved together. At the barber shop, they noticed a familiar face seated beside Ms. Cohen.

“It was the rabbi who married us,” she said. “We were stunned. We hadn’t seen him in four years, and we took this as a positive sign.”

Three weeks after Ms. Cohen’s second chemo cycle, Franklin was born at 7 lbs., 12 oz. “He was healthy. And we were overjoyed that he had a full head of black hair, which reassured us that chemo did not affect him,” Ms. Cohen said. “Everyone always tells you how amazing it is the day your child is born, but until it happened, I didn’t quite understand. The instant love is amazing. Now, I can’t imagine my life without him.”

Ms. Cohen received four more rounds of chemo. In July, Dr. Dos Santos reduced the risk of recurrence by performing a radical hysterectomy laparoscopically.

“This family’s story highlights the need for the Center for Cancer, Pregnancy and Reproduction,” said Richard Barakat, MD, physician-in-chief and director of the Northwell Health Cancer Institute. “We want to make it a seamless process, where our nurse navigators can put you in touch with all of the right people to get the best care possible. We don’t believe any other cancer provider in New York can provide all of these services.”

A happy home

Ms. Cohen returned to teaching full time in September. She and Franklin are happy and healthy, and beginning to find a routine during this first year of parenthood.

“We found our rhythm,” she said. “Fortunately, he likes to sleep at night. So it makes it easy. To come home from work and see him smile — he just wants to play.”

“We thought about going to the city, but the amount of checkups and time difference... for everything to be in one place really makes a difference.”

— Michelle Cohen

Center for Cancer, Pregnancy and Reproduction

Treating cancer during pregnancy is extremely complex. Northwell has the expertise to bring you through it. Find the care you need at (855) 252-5666 or bit.ly/ctr-cpr.
Active retiree Larry Fenster is a problem-solver. So when he was diagnosed with prostate cancer, he searched for solutions. Mr. Fenster, 80, soon found out that he was a prime candidate for brachytherapy (radioactive seed therapy). The treatment would allow him to avoid surgery and traditional radiation therapy.

For several years, the Manhasset resident — an avid golfer who enjoys traveling with his wife — watched his concentration of PSA (prostate-specific antigen) rise from a “normal” score below 4.0 nanograms per milliliter all the way up to 10.

A prior biopsy did not show cancer, but his urologist, Robert Waldbaum, MD, of Northwell Health’s Smith Institute for Urology, ordered parametric magnetic resonance imaging (MRI).

The scan revealed a mass in Mr. Fenster’s prostate, and a directed re-biopsy confirmed that he had Stage II cancer. Dr. Waldbaum referred him to Louis Potters, MD, Northwell’s chair of radiation medicine and
He recommended a radioactive seed implant rather than more traditional surgery or radiation therapy. Prostate cancer experts at Northwell Health, Dr. Potters noted, are among the most experienced in seed implants in the US, having performed more than 10,000 such procedures.

Brachytherapy basics

Brachytherapy offers numerous benefits as a prostate cancer treatment.

During the 50-minute outpatient procedure, a physician implants seeds individually into the gland. Ultrasound and advanced real-time technology help to target the exact placement.

Most men return to normal activities the day after brachytherapy. That contrasts with external beam radiation therapy, which can take up to nine weeks to complete, or surgery, which can take up to one month or longer of recovery time. For men who qualify, the procedure is becoming an increasingly preferred option.

Brachytherapy requires a high degree of expertise that Northwell Health’s radiation oncologists can provide, Dr. Potters said.

What’s your risk?


Call (855) 442-4809 to learn more about brachytherapy at the Northwell Health Cancer Institute.

“This procedure has a long track record,” said Dr. Potters. “In a recent randomized controlled study, it was shown to beat traditional external radiation therapy in curing the disease.” Recent medical journals confirm the success of seed implant therapy compared to other radiation options and surgery — meaning the studies showed patients receiving this therapy had less prostate cancer-related mortality and lower incidence of metastasis, plus fewer side effects and faster recovery times.

Seed therapy has been around for 25 years, and is undergoing a resurgence. Side effects include more frequent and bothersome urination, sometimes with a mild burning sensation that usually resolves in six to 12 weeks. But each man’s experience is different, and Mr. Fenster reported few side effects.

“I was on the golf course the next day,” Mr. Fenster said. Two days later, he traveled to Michigan to visit his grandson and attend a football game. What’s more, after 52 years of marriage, he said he and his wife enjoy a healthy sex life, even after the procedure. “Talk about a blessing!”

Prior to the procedure, Mr. Fenster said he was getting out of bed three or four times a night to use the bathroom. Now, he says, he hardly ever needs to get up, and his PSA level is nearly undetectable at .02 ng/mL.

“I live a normal life,” he said, citing his faith in God — and the expertise of his doctors at Northwell Health — for returning him to cancer-free health.

A less invasive choice

Dr. Potters determined the best course of treatment by assessing Mr. Fenster’s risk — informed by a physical exam, his PSA level and an evaluation of the prostate tissue using what doctors call the Gleason score.

Most frequently, older men and those with low-risk disease can elect active surveillance rather than initial treatment. But Dr. Potters determined that Mr. Fenster’s risk of disease, coupled with his active lifestyle, meant intervention was the best approach.

Mr. Fenster shares his experience with radioactive seed therapy at bit.ly/seed-therapy.
The big 4-0

Emma Barros reaches a milestone after a scary diagnosis

By Chris Gasiewski

It wasn’t the 40th birthday that Emma Barros had in mind. But considering all she’d been through, she was happy to be alive.

A US resident for 20 years, Ms. Barros planned to visit her native country of Ecuador for her big day. But medical issues kept her in New York, where she recently celebrated her milestone with loved ones and clinicians at Long Island Jewish (LIJ) Medical Center.

Her health crisis began earlier this year after Ms. Barros returned from a trip to Ecuador. Persistent abdominal pain drove her to the doctor, who diagnosed her with gallstones. Ms. Barros underwent gallbladder removal in March, but the pain returned — this time, with new symptoms.

“My body was itching all over,” she said. “I was getting jaundice, but I didn’t pay attention to it. My husband said, ‘You look very yellow.’ I didn’t believe him. Then, I asked my daughter. She said, ‘Mommy, you are yellow and you need to go to the doctor.’”

The next day, Ms. Barros went to LIJ’s Emergency Department. An endoscopy revealed a cancerous tumor in her duodenum (the first part of her intestine). Before leaving the hospital, Ms. Barros scheduled a visit with Gary Deutsch, MD, a surgical oncologist at LIJ.

“She was completely overwhelmed,” Dr. Deutsch said. “When you mention the C word, it hits you like a ton of bricks. It was the last thing on her mind. She thought she was having a stone removed. Little did she know, she had cancer growing inside her intestine.”
Robotic Whipple surgery offers many benefits, according to Dr. Deutsch. “By operating robotically, we have better visualization with a high-definition 3D camera and more freedom of movement and dexterity,” he said. Furthermore, Dr. Deutsch performed Ms. Barros’ robotic Whipple through five small abdominal incisions. The standard approach results in longer incisions, more pain and scarring and more recuperation time.

