

### FAMILY BUILDING GUIDE

The Global Leader for High Quality,
Affordable Fertility Care

Making priceless affordable<sup>TM</sup>



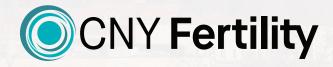
## Welcome to the Family: CNY Colorado



CNY Fertility's newest location in Colorado Springs, CO will provide topnotch fertility care throughout Colorado and the West Coast. Led by Dr. Paul Magarelli, who has been practicing in Colorado since 1998, CNY Colorado is an experienced team of caregivers who have been serving the fertility needs of couples in the region, including a large number of military families.

Your treatment plan is as unique as you are. It's completely personalized and based on your individual health and goals. Dr. Magarelli and his team believe "a healthy body is a fertile body." Using a blend of the best eastern and western therapies, an integrative approach provides the highest chances for fertility success.

CNY Colorado is a full-service fertility center with state-of-the-art embryology, andrology, and endocrinology labs, a surgical suite, egg/sperm/embryo freezing services, and on-site acupuncture services. CNY Colorado also provides fertility services to travel clients who visit Colorado Springs for egg retrievals and embryo transfers. CNY's concierge medical team manages all stages of a travel patients' fertility treatment-- before, during, and after transfer.



## Welcome

#### WE'RE HERE FOR EVERYONE EVERYWHERE.

When I say this, I'm not being hyperbolic. I quite literally mean that CNY Fertility won't turn away a single patient no matter where they come from, their age, weight, number of previously failed cycles, AMH level, income, or whatever diagnosis they've received previously. We're proud to be the fertility center so many turn to when they seem to have run out of options (and often hope)—whether their reasons are financial or something else completely.



CNY Fertility's affordability and high-quality care were somewhat of a well-kept secret until very recently. Travel patients have now become the fastest growing portion of our business. Indeed, patients from outside the State of New York now make up over one-third of our clients. As they say, good news travels fast.

CNY Fertility is something special. We know this (1) because we work here and see it first-hand every day, but also (2) because so many patients past and present have shared their stories with us, telling us the difference we have made in their lives. We pride ourselves on being the little voices that whisper "maybe" when the rest of the world is shouting "no!" And we are many encouraging voices—from our doctors to our PAs, nurse practitioners, embryologists and lab techs to our support groups and "fertile friends". Whether or not you have the opportunity to meet all of the people involved in your care and that of your future child(ren), you can rest assured that our support and commitment to helping you achieve your dreams run deep.

This starts with 24/7 access to a nurse who can answer your questions, explain your protocol, or reassure you that what you're feeling (or worrying about) is completely normal. Patients near and far have around the clock access to CNY Fertility. We know the little things can make a big difference, which is why CNY Fertility takes an integrative approach to treatment, looking at all aspects of health including what you're eating (go Keto!), thinking, how well and how much you're sleeping (get more!), hormones, exercise (do less!), and, of course, staying positive, focusing on mindfulness and gratitude, and making this incredible journey to parenthood as awe inspiring as it's meant to be.

We look forward to celebrating each of your successes and supporting you every step of the way.

Dr. Robert Kiltz
Founder and Director

P.S. – Remember to join me live on Facebook and Instagram every Sunday evening at 10:00 am (EST) for a Fertile Fireside Chat. I'll be answering your questions and discussing the latest innovations at CNY Fertility. For our Spanish-speaking clients, join my colleague Dr. Maribelle Verdiales every Wednesday evening from 8-8:30 p.m. (EST) as she provides fertility updates entirely in Spanish.



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### Meet Our Team

#### **OUR FERTILITY SPECIALISTS**



ROBERT J. KILTZ, MD

Dr. Kiltz is Founder and
Director of Central New
York's first successful IVF
center. He is a Diplomate
of the American Board of
Obstetrics and Gynecology
and Fellowship trained
and Board Certified in
Reproductive Endocrinology
and Infertility. A Graduate of
the University of Southern
California, Dr. Kiltz completed
medical school training at the
University of California, Davis.

He interned in Internal
Medicine at UCLA, and in
Obstetrics and Gynecology
at USC Los Angeles County
Women's Hospital. After
residency at the University
of Colorado Health Science
Center in Denver, he practiced
for one year at Kaiser
Permanente in California. He
then went to Harbor UCLA
Medical Center for a two-year
fellowship in Reproductive
Endocrinology and Infertility.