For Ms. Barros, the decision was simple. She returned to her Brentwood home four days after surgery, and her healing process was a pleasant surprise. Dr. Deutsch said Ms. Barros was “ahead of where I expected her to be.” She was recovering and could eat small meals, and was ready to embark on oral chemotherapy within a few days of her 40th birthday celebration.

Evolving a complex technique

Dr. Deutsch specializes in the Whipple procedure, a complex surgical treatment for cancer. The technique involves removing the head of the pancreas, the duodenum, a portion of the stomach, and nearby tissue as needed. (see box above).

“There are lymph nodes there, where the cancer can spread,” Dr. Deutsch said. “You have to remove those as well.” After the excisions, he reattaches the healthy organs so normal intestinal function can return.

“The Whipple was first performed in 1935 and has come a long way since,” Dr. Deutsch said. “We are doing things now that I don’t think the person who invented it would’ve imagined.”

Surgeons usually use laparoscopic instruments to perform the Whipple. Very few US healthcare organizations offer the procedure robotically, but Northwell does. The health system’s extensive experience with robotic surgery provides more treatment options.

Robotic Whipple surgery offers many benefits, according to Dr. Deutsch. “By operating robotically, we have better visualization with a high-definition 3D camera and more freedom of movement and dexterity,” he said. Furthermore, Dr. Deutsch performed Ms. Barros’ robotic Whipple through five small abdominal incisions. The standard approach results in longer incisions, more pain and scarring and more recuperation time.

For Ms. Barros, the decision was simple. She returned to her Brentwood home four days after surgery, and her healing process was a pleasant surprise. Dr. Deutsch said Ms. Barros was “ahead of where I expected her to be.” She was recovering and could eat small meals, and was ready to embark on oral chemotherapy within a few days of her 40th birthday celebration.

Celebrate with Ms. Barros and Dr. Deutsch at bit.ly/robotic-whipple.

The Surgical Review Corporation has designated Northwell Health a Robotic Surgery Network of Excellence. Visit us at bit.ly/robotmd or call (844) ROBOT-MD to make an appointment.
Prompt care saved Chen Lie, 61, when she had a stroke last autumn while visiting family in Texas. Rehabilitation — first in Texas, then when she returned to New York — brought noticeable improvements, but Ms. Lie had lost functional use of her right arm and leg.

Her road back to health required a continued dedication to physical and occupational therapy, determination — and a robot.

The retired technical designer missed cooking for her family and taking long walks. Occupational therapy (OT), which focuses on restoring everyday movement, would be the next natural step. But Ms. Lie enrolled in a clinical trial of robotic therapy in physical rehabilitation at the Feinstein Institute for Medical Research. Trial participants perform up to 1,000 movements per hour with the robotic system. That’s a big jump compared to an average of 32 task-specific movements per hour in traditional OT. “I learned like a baby how to move and how to walk again,” said Ms. Lie.

OT assistants enclosed the Briarwood resident’s weakened arm in the robot. As the device moved her arm forward, backward and side to side, it supported her arm and sensed when she needed help to complete a motion. It helped to control jerky movements as needed, and progressively provided less assistance as she improved and moved more independently.

Trial enrollees working with the futuristic “therapist” can do up to 320 repetitions of a movement before getting a break, and then they dive right back in. “The robot has no mercy!” said Ms. Lie. She was skeptical at first — who wouldn’t be? — but soon she saw improvement and had good reason to give the robot high marks.

Robotics meet bioelectronics

Originally developed at the Newman Laboratory at the Massachusetts Institute of Technology, this technology has been validated in multiple clinical trials directed by Bruce Volpe, MD, principal...
Visit bit.ly/look-north-trials to learn about participating in a clinical trial at the Feinstein Institute for Medical Research.

Dr. Volpe and his colleagues also employ robotic therapy on other parts of the body to help stroke patients improve movement. In a recent study published in NeuroRehabilitation, they reported that isolated ankle training with a robotic therapy device improves walking speed and balance after a stroke.

**Results you can see**

“Robotic systems or robot-assisted therapy can provide repetitive, reproducible, interactive forms of physical therapy to stroke patients,” said Rohan Arora, MD, director of neurovascular services at North Shore University Hospital. “Robots can perform complex tasks and actions, usually with an advanced level of speed and precision.”

“[Dr. Arora] told us about all the benefits of robotic therapy and the improvements that he’s seen with it,” says Liana Purnama, Ms. Lie’s daughter. “It was something my mom needed to hear. It was hoped that this could help her regain her arm mobility.”

Johanna Chang, senior clinical research coordinator at the Feinstein Institute and a certified speech/language pathologist, said, “One of the key benefits of robotic rehabilitation is that it provides precise, objective measurement of improvement.” During each rehab session, the robot assesses power, quality and smoothness of movement. Seeing progress on this running report card motivates participants. Many compete against previous scores — and sometimes, other participants.

After the study, Ms. Lie “graduated” from robotic therapy this spring. Since then, she has continued to feel stronger and more capable, particularly with upper-body function on her affected side. She’s back to being able to cut and chop and stir the foods she loves to cook for her family. More importantly, she can feed herself without assistance. She has also resumed her long walks — Ms. Purnama said she walks at least a mile each day.

Ms. Lie felt a connection with all the Feinstein Institute staff members who helped her. But it was the robot, she said, that motivated her to work so hard. “Coming to therapy made me happy,” she said. “Every time I went, I set a goal.” When she surpassed that goal, she set a new one.

Now she’s back to doing what no robot can — playing with her four grandchildren.

“I consider Ms. Lie’s recovery story my holiday gift for this year,” said Dr. Arora.

Paulina Purnama-Sehgal, Ms. Lie’s other daughter, calls her a “super-grandma.” She quickly noticed the difference between her mother’s standard therapy and the robotic-assisted therapy. “The feedback of seeing her accomplishments as she did it was amazing,” she said.

By design, the robot starts out doing much of the heavy lifting. But as Ms. Lie got stronger, the robot did less — and she took over. “We noticed a lot of progress, with less robot help and more independent movement,” said Ms. Purnama.

Ms. Lie “graduated” from robotic therapy this spring. Since then, she has continued to feel stronger and more capable, particularly with upper-body function on her affected side. She’s back to being able to cut and chop and stir the foods she loves to cook for her family. More importantly, she can feed herself without assistance. She has also resumed her long walks — Ms. Purnama said she walks at least a mile each day.

Ms. Lie felt a connection with all the Feinstein Institute staff members who helped her. But it was the robot, she said, that motivated her to work so hard. “Coming to therapy made me happy,” she said. “Every time I went, I set a goal.” When she surpassed that goal, she set a new one.

Now she’s back to doing what no robot can — playing with her four grandchildren.

“I consider Ms. Lie’s recovery story my holiday gift for this year,” said Dr. Arora.
When a skull fracture is just a bump in the road

The ‘right stuff’ restores health after the ‘dangerous stuff’

While working at a mover’s warehouse five years ago, Brendan Duffy, 25, learned he’d be doing “dangerous stuff” that day. The Rockville Centre resident and his coworkers were hoisting 100-pound steel beams by forklift — without hardhats.

An inattentive coworker brought a steel beam crashing down onto Mr. Duffy’s head. Badly hurt, dizzy and with blood running down his face, Mr. Duffy was transported by ambulance to a community hospital.

The seriousness of his injury required immediate transfer to North Shore University Hospital (NSUH), where neurosurgeon David Chalif, MD, diagnosed a depressed skull fracture. The top/center of Mr. Duffy’s skull was pushed in at a spot called the superior sagittal sinus. The structure is a channel at the top of the cranium that collects deoxygenated blood from the brain to be returned into the jugular vein.

“It’s a treacherous area for a fracture,” Dr. Chalif said. If the jugular vein were impacted, Mr. Duffy could have bled to death. Dr. Chalif removed bone fragments and other debris from Mr. Duffy’s brain and inserted titanium mesh to replace the missing portion of his skull.

The workplace accident happened on the anniversary of a Duffy family trauma — the day they had lost his older brother, who died as a newborn. The Duffys are thankful that Dr. Chalif’s expertise prevented another tragedy.

The ability to handle head trauma 24/7, 365 days a year makes the NSUH neurosurgery team well-suited to helping people with injuries like Mr. Duffy’s, according to Dr. Chalif. North Shore University Hospital is the first downstate Level I Trauma Center to be verified by the American College of Surgeons.

Today, Mr. Duffy feels few long-term side effects from the incident. He’s numb at the top of his head, “but no migraines or headaches,” he said.

He now works for the U.S. Postal Service and attends Adelphi University.

The speed of his recovery still amazes him. “I was back at school within a few weeks,” he said. “I’m grateful to Dr. Chalif for saving my life — and the quality of my life. I’m happy to be alive.”

“I’m grateful to Dr. Chalif for saving my life — and the quality of my life. I’m happy to be alive.” — Mr. Duffy

The care you need, the expertise you trust. Connect with our Institute for Neurology and Neurosurgery at bit.ly/northwell-neuro or call (855) 472-5801.
Back from the brink

A rapid series of heart attacks left this Oakdale resident with nothing but hope, but a surprising treatment means smooth sailing again

Nanci Kurz, 51, toppled over with chest pains one night this past February. The teacher’s assistant from Oakdale was having a heart attack. How she spent the following minutes, hours and days would mean the difference between life and death.

Her parents, Alan and Florence Kratz, called 911 and an ambulance sped Ms. Kurz to Southside Hospital. Cardiologists at the Bay Shore hospital inserted three stents to relieve severe blockages in the arteries feeding her heart muscle. Even so, she suffered several more cardiac arrests and exhibited persistent signs of shock — her pupils were fixed and dialated — and it was clear her brain was at risk.

The heart attacks weakened Ms. Kurz’s cardiac muscle, which led to acute heart failure when blood flow was restored. Her left ventricle had an ejection fraction number of just 20 percent, which indicated reduced pumping capacity (see below). Fifty to 70 percent is the norm, according to the American Heart Association, and readings lower than 35 percent can lead to life-threatening conditions.

Surgeons implanted a temporary mechanical heart pump called an Impella LVAD (left ventricular assist device), deployed from an artery in her leg to help her heart to function. Ms. Kurz needed a ventilator to help her breathe and dialysis because her kidneys began to fail.

Complex heart failure options

Ms. Kurz’s fragile condition required a choice between complex treatments. She could undergo surgical replacement of her temporary LVAD with a more permanent device to help her heart work until she could receive a heart transplant, or she could transfer to the Sandra Atlas Bass Heart Hospital at North Shore University Hospital for a type of life support called extracorporeal membrane oxygenation (ECMO). ECMO does the work of the lungs and heart, giving the organs time to heal.

“We sat there all day and watched her breathe,” said Mr. Kratz.

Her prognosis was grim.

Her Southside care team determined that ECMO was Ms. Kurz’s best path forward. SkyHealth, Northwell Health’s helicopter for interhospital transfers, airlifted her to the Sandra Atlas Bass Heart Hospital. Brian Lima, MD, director of heart transplantation surgery, implemented ECMO to help the parts of Ms. Kurz’s heart that were “hibernating” to accept renewed blood flow, he said.

“ECMO allowed her heart to settle down from the shock and recover,” said Dr. Lima. The technique usually gets people back on their feet, but Ms. Kurz encountered another tough setback: She had an acute stroke that bled into her brain, so the care team immediately stopped ECMO and took

Understanding ejection fraction

Ejection fraction is a measurement that compares the amount of blood in the left ventricle to the amount of blood pumped out with each beat. This number helps to inform physicians how efficiently heart is working. A low ejection fraction means the heart is working much harder to circulate the same amount of blood.

50-70% - Normal ejection fraction –
Patient is comfortable with light activity

41-49% - Borderline ejection fraction –
Patient may have symptoms with light activity (like climbing stairs)

Below 40% - Reduced ejection fraction –
Patient may have symptoms at rest

50-70% - Normal ejection fraction –
Patient is comfortable with light activity

41-49% - Borderline ejection fraction –
Patient may have symptoms with light activity (like climbing stairs)

Below 40% - Reduced ejection fraction –
Patient may have symptoms at rest

EJECTION FRACTION =

amount of blood pumped out

amount of blood in chamber
her off the blood thinners it required so neurosurgeons could drain the brain bleed.

“Every day was like a roller coaster,” said Mr. Kratz. “This was our lowest point.” When his daughter finally responded to a command to squeeze his hand, he spent hours trying to get her to do it again. It didn’t happen.

Nine lives, countless experts

“Usually when you’re having that level of problems, you’re looking at an unlikely recovery,” Dr. Lima said. Yet Ms. Kurz woke up after her neurosurgery. “Most of the time, someone with multisystem organ failure and a brain bleed doesn’t recover. She’s got nine lives.”

Ms. Kurz’s heart had healed enough to continue treatment. Over three weeks, she progressed from the Cardiothoracic Intensive Care Unit to the step-down unit. She finally went home for rehabilitation two weeks later.

Ms. Kurz remembers little of her ordeal, but she is grateful for her care and considers her physicians, PAs, nurses and cardiac rehabilitation experts “extended family.” Dr. Lima “didn’t want to leave my side,” she said, so he spent his wedding anniversary with her and her parents. Samit Shah, MD, the cardiologist overseeing her care, checks in with her nearly every day. Ms. Kurz will continue to be monitored closely by the heart failure team.

Ms. Kurz has since returned to work as a teacher’s assistant. In September, she visited the Cardiothoracic Intensive Care Unit at the Sandra Atlas Bass Heart Hospital — the only place on Long Island where you can receive extensive cardiac critical care, including heart transplantation. This level of expertise in cardiac care is essential for complex heart issues like Ms. Kurz’s, because such health crises can worsen quickly and dramatically, Dr. Lima said.

“We take care of the sickest of the sick — and Ms. Kurz was complicated and as sick as you can get,” said Dr. Lima. “Seeing her walk through the unit reminds you why we do this.”