DAVID R. CORLEY, MD

Dr. Corley has been helping couples with fertility issues have families for over 24 vears. He is board certified in both Obstetrics & Gynecology and Reproductive Endocrinology and Infertility (REI). He is a graduate of Clemson University and obtained his medical degree from the University Of South Carolina School Of Medicine. He completed his OB/GYN Internship and Residency at Portsmouth Naval Hospital. After serving in the Navy at Guantanamo Bay Cuba and Charleston Medical Center, he continued his fellowship training in Reproductive Endocrinology and Infertility



MICHAEL P. GROSSMAN, MD

Dr. Grossman is a graduate of Michigan State University. Dr. Grossman's residency was in Saginaw, Michigan, after which he worked at a private infertility clinic in southeast Michigan. He completed his fellowship at the University of Louisville and joined CNY Fertility as our Albany physician. He is a Diplomate of the American Board of Obstetrics and Gynecology, and board certified in Reproductive Endocrinology and Infertility.



EDWARD C.
DITKOFF, MD

Dr. Ditkoff is a native New Yorker and attended college at Emory University before continuing on to Chicago Medical School. Following his residency training in OB/GYN at the George Washington University Medical Center, he successfully completed a fellowship in Reproductive Endocrinology at USC Medical Center in Los Angeles from 1990–1992.



#### **OUR FERTILITY SPECIALISTS**



MYRON O. LUTHRINGER, MD

Dr. Luthringer serves as chief surgeon at the CNY Fertility International Surgical Institute. He joined the team in 2016 and brings 30 years of experience assisting fertility patients to achieve their goals. His passion is the development and advancement of techniques to better the surgical outcomes of his patients. This has led to his expertise in the treatment of endometriosis utilizing both advanced minimally invasive and da Vinci robotic surgery. He routinely performs surgery on patients from across the country and around the world in addition to teaching all aspects of gynecologic surgery.

Dr. Luthringer completed both medical school and residency at SUNY Upstate Medical Center. He also served as the Felix Rutledge Fellow at MD Anderson in Houston, Texas. He is Board Certified in Obstetrics and Gynecology, a Fellow of the American College of Obstetricians and Gynecologists, and a member of the American Association of Gynecologic Laparoscopists.



MARIBELLE VERDIALES, MD

Dr. Verdiales was born in Puerto Rico, where she graduated with honors from University of Puerto Rico School of Medicine. She completed her residency at Jamaica Hospital Medical Center (Jamaica, NY) where she discovered her passion for women's health. After graduation, she continued to practice in New York and pursued further training in the areas of Robotic Surgery and pelvic reconstruction with and without mesh implants. In 2009, Dr. Verdiales relocated to Georgia with her family. She took advance training in bio-identical hormone therapy, nutrition, weight loss and integrative medicine.

She believes that in order to achieve health, there must be a balance between body, mind and soul. Dr. Verdiales is dedicated to the health and wellness of women and all couples and clients interested in growing their families. In addition to being a doctor, she is also a speaker and wellness coach.



**FAEZ FARUQI, MD** 

Dr. Faruqi is a graduate of Université de Montréal and currently teaches gynecology at McGill University. His expertise is in assisted reproductive technology and minimally invasive gynecological surgery. He takes a comprehensive approach to fertility treatment that focuses on medical interventions as well as improving the overall health and well-being of the client. Dr. Faruqi has a certificate in Reproductive Endocrinology and Infertility and is a fellow of both the Royal College of Surgeons of Canada and the American Board of Obstetrics & Gynecology.

"WE'RE HERE FOR EVERYONE, EVERYWHERE."

**CHANG, DO** 

Dr. Chang is a Diplomate of the American Osteopathic Board of Obstetrics and Gynecology. He is a graduate of Penn State and obtained his medical degree from Des Moines University. Following his OB/GYN residency at Cooper University Medical Center, he practiced obstetrics and gynecology for seven years before entering a fellowship in Reproductive Endocrinology and Infertility at the Philadelphia College of Osteopathic Medicine. He credits his osteopathic training for having encouraged his life-long interest in Asian medicine and alternative therapies, and he takes great pride in treating people as a whole, rather than as a set of lab values.



TRUSSELL, MD

Dr. Trussell is a urologist specializing in treating conditions affecting the urinary tract in men and women. He is a 1992 graduate of Temple University School of Medicine, did his residency at SUNY Upstate Medical University and internship at Balboa Naval Hospital.