Find the cardiac expertise you need at the Sandra Atlas Bass Heart Hospital. Call (516) 505-4327.
Daniel Walsh, 65, faced a dilemma: He was at high risk for a stroke, and yet the standard treatment wasn’t open to him. The retired window cleaner from Massapequa had carotid artery disease, a buildup of plaque in the main vessel in the neck that supplies blood to the brain. He had successful removal of the plaque with a surgical procedure, called an endarterectomy, in 2016. But he formed scar tissue that posed the risk of a stroke and made a second endarterectomy too dangerous.

Mr. Walsh’s right knee had also developed a severe infection that would complicate surgery.

But his vascular surgeon, Gregg Landis, MD, chief of vascular surgery at North Shore University Hospital and Long Island Jewish Medical Center, had a solution to reduce Mr. Walsh’s risk of stroke: transcarotid artery revascularization (TCAR). The minimally invasive procedure involves a small incision just above the collar bone.

Unblocked
A high-risk stroke patient gets a second chance with TCAR
The surgeon places a tube in the carotid artery to redirect blood flow temporarily and protect the brain from any loosened plaque or scar tissue that could cause a stroke. After implanting a stent in the artery, the surgeon returns the blood flow to normal.

“TCAR, though cutting edge, is well tolerated by patients and has been proven safe and effective,” said Dr. Landis. It’s an ideal solution for men and women like Mr. Walsh, who are at high risk of stroke after a previous surgery. It may eventually replace endarterectomy as the first-line treatment for carotid artery disease, according to Dr. Landis.

Mr. Walsh returned home the day after TCAR. Now, nearly a year later, he has experienced no recurrence of carotid artery disease.

Mr. Walsh said that he felt better whenever the surgeon was in his hospital room because Dr. Landis’ bedside manner was so good. He added, “I’ve got nothing but five-star reviews for Dr. Landis — and I’ve been to a lot of doctors.”

“I’ve got nothing but five-star reviews for Dr. Landis — and I’ve been to a lot of doctors.”
— Mr. Walsh

Broad strokes
- About 20 percent of strokes are caused by a narrowing of the main arteries of the neck that deliver blood to the brain: carotid artery disease
- Smoking, high cholesterol levels, high blood pressure and diabetes increase the risk for carotid artery disease
- Nearly one in four strokes occur in people who have had a stroke before

Find relief for vascular conditions. Visit bit.ly/vasc-help or call (516) 470-4505.
Ready to dance again

Deep brain stimulation addresses movement problems from Parkinson’s disease
William Bridges, 58, never had a problem with movement. The active East Meadow resident and his wife enjoyed shuffle dancing together. But in 2011, tremors in his left hand led Mr. Bridges to his primary care doctor. The physician determined that the problem was likely a tic and prescribed medication to calm the episodes. Yet the tremors only got worse. Concerned, Mr. Bridges finally saw a neurologist who diagnosed him with Parkinson’s disease.

A neurodegenerative disorder that affects brain cells that produce dopamine, a neurotransmitter, Parkinson’s disease causes tremors and can affect balance and walking and cause rigidity and stiff and slow movement (bradykinesia). Each year, about 60,000 Americans are diagnosed with Parkinson’s disease. There is no cure yet.

Restoring motor control
There is no ideal treatment for Parkinson’s disease. Many people, including Mr. Bridges, take levodopa, a drug that increases dopamine levels. One issue with drug treatment is that its effectiveness can wane, so symptoms return between doses.

Mr. Bridges made an appointment with Martin Neithammer, MD, a neurologist and movement disorders specialist with Northwell Health Physician Partners. He saw Mr. Bridges as a potential candidate for deep brain stimulation (DBS). During DBS surgery, a neurosurgeon implants electrodes into the brain that help control symptoms such as tremors.

Dr. Neithammer referred Mr. Bridges to David Weintraub, MD, director of functional neurosurgery at North Shore University Hospital.

Mr. Bridges wanted to try DBS, but Dr. Weintraub suggested that he wait because medication controlled his symptoms most of the time. The best candidates for DBS surgery are those who experience increased motor-symptom fluctuations, according to Dr. Weintraub.

A year later, that happened for Mr. Bridges, and DBS surgery was a go.

“Deep brain stimulation surgery can provide significant improvement in symptom control and quality of life,” said Dr. Weintraub. He added that it can also reduce how much medication someone with Parkinson’s must take.

During a follow-up office visit, the neurosurgeon activates the device and programs the electrodes to stimulate the brain as needed. The neurosurgeon then walks the patient through how to make adjustments to fine-tune the stimulation. You can often go home the same day that your electrodes are implanted.

“This is essentially outpatient brain surgery,” Dr. Weintraub said.

Deep brain stimulation has given Mr. Bridges a better quality of life than with medication alone, and he couldn’t be happier.

“Dr. Weintraub promised me he could make a difference in my life, my wife’s life, my family’s life,” he said. “I can drive, I can walk, my tremors are almost nonexistent. What Dr. Weintraub did was brilliant.”

What happens in DBS surgery
Neurosurgeons maximize safety for DBS surgery by completing it in three stages. They implant an electrode in one side of the brain during a 90-minute outpatient procedure. Then they perform the same procedure on the other side a week later. Finally, they implant a battery, similar to a pacemaker, in the chest that is connected to the electrodes.

Improve your quality of life. Get in touch with Northwell’s Movement Disorders Center at bit.ly/my-mdc or call (844) 56-NEURO.
A new inroad to ending endometriosis anguish

Endometriosis can cause chronic pain and lead to infertility. Our researchers are working to speed diagnosis, which now takes years and is only certain with surgery.

It’s surprising, but true: Surgery is the only way to conclusively diagnose endometriosis, a chronic pelvic condition in women.

Now, scientists at the Feinstein Institute for Medical Research are working to change that by developing a simple, noninvasive lab test to identify endometriosis. That’s promising news for the 5.5 million women in North America who suffer with the painful condition.

Endometriosis occurs when uterine tissue grows outside the womb, typically in the abdominal cavity or adhering to internal organs. Women with endometriosis often experience severe pain. Many become infertile. And sometimes, the only permanent solution is a hysterectomy.

“Endometriosis occurs when uterine tissue grows outside the womb, typically in the abdominal cavity or adhering to internal organs. Women with endometriosis often experience severe pain. Many become infertile. And sometimes, the only permanent solution is a hysterectomy.”

Though the cause is unclear, doctors theorize that endometriosis may come from retrograde menstruation — when menstrual fluid flows back out of the uterus through the fallopian tubes and into the abdominal cavity. Yet many women with retrograde menstruation don’t have endometriosis, said Dr. Gregersen. He is leading the Feinstein Institute team that is working to devise a noninvasive test for the condition. He added that genes may play a role in developing endometriosis, but they don’t provide a complete picture, either.

Dr. Gregersen and his colleagues have found cellular differences in the menstrual discharge of women with endometriosis compared to healthy women. They also discovered differences in the uterine lining of women with endometriosis. This creates problems during the second half of a menstrual cycle.

Now, the team is using their findings to create a noninvasive prescreening lab test that can help identify the condition sooner and with less patient suffering.