Dr. Trussell has a clinical interest in Andrology, Erectile Dysfunction, Peyronie's Disease, and Male Infertility. He is a member of the American Urological Association (AUA) and an Associate Professor of Urology at Upstate Medical University.



**CAROLINE A.** D'SOUZA, MD

Dr. D'Souza was born in London, England but has called Buffalo, NY home for many years. She is a graduate of Canisius College and obtained her medical degree from Jagiellonian University. Dr. D'Souza completed her residency at Hutzel Women's Hospital at Wayne State University in Obstetrics and Gynecology. She is a practicing Ob/Gyn and is dedicated to the health and well-being of women of all ages.

She has a particular interest in fertility and nutrition. She seeks a holistic approach to helping patients in addition to western medicine practices and has completed a certificate program with the Institute of Integrative Nutrition.



PAUL C. MAGARELLI, MD, PhD

Dr. Magarelli is a Board-Certified Reproductive Endocrinology & Infertility (REI) specialist with national acclaim and was most recently the founder and Medical Director of Magarelli Fertility Centers, LLC. Prior to that, he ran High Quality Affordable Fertility Centers, LLC and Reproductive Medicine and Fertility Centers, LLC. Dr. Magarelli is also Founder, Medical Director, and Advisor to the ABORM and Reproductive Industry Partners, a past faculty member at Yo San University and University of New Mexico, founder of the Institute for Sustained Health, founder of US Military Family Fertility Services 501 c3, recipient of the Pioneers in Integrated Reproductive Medicine Award, and Past President of the Pacific Coast Reproductive Society. He is a graduate of Duke University Health Sciences Residency and UCLA RE Fellowship program. He earned his PhD in Nutritional Biochemistry and Physiology at the University of Arizona and is a frequent presenter on topics such as infertility, PCOS, Menopause, Andropause, and the treatment of Insulin Resistance.



**DENISE WALINSKY, MD** 

Dr. Walinsky is a graduate of Drexel University College of Medicine in Philadelphia where she also did a research fellowship in the Division of Reproductive Medicine at University of Pennsylvania. She completed her OB/ GYN residency in Baltimore and then taught residents there for five years before moving to New Mexico where she was a Laparoscopic Specialist for ten years. She is a diplomate of the American Board of Obstetrics and Gynecology and an active member of the AAGL (American Association of Gynecologic Laparoscopists). Dr. Walinsky is happy to return to her roots in assisting patients with fertility



DIANE K. CRIDENNDA, MD, LAc

Dr. Cridennda has been in private practice as an Acupuncturist and Chinese Herbalist since 1995. She spent twenty years in western medicine working as a Radiological Technologist. She made a career change after being treated with acupuncture to overcome a debilitating illness. Dr. Cridennda has spent years training in Traditional Chinese Medicine (TCM). She graduated from the International Institute of Chinese Medicine with a Masters of Oriental Medicine and trained in Beijing. She is NCCAOMcertified and has authored several studies on outcomes of combining acupuncture with ART (assisted reproductive techniques).



#### "CREATING MIRACLES FOR OVER 20 YEARS"



**ASHLEIGH** RAUSCH, PA-C Physician Assistant, Buffalo



PHILLIPS, RPA-C Physician Assistant, Rochester

**JENNIFER** 



SUSAN KOLLER, RN, FNP-C Nurse Practitioner, Albany



**KIMBERLY** MATHIS, NP Nurse Practitioner, Atlanta

Ashleigh Rausch joins CNY Fertility with an extensive clinical background as a Physician Assistant with over 10 years of experience in Emergency Medicine, Interventional Radiology, and Primary Care with a focus in Women's Health.

Ashleigh earned her PA degree from Rochester Institute of Technology,

where she completed specialized clinical training in Reproductive Endocrinology and Infertility. She also completed a Medical Immersion Program in Guanajuato, Mexico where she became fluent in Spanish. Ashleigh enjoys reading, traveling and spending time with her family and friends.

a longtime interest in infertility and

She is a former secretary and member

of the WNY PA Association, as well as

a fellow of the American Academy of

active in the education of PAs as a

student mentor and clinical lecturer.

Jennifer resides in Amherst with her

husband and two daughters. In her

free-time, she enjoys exercise, skiing,

traveling, and spending time with her

Physician Assistants. Jennifer remains

A lifelong resident of Western New York,

reproductive endocrinology.