“If we could do that, it will revolutionize the management of endometriosis,” Dr. Gregersen said. Dr. Gregersen works with a team of scientists including Christine Metz, PhD, director of faculty affairs at the Center for Biomedical Science, and Laura Warren, an MD/PhD student at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell. Their discoveries stem from the Research Out-Smarts Endometriosis (ROSE) Program, which investigates the genetic basis and cellular activity of endometriosis. These efforts include a biobank that stores blood samples from women with and without endometriosis for studies like this. A $500,000 grant from Northwell Health funds the program.
ROSE volunteers are helping researchers to advance toward a noninvasive test for endometriosis. If you want to participate, visit bit.ly/ROSE-volunteer.
Good to the bone
You can slow down — and even reverse — bone loss as time passes

Bones are your hardest body part, but over your lifetime they’re continually breaking down and rebuilding themselves.

Loss of bone density may accelerate as time passes, but you can take steps in your 30s, 40s, 50s and beyond to help fortify skeletal strength and prevent the worst effects of bone loss.

It helps to think of bone loss and rebuilding as a cycle. In youth, you build bone mass faster than you break it down. Bone loss occurs when bone-building mode is slower than break-down mode. This may lead to osteopenia or osteoporosis — low bone density and bone weakness. Both conditions increase your risk of falls and fractures. According to the National Osteoporosis Foundation, one in two women and up to one in four men will break a bone in their lifetime due to osteoporosis.

Women’s bone mass peaks around age 30. Bone loss begins gradually after that and speeds up after menopause. Men typically achieve greater peak bone mass, but they lose bone mass over time, too.

Factors that increase your risk of osteopenia or osteoporosis:

- Menopause
- Family history of osteoporosis
- Small stature and thin frame
- Caucasian or Asian ethnicity
- Smoking
- Overactive thyroid
- Excessive alcohol consumption
- Lack of exercise, especially strength training
- Low calcium and vitamin D intake
- Certain medications such as steroids and antacids
- Past cancer treatment such as chemotherapy or radiation
Dietary musts for strong bones

You can prevent or reverse bone loss with a diet that’s rich in nutrients and minerals that are key to building and maintaining bone: calcium, vitamin D and phosphorous.

**Calcium** is constantly removed and replaced through a bone “remodeling” process, but it isn’t made by the body. Good dietary sources of calcium include dark leafy greens such as collard greens and kale, dairy products including milk, cheese and yogurt and fish, especially sardines and salmon. In addition, many foods are fortified with additional calcium. Women over 50 and all adults over 70 should ingest 1,200 mg a day of calcium. If choosing supplements to augment your dietary calcium, the National Institutes of Health recommends 1,000 mg daily for most adults.

**Vitamin D** works with calcium to help build and maintain strong bones. There is very little vitamin D in food, but some good natural sources are cod liver oil, salmon and tuna, fortified milk, egg yolks and liver. Vitamin D is known as the sunshine vitamin because our bodies can synthesize the vitamin with exposure to sunlight. It doesn’t take much — studies suggest that 30 minutes of midday sun exposure outside on your arms and face twice a week can maintain healthy vitamin D levels. While experts normally suggest wearing sunblock in direct sun, it actually inhibits the process. So use your judgment — enjoy the sunshine in short bursts, and if you’re especially fair-skinned, consider supplements. As with calcium, you can goose your vitamin D intake with a supplement; the NIH recommends 600 IU (international units) daily.

**Phosphorus** helps to maximize calcium’s ability to strengthen bones. Find it in protein-rich foods such as tuna, tofu, milk, chicken, lentils, pumpkin seeds and quinoa. Adults should get 700 mg of phosphorus daily, which is easy to accomplish with a balanced diet.

Workouts that build bones

Weight-bearing exercise, which is any activity that makes you work against gravity, builds and maintains bone density. Enjoy high-impact dancing, jogging, running or tennis. If you prefer low-impact workouts, try walking (outside or on a treadmill), hiking or elliptical or stair-climbing gym equipment. Resistance training with free weights, machines or a resistance band also builds bone, particularly in your upper body and spine.

Performing at least 30 minutes of physical activity most days of the week is good not only for your bones, but also for your overall health. Be sure to consult a physician before starting any exercise program.

Good health habits

You can help reduce your risk for developing osteoporosis by eliminating unhealthy habits, including smoking, which has been associated with bone loss. In fact, studies have shown that smoking increases the risk for fracture. Similarly, chronic, heavy alcohol intake may also increase the risk for developing osteoporosis. Consult your physician for help in quitting smoking and reducing or eliminating your alcohol intake.

Bone density testing

More than 53 million people in the U.S. are living with osteoporosis or are at high risk, according to the National Institutes of Health’s Osteoporosis and Related Bone Diseases National Resource Center. Sometimes you don’t have symptoms until you break a bone. If you think you’re at risk, ask your doctor if you should have a bone densitometry test, which is a low-dose X-ray that measures the density of bone. This painless scan takes 10 to 20 minutes to perform.

If you have questions about your bone health, we can help. Find a primary care physician with Northwell Health Physician Partners. Visit bit.ly/my-pcp.
Is your body ready for winter? Ride out cold temps with stay-healthy tips.
It’s wise to winterize your home and car to withstand low temps, chill winds, snow and ice. But what about winterizing your body? A few smart prep tips can help you stay safe and healthy.

**Protect against colds — and extreme cold**

Most adults get the common cold two or three times during each cold season (roughly September to April), according to the U.S. Centers for Disease Control and Prevention (CDC). Children succumb even more often, and frequently “share” their germs with the grownups around them.

Frostbite certainly isn’t contagious, but it can cause a lasting injury when it goes unchecked. It most often affects the nose, ears, cheeks, chin, fingers or toes.

**Winterizing tips:** Limit the spread of rhinovirus, the cause of the common cold, by washing your hands often. Avoid touching your eyes, nose and mouth, and steer clear of people with colds. Boost your immune system by getting at least eight hours of sleep each night, eating immune-boosting foods like dark leafy greens, cutting down on sugar and processed foods, reducing stress and exercising regularly.

Dress to prevent frostbite when you’re outside. Layer your clothing, cover your head, ears and hands and top everything off with a waterproof outer layer.

Signs of frostbite include itching, stinging or hardening of skin that’s exposed to cold air, or even skin turning blue. If you experience symptoms, move to a warm place indoors as soon as possible. In the meantime, warm up with body heat if possible — such as putting frostbitten fingers in your armpits.

Don’t use hot water to warm up, because it could damage numb skin. In fact, the CDC notes that you can injure yourself with old-school “remedies.” So don’t rub or massage a frostbitten area with snow or anything else. Don’t use a heating pad directly on the skin, and don’t get right up close to a heat lamp, a stove, fireplace or radiator. If you continue to experience numbness, pain, blisters or changes in skin color, go to an emergency department.

**Practice safe shoveling**

Shoveling snow poses risks beyond a sore back. There is a significant connection between heavy snowfall and the incidence of heart attacks, according to a recent study published in the Canadian Medical Association Journal. So respect your limits, take your time and don’t be shy about asking family and friends for help. Some communities offer assistance with snow removal to seniors. Senior residents of New York City can call 311 to make a request. If you live outside of New York, check with your local public works department or faith community to see if there is assistance available near you.