Jennifer is a 1999 graduate of the D'Youville College Physician Assistant program. She has worked in women's health since 2001, and prior to that practiced family medicine. She regularly attends continuing education seminars to keep up to date on new medical advances. Jennifer enjoys working with women of all ages and abilities to improve their quality of life. She feels patient education is key to good healthcare.

Her clinical interests include adolescent medicine, contraception and menopausal management, and

Sue recently joined CNY Fertility as a board certified Family Nurse Practitioner. She has dedicated her career to women's health for the past 19 years. Sue is a graduate of Binghamton University's nursing program and The Sage Colleges Master's program.

She started her career as a labor and delivery nurse at Albany Medical Center and then worked in OBGYN private practice. Sue takes great pride in guiding women in their overall physical and emotional well-being and is honored to help people fulfill their dreams of parenthood. Sue lives with her husband and two children in Delmar, NY.

Kimberly has dedicated her career to women and women's health. She graduated from Mercer University with a Bachelor of Science in Nursing. She was a Labor & Delivery/Antepartum nurse at Piedmont Hospital for over 10 years. She received a Master of Science in Nursing degree from Georgia State University, majoring in the Women's Health Nurse Practitioner/Perinatal Clinical Nurse Specialist program. She worked as a Nurse Practitioner in Gynecology/

Urogynecology prior to joining CNY Fertility.

Kim enjoys helping women of all ages address whatever gynecologic challenge they may be facing. Whether it is heavy or painful periods, difficulty getting pregnant, or pelvic floor weakness postpartum and beyond, Kim is an expert in women's issues.

#### **OUR FERTILITY SPECIALISTS**



REBECCA ESKIN. CNM . NP Nurse Practioner, Latham



LEIGH HOUGHTON. RN, NP Nurse Practioner. Rochester



CATHERINE FALCON. WHNP Nurse Practioner. Rochester



KRIS ZIEGLER. RNC. MSN. WHNP Nurse Practioner, Buffalo

Rebecca became a Nurse Midwife and OB/GYN Nurse Practitioner in 1999 and has spent most of her career working as a Nurse Midwife, helping women deliver their babies. She was excited to make a slight career change and has been at CNY Fertility for the past 5

Rebecca is a graduate of Binghamton University with a BS in Nursing and a BA in Psychology and Biology. She worked for 8 years as a Labor and Delivery Nurse at Bellevue Woman's Hospital. She then chose to fulfill a

lifetime career goal and graduated from Baystate Medical Center, beginning her career as a Nurse Midwife. It has been a privilege to help many women give birth. Joining CNY Fertility felt like coming home, as Rebecca and many of her coworkers started their careers together in women's healthcare at Bellevue Woman's Hospital.

She truly loves being part of the CNY Fertility family. The best part of her job is guiding couples through the fertility process and helping clients achieve their dreams of becoming parents.

Leigh completed her Bachelor of Science degree in Nursing at Binghamton University in 1999 and her Nurse Practitioner degree from the University of Rochester in 2004.

She joined the CNY Fertility team in 2011 and has worked in the women's health arena for the past 18 years. She lives in Rochester with her husband and two daughters.

Katy graduated from Loyola University Chicago with a Bachelor of Science in Nursing and worked as a Labor & Delivery nurse for nearly 10 years prior to pursuing her Master's degree. In 1994, she completed her Master's Degree in Women's Health at the University of Rochester and worked in OB/GYN private practice as a Nurse Practitioner.

Katy joined CNY Fertility in 2013 and couldn't be happier.

She has spent her entire career in women's health and finds it to be tremendously rewarding.

Kris earned her Baccalaureate of Science in Nursing from Niagara University. She completed the Women's Health Nurse Practitioner Program and received her Master's Degree from The State University of New York in Buffalo. Kris is an active member of ASRM and has been NCC certified in Reproductive Endocrinology since 1989. She has taught at D'Youville College as an adjunct faculty member and has been a Nurse Practitioner and Physician Assistant student preceptor at SUNY Buffalo, Daemen College, Dyouville College and St. John Fischer College.

Kris was the Clinical Director of the Department of Reproductive Medicine at St. Francis and Kenmore Mercy Hospital, until entering private practice in 1994.

Kris joined CNY Fertility in 2012, working part time out of the Rochester office, and then became fulltime in 2016 when the Buffalo office opened.