**Winterizing tips:** Before you hit the pavement, first do some simple stretching indoors for about 10 minutes. Avoid eating a big meal or drinking alcohol, advises the American Heart Association (AHA). To protect your back, lift with your legs and don’t twist at the waist.

The AHA advises against snow shoveling if you have a heart condition or chronic pain or are pregnant.

**Shield your skin**

Cold weather and indoor heating cause or worsen skin dryness. They can also exacerbate conditions such as eczema or psoriasis.

**Winterizing tips:** Use a moisturizing cream or lotion plus a gentle, moisturizing cleanser.

You can enjoy yourself during the holidays without putting on extra pounds. Watch your portions and follow a few simple strategies provided by the Academy of Nutrition and Dietetics:

1. **Don’t skip meals.** You may believe that skipping a meal means you’ll take in fewer calories for the day. But it actually makes you hungrier and leads to overeating. It’s wiser to eat moderate portions at all your meals.

2. **Add fiber.** Foods that are high in fiber are high in volume, yet lower in calories. Fiber-rich foods like fruits, vegetables and whole grains can help satisfy your hunger.

3. **Eat moderate portions.** It’s easy to lose track of the calories you’re consuming when you’re presented with large platters of food. Be sure to eat in moderation so you don’t blow your caloric budget. Try using a smaller plate.

4. **Set priorities.** Get plenty of lower-calorie foods, like salad or vegetables, before you dive into the entree and sides. This can keep you from binging on less healthy options at the dinner table.

5. **Get moving.** Work off some calories with an after-dinner walk or a game of catch with family and friends.

6. **Serve healthy meals.** If you’re cooking this year, opt for some nutritious recipes like those you see here.

---

**Healthy recipes for family gatherings**

You’ll feel good about serving these appealing yet nutritious dishes

---

### Hot spiced apple cider

**A festive scent, too**

Makes 8 servings.

Per serving: 120 calories, 0 g total fat (0 g saturated fat), 30 g carbohydrate, 0 g protein, 0 g fiber, 8 mg sodium.

**Ingredients**

- 8 cups fresh sweet apple cider
- 8 t grated fresh ginger
- 8 t grated fresh turmeric
- 1 medium lemon peel, pith (white part of peel) included

**Directions**

In a small saucepan, combine cider, ginger, turmeric and lemon peel. Over medium-high heat, heat until a ring of bubbles appears around edge of pan, 3 minutes.

Cover pan and set aside to steep for 5 minutes.

Pour hot spiced cider through fine tea strainer into mugs. Serve immediately.
**Herb-roasted turkey breast with vegetables**

_Directors_  
Preheat oven to 425 degrees F. Add oil, rosemary, sage, oregano, garlic, salt and pepper to a small food processor (or blender). Pulse until finely chopped.  
Gently pull skin back from turkey-breast halves. Rub half of the oil-herb mixture all over turkey breasts, both under the skin and then on top.  
Arrange 6 shallot halves on each of two separate large, deep baking pans. Set turkey breasts on top of shallots and add ½ cup chicken broth to each pan. Roast for 60 minutes. While the turkey is roasting, toss the sweet potatoes, Brussels sprouts and carrots with remaining oil-herb mixture in a large bowl.  
Remove turkey from oven and transfer turkey and shallots to cutting board. Carefully drain the broth (and save for gravy, if desired). Spread the sweet potatoes, Brussels sprouts and carrots on baking pans in an even layer. Place turkey and shallots on top of vegetables and roast until turkey registers 165 degrees F on instant-read thermometer and vegetables are golden brown, about 60 to 75 minutes more (if skin or vegetables are starting to burn, lightly tent the turkey in foil).  
Transfer turkey to clean cutting board and let rest at least 10 minutes before slicing. Serve with roasted vegetables.

Makes 10 servings.  
Per serving: 380 calories, 13 g total fat (3.5 g saturated fat), 19 g carbohydrate, 43 g protein, 5 g fiber, 390 mg sodium.  
Prep time: 20 minutes  
Cook time: 2 hours

**Ingredients**  
- 2 (2.5 lbs each) bone-in, skin-on turkey breasts (1 whole turkey breast split in half)  
- 2 T olive or canola oil  
- 4 sprigs fresh rosemary or 1.5 t dried rosemary  
- 3 sprigs fresh sage or 1 t dried sage  
- 5 sprigs fresh oregano or 1 t dried oregano  
- 4 cloves garlic or 1 ½ T minced garlic  
- 1 t salt  
- ½ t black pepper  
- 6 shallots peeled and halved length-wise  
- 1 cup low-sodium chicken broth  
- 2 large sweet potatoes, scrubbed and chopped into 1-inch cubes  
- 1 ½ lbs Brussels sprouts, halved  
- 1 lb whole small carrots, tops removed and sliced in half length-wise

**Beet, carrot and apple salad**

_A colorful, easy, affordable starter_

Makes 4 servings.  
Per serving: 112 calories, 8 g total fat (<1g saturated fat), 11 g carbohydrate, 2 g protein, 2 g fiber, 330 mg sodium.

**Ingredients**  
- 1 medium beet (or ¾ cup preshredded beets)  
- 2 medium carrots (or ¾ cup preshredded carrots)  
- 1 large Granny Smith apple, peeled  
- ¼ cup walnut halves, chopped  
- 3 T chopped flat-leaf parsley or dill or combination  
- 1 T fresh lemon juice  
- ½ t salt  
- Freshly ground black pepper, to taste  
- 1 T extra virgin olive oil

**Directions**  
Place each hand in a plastic sandwich bag to avoid staining your hands while you prep the beet. Peel beet using a swivel-blade vegetable peeler. Using the coarse side of a box grater, shred the beet to ¾ cup. Save any remaining beet for another use. Shred carrots and apple. Place shredded beets, carrots, and apple in a mixing bowl and mix to combine. Add walnuts and green herbs and set bowl aside.  
For dressing, whisk lemon juice and salt in a small bowl until the salt dissolves. Add 3 to 4 grinds of pepper. Whisk in the olive oil. Pour the dressing over the salad and mix well. Serve the salad within one hour.

Fighting fatigue

Sometimes tiredness isn’t from too little sleep. Here are some surprising causes of fatigue — and how to get more energy.

If you find yourself always tired, dragging in the middle of the day, looking for a caffeine boost at 2pm, it may be cause for concern. It’s normal to be tired after a late night, but always feeling tired is not. Rather than making another coffee run, consider these possible causes of fatigue.

**Undiagnosed Illness.** A discussion with your doctor may uncover symptoms of fatigue-triggering physical conditions such as sleep apnea, thyroid disease or diabetes. Exhaustion can also be a sign of depression, so talk with your primary care physician about a depression screening.

**A sedentary lifestyle.** Too much rest results in deconditioning. That means your muscles become weaker and your metabolism becomes less effective, so your body is not as efficient at getting oxygen to your tissues. Recent studies have shown a positive influence from exercise therapy for people with chronic fatigue. A daily brisk walk at lunch can make a big difference. Roughly 20 to 30 minutes of moderate activity a day can help curb insomnia, boost feel-good endorphins and improve cognitive function.

**Dehydration.** If you’re draggy and foggy, thirst may be to blame. Studies show that even mild dehydration can reduce mental clarity and cause fatigue, which may be related to reduced blood volume. Men should drink about 15 cups and women 11 cups of water (or other no-calorie/low-calorie fluid) per day, according to Harvard’s T. H. Chan School of Public Health. Fresh fruits and vegetables are also a good way to hydrate.

**The snack cycle.** Tired bodies crave carbs that promise quick energy. But processed/packaged snacks are likely to cause a crash when your body quickly processes the sugar and your glucose levels dip. If you’re the snacking type, pack small, nutritious snacks — raw carrots, almonds, low-fat cheese — that can feed the urge and prevent a trip to the vending machine.

**Doing too much.** A packed calendar can poop you out, even when it’s peppered with fun stuff. Take time to reset with proven relaxers such as reading, meditating, deep breathing and yoga.

---

**Are you SAD?**

If you feel noticeably more fatigued as winter edges closer, the culprit may be seasonal affective disorder (SAD). SAD is a form of depression that’s related to months of weaker sunlight and shorter, colder days.

SAD can cause fatigue as well as depressed feelings, loss of interest in activities and difficulty concentrating. You may find yourself oversleeping and gaining weight.

If this sounds like you, visit your doctor. Treatment can include sitting in front of a special lamp, which is believed to boost serotonin levels in the brain, improving mood. Some doctors recommend vitamin D supplements and others prescribe antidepressants to relieve symptoms of SAD.

You can help relieve symptoms of SAD by exercising for at least 30 minutes, three days a week, and going outside for short periods when the sun is shining.

---

**Sleep more soundly**

Visit bit.ly/sleep-doc to find a Northwell Health sleep specialist.
When someone is very sick, loved ones all want what’s best — but they don’t always agree about what to do. Sometimes conflicts come up over whether to continue treatment or when to use lifesaving methods such as CPR. Making medical decisions is especially complicated when there are no power of attorney or living will records.

But you can clear a path forward. The Northwell Health Ethics Committee’s clinicians specialize in bioethics, and they help people who have concerns about making medical decisions. Individuals who struggle with making healthcare choices that reflect their personal values appreciate the assistance. Northwell’s clinical bioethicists help patients, their relatives and clinicians to clarify what feels right.

“Seeing hospital beds, tubes and lines through your loved one’s eyes — their desires, wants and dreams — relieves a conflicted family. We help restore peace as they recall that they have not made the difficult decision alone, and that their loved one’s wishes and values are first and foremost,” said Samuel Packer, MD, founder and chair of the Health Ethics Committee. Dr. Packer serves as Northwell’s chief of medical ethics; the Robert and Florence Kaufman Professor of Medical Ethics at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell; and codirector of the Hofstra University Bioethics Center.

You have no obligation to follow the committee’s advice, Dr. Packer added. How to move forward is up to you, your family and the healthcare team.

The Northwell Health Ethics Committee assists and advises at North Shore University Hospital, Long Island Jewish Medical Center, Cohen Children’s Medical Center, Zucker Hillside Hospital, Nassau University Medical Center and the A. Holly Patterson Extended Care Facility.

Any patient or family member is welcome to contact the Health Ethics Committee. Even if you’re not sure that you need a health ethics consultation, the team can direct you toward resources that address your concerns. A medical ethicist is always available to help — 24 hours a day, 7 days a week, 365 days a year. Get in touch at (516) 470-5841.
New York magazine bases “Best Doctors” rankings on peer-reviewed surveys administered by Castle Connolly Medical Ltd. This year’s edition listed 1,390 tri-state physicians with 65 different specialties. See the full list at nymag.com/bestdoctors.
North Shore University Hospital
300 Community Drive
Manhasset, NY 11030

Cardiothoracic Surgery
Alan Hartman, MD
James Taylor, Jr., MD
(516) 562-4970

Infectious Disease
Marcia Epstein, MD
(516) 562-4280

Interventional Cardiology
Barry Kaplan, MD
(516) 562-4100

225 Community Drive, Suite 110
Great Neck, NY 11021

Clinical Genetics
Martin Bialer, MD
(516) 918-4800

600 Northern Boulevard, Suite 300
Great Neck, NY 11021

Hand Surgery
David Tuckman, MD
Peter Stein, MD
(516) 627-8717

Orthopedic Surgery
Michael Angel, MD
(516) 627-8717

611 Northern Boulevard, Suite 150
Great Neck, NY 11021

Neurology
Steven Pacia, MD
(516) 325-7000

865 Northern Boulevard, Suite 202
Great Neck, NY 11021

Urogynecology
Harvey Winkler, MD
(516) 622-5114

900 Northern Boulevard, Suite 130
Great Neck, NY 11021

Plastic Surgery
Lyle Leipziger, MD
(516) 465-8787

Colon and Rectal Surgery
John Procaccino, MD
(516) 730-2100

Long Island Jewish (LIJ) Medical Center
270-05 76th Avenue
New Hyde Park, NY 11040

Thoracic and Cardiac Surgery
Paul Lee, MD
(718) 470-7499

Vascular Surgery
Gregg Landis, MD
(516) 470-4505

Center for Advanced Medicine
450 Lakeville Road, Area B
New Hyde Park, NY 11042

Gynecologic Oncology
Richard Barakat, MD
(516) 734-7671

Hematology
Steven Allen, MD
(516) 734-8959

Lakeville Road Office Park
New Hyde Park, NY 11042

410 Lakeville Road
Pulmonary Disease
Suite 107
Harly Greenberg, MD
(516) 465-5400

Adolescent Medicine
Suite 109
Martin Fisher, MD
(516) 465-3270

430 Lakeville Road, First floor
Otolaryngology
Andrea Vambutas, MD
(718) 470-7550

Pediatric Otolaryngology
Lee Smith, MD
(718) 470-7550

450 Lakeville Road
Medical Oncology,
Section B
Robert Maki, MD, PhD
(516) 734-8976

3003 New Hyde Park Road, Suite 407
New Hyde Park, NY 11042

Obstetrics and Gynecology
Jessica Jacob, MD
(516) 488-8145

Cohen Children’s Medical Center
269-01 76th Avenue
New Hyde Park, NY 11040

Pediatric Infectious Disease
Lorry Rubin, MD
(718) 470-3480

Pediatric Nephrology
Christine Sethna, MD
(718) 470-3491

1999 Marcus Avenue
New Hyde Park, NY 11042

Pediatric Urology
Suite M18
Jordan Gitlin, MD
(516) 466-6953

1983 Marcus Avenue, Suite 130
New Hyde Park, NY 11042
Developmental-Behavioral Pediatrics
Ruth Milanaik, DO
(516) 802-6100

1 Dakota Drive, Suite 312
Lake Success, NY 11042
Pediatric Allergy and Immunology
James Fagin, MD
David Wertheim, MD
(516) 608-2898

1991 Marcus Avenue,
Lake Success, NY 11042

Suite M100
Pediatric Gastroenterology
James Markowitz, MD
(516) 472-3650

Pediatric Rheumatology
Barbara Eberhard, MBBS
(516) 472-3700

Pediatric Endocrinology
Phyllis Speiser, MD
(516) 472-3750

Pediatric Neurology
Joseph Maytal, MD
(516) 465-5255

Zucker Hillside Hospital
75-59 263rd Street
Glen Oaks, NY 11040

Child/Adolescent Psychiatry
Victor Fornari, MD
(718) 470-3510

100 Port Washington Boulevard
Vizza Pavilion, Suite 108
Roslyn, NY 11576

Pediatric Cardiology
Douglas Luxenberg, DO
(516) 365-3340

366 Veterans Memorial Highway, Suite 8
Commack, NY 11725

Dermatology
Lance Barazani, MD
(631) 499-1200

222 Middle Country Road, Suite 106
Smithtown, NY 11787

Pediatric Cardiology
Angela Romano-Adesman, MD
(631) 439-5437
Family health and safety

Foster a safe, nurturing home for loved ones with our resources and classes

Tight schedule?
No problem.