She loves providing care to couples trying to achieve a pregnancy and is honored to be part of the CNY Fertility team, working with Dr. Kiltz and a talented group of compassionate professionals

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## NY FERTILIT

#### **OUR FERTILITY SPECIALISTS**



MARGARET MARNELL, MS, FNP- BC Nurse Practioner, Syracuse



GRACE MICHEL, RN, MSN, FNP - BC Nurse Practioner, Syracuse



KELLY TESTA, RNC, MSN, WHNP-BC Nurse Practioner, Syracuse

Margaret earned her Baccalaureate of Science in Nursing from Niagara University, completed the Community General Hospital Family Nurse Practitioner Program, and received her Master's Degree with Distinction from Upstate Medical University.

Board certified by the ANCC and an active member of ASRM and ANCC, Margaret is a preceptor faculty member at Le Moyne College and Upstate Medical University, assisting Nurse Practitioners and Physician Assistant students.

Margaret has been practicing with Dr. Kiltz for over 15 years. She completes initial client consultations and is an active member of the clinical team.

Margaret is responsible for initiating the CNY Fertility's office-based surgery centers in our Syracuse and Albany locations, manages the centers through the American Association for Ambulatory Surgery Facilities. Margaret loves working with Dr. Kiltz and is proud to be part of the CNY Fertility family.

organizations, including the American

American College of Nursing, and the

International Honor Society of Nursing,

Grace was inducted into Sigma Theta

experience, hard work and professional

knowledge and experience with fertility

study, Grace has gained substantial

Tau, the National Honor Society of

Through many years of hands-on

Nursing.

patients.

College of Nurse Practitioners, the

Grace is a graduate of LeMoyne College, where she received a Bachelor of Science Degree in Nursing with a minor in Psychology. While working at CNY Fertility Center as a Registered Nurse, she completed the Le Moyne Family Nurse Practitioner Program.

Grace is a Board Certified Family Nurse Practitioner and licensed in New York State. She works primarily with patients undergoing Reproductive Endocrinology and Gynecological care. An active member of several professional

Kelly received her Bachelor's

Stony Brook University.

Degree in Nursing from Syracuse

Master's Degree in Nursing from

University at Utica College and her

She is Board Certified by the National

member of the American Society of Reproductive Medicine (ASRM).

Kelly specializes in Women's Health and has spent more than 13 years practicing in that specialty.







POLITO, RNC

Nurse Manager,
Syracuse

**DONNA MILLER** 

Donna has been working in the fertility field as a Reproductive Nurse for the past 22 years. She has been at CNY Fertility Center since its inception and has significantly contributed to its growth and development. Earlier in her career, she was the IVF and Oocyte Donor Program Coordinator. She transitioned to the Clinical Nurse Manager for the Syracuse location as the business expanded.

Realizing that she was able to assist clients from across the country and beyond to achieve their dreams of having a family, she established the Global Fertility Program. Donna understands the challenges faced by those experiencing infertility, particularly those coordinating cycles from afar, and supports them throughout their journey.

She continues to enhance her fertility knowledge by attending Post Graduate courses at ASRM on a yearly basis and staying up-to-date with assisted reproduction publications and articles.



BSN, RN
Nurse Manager,

Latham

JUSTINE TAYLOR.

Justine is a graduate of Samaritan Hospital School of Nursing and received a Bachelor's Degree in Nursing from the State University of New York at Utica/Rome. She began her career in women's health at Bellevue Women's Hospital in June 1989 as a labor and delivery nurse. In September 1994, Justine assisted with the development of an IVF program at Bellevue Woman's Hospital, and in January 2006, she joined Dr. Robert Kiltz and the CNY Fertility family with the opening of the Latham location.

reproductive technologies, she feels very fortunate to absolutely love the role she is in today. Helping couples and women to achieve their dreams of parenthood is incredibly rewarding. It is a privilege and honor to support CNY Fertility's clients as they navigate one of the most difficult times in their lives.

With 23 years of experience in assisted

It is also Justine's sincere pleasure to lead a team of professionals who provide the most compassionate, advanced care to each and every client.