Get on the fast track for orthopedic care.

Whether you need an evaluation, a follow-up appointment or on-site imaging and casting, the Northwell Health Orthopaedic Institute accommodates your schedule.

Same-day appointments, nights, weekends — we’ve got you covered from head to toe. Our specialties include hand and wrist, foot and ankle, sports medicine, fracture care, shoulder and elbow and joint replacement.

Call (855) 620-1853 and choose option 1 for an appointment at 611 Northern Boulevard, Suite 200, Great Neck.

Making the “golden hour” count

When your child is dangerously injured or ill, it’s a comfort to have a Level I Pediatric Trauma Center in your back yard — at Cohen Children’s Medical Center.

“There’s something called the ‘golden hour’ in trauma care,” said Mark Mittler, MD, codirector of pediatric neurosurgery at Cohen Children’s. “The first hour after an injury is when we can provide the most effective treatments. Delays in trauma treatment result in poor outcomes.”

SkyHealth, Northwell Health’s 24/7 helicopter emergency medical service, removes traffic congestion concerns if a transfer between hospitals is necessary. A nurse and paramedic administer care during flight, and pediatric critical care specialists meet children at the hospital’s helipad for immediate transport to the Emergency Department or an operating room.

“Our skilled pediatric trauma team is available 24/7 to provide fast, effective care for the most seriously injured children, including those with traumatic brain injuries,” Dr. Mittler said.

Cohen Children’s Level I Pediatric Trauma Center is one of only three regional pediatric trauma centers in metro New York. Learn more at bit.ly/ccmc-trauma.
CPR
Learn cardiopulmonary resuscitation (CPR), foreign body airway obstruction techniques and enhanced 911 response. Infant CPR: $45 per person/$75 per couple. Infant/child CPR: $65 per person/$120 per couple. Family and friends adult/child CPR: $50 per person. Available at North Shore University Hospital (NSUH).

Preparing for life’s new journey
A four-week program for first-time parents. Experts cover topics like how to choose a pediatrician, bonding with your baby, safety/injury prevention for young children and self-care after birth. $40 per person/$70 per couple. Available at NSUH.

Preparation for childbirth
Find out about the process of labor and birth, relaxation and breathing techniques, hospital admission policies and procedures, anesthesia/analgesia options, vaginal and cesarean births and postpartum expectations. A hospital tour is included. Recommended four to six weeks before your estimated delivery date. $200 for expectant mom and coach. Available at the Katz Women’s Hospitals at NSUH and Long Island Jewish (LIJ) Medical Center.

Breastfeeding
Covers the basics of breastfeeding and prepares expectant parents for a healthy breastfeeding relationship with their baby. Topics include advantages of breastfeeding, breastfeeding techniques and effective latching, bottle use, breast pumping, returning to work and common facts and myths. Bring a baby doll or stuffed animal to class. $70 per person/$85 per couple. Available at the Katz Women's Hospitals at NSUH and LIJ.

Baby care
Teaches expectant parents, grandparents and childcare providers about characteristics of a newborn, feeding, bathing, diapering, cord and circumcision care, baby equipment, safety, sleep and immunization. $70 per person/$85 per couple. Available at the Katz Women’s Hospitals at NSUH and LIJ.

Baby safe
Focuses on creating a safe home environment. Covers crib and toy safety, safe sleep positions, baby-proofing the home, home emergencies and basic first aid for bleeding, burns, fractures, shock and poisoning. $20 per person/$35 per couple. Available at NSUH.

For more information, visit bit.ly/healthclasses4me or call the Northwell Health Center for Equity of Care at (516) 881-7000.

Women’s wellness
Whether you want to discover the best type of exercise for you, get new healthy cooking tips or kick the cigarette habit, the Katz Institute for Women’s Health has all this in store — and more. Bookmark bit.ly/katz-learning4me to stay abreast of health and wellbeing programs throughout the year.

Free for the community
There are solutions for your aches and pains. Discover what’s possible at our free community seminars. Visit bit.ly/ache-pain-fix or call (855) 678-4604 to learn more from the Northwell Health Orthopaedic Institute.
Step up to prevent **substance misuse**

If you know someone who has a substance misuse problem, you can make a difference with the right tools and information.

First, it’s important to understand that having a drug or alcohol problem is not a failure of willpower or a sign of personal weakness. Rather, it’s a chronic and complex condition that affects brain function and makes it harder to quit and to “stay quit.”

Here’s how you can spot danger signs and learn to intervene promptly and empathetically.

**Physical signs**
Watch for bloodshot eyes, coordination problems, large or small pupils, slurred speech and sudden, unexplained weight changes.

**Behavioral signs**
People with substance misuse problems tend to have relationship issues and difficulties handling daily responsibilities. Note changes in performance at work or school, abrupt changes in energy (too much or too little), shifts in sleeping and eating patterns, withdrawal from family and friends and a sudden lack of care about personal hygiene.

**Emotional signs**
Substance misuse and addiction can affect mood and personality. Look for unusual mood swings, dramatic outbursts, irritability, fatigue, nervousness, anger, sadness or a lack of motivation.

**If a loved one has a substance use problem**
1. If you see some of these signs and are concerned, confide in a trusted family member or friend.
2. If they agree there’s a problem, contact a mental health expert or social worker, physician or substance abuse professional for guidance. Contact the Substance Abuse and Mental Health Services Administration (SAMHSA) National Helpline at (800) 662-HELP.
3. With an expert’s guidance, calmly and empathetically tell the person (when sober) how you and other loved ones are affected by his or her unhealthy choices.
4. Provide suggestions for getting help.
5. If your loved one resists treatment or is not ready to admit to a problem, it isn’t your fault. You may want to consider joining a support group for families of people with substance use issues. Find out more at Al-Anon Family Groups (al-anon.org) or Nar-Anon Family Groups (nar-anon.org/naranon).

We ask everyone
Northwell Health clinicians screen all patients for potential risk of substance misuse. If needed, we make referrals for treatment. Called SBIRT (Screening, Brief Intervention and Referral to Treatment), this initiative receives grant support from SAMHSA, the New York State Office of Alcoholism and Substance Abuse Services and the Center for Addiction and Substance Abuse. Learn more at [samhsa.gov/sbirt](http://samhsa.gov/sbirt).