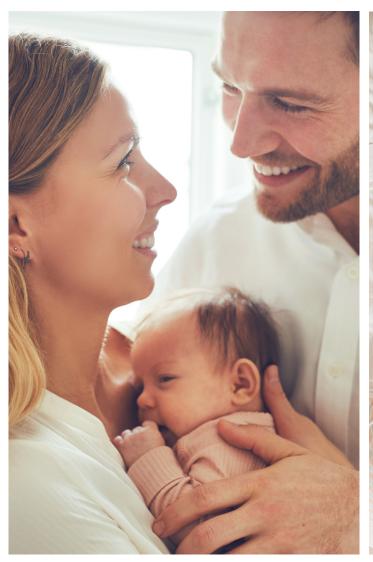
## **CNY Fertility Alliance**

The CNY Fertility Alliance is a network of Reproductive Endocrinologists and OB/GYNs that have partnered in their mutual commitment to providing top-quality family building options priced well below the national average. Alliance members are committed to every patient and working in cooperation to ensure quality care for everyone.

Choosing to receive care from the CNY Fertility Alliance and its members means choosing the nation's most innovative fertility care network. Alliance members provide local testing and cycle

monitoring, minimizing the inconvenience and expense of travel to Central New York for IVF or other procedures.

If you or your care provider would like additional information on becoming a patient or member of the Alliance, please call 844-315-2229 (patients) or 530-400-3864 (providers).



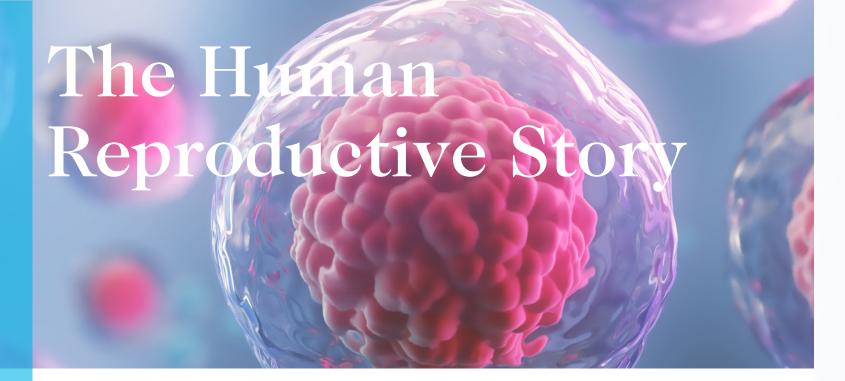




## **CNY Fertility**

**BUILDING FAMILIES, BUILDING DREAMS FOR OVER 20 YEARS** 





#### **CONSIDER THE CHALLENGE**

When you consider the complexity involved in human reproduction, you begin to realize it's a miracle that we exist at all. That a tiny oocyte (the egg) – a cell the size of a grain of sand – and a mature human sperm cell (which is one hundred times smaller than the oocyte) manage to find each other and combine to create a human child is one of the most amazing creations of the universe. The average chances of conceiving naturally and delivering a baby are about 20% per cycle in the first 6 months of trying, rates go down to 1-5% after about 18-24 months, and significantly diminish after age 40.

#### **INFERTILITY FACTORS**

Our ability to answer the question why couples struggle to conceive or carry a baby to term is somewhat limited. Factors such as hormonal, anatomic, immunologic and genetic/chromosomal dysfunction are just a few of the causes we may identify. Since a woman is most fertile in her teens and early 20s, we know that the postponement of childbearing is a major cause of infertility. Failed implantation and repetitive early and late pregnancy loss are also likely related to infertility and have similar

and overlapping causes. In general, there are four main contributing factors to infertility:

Ovulatory factors, Tubal and Uterine factors,

Male factors, and Unexplained factors. A couple facing infertility may be experiencing one or more of these obstacles in both the male and female partner. But, you are not alone. Nearly

1 out of every 8 couples of reproductive age is affected by infertility.

#### **OUR MISSION**

Our mission at CNY Fertility is to guide you on your journey with a comprehensive evaluation and treatment options while integrating both eastern and western methods. Increasingly, we are seeing that our food is both a medicine and a toxin. By incorporating functional medical ideas to healing, you can enhance your chances of success for both natural conception and assisted techniques.

"OUR MISSION AT CNY FERTILITY IS TO GUIDE YOU ON YOUR JOURNEY"

"YOU ARE NOT ALONE. **NEARLY 1 OUT OF EVERY 8 COUPLES** OF REPRODUCTIVE AGE IS AFFECTED BY INFERTILITY."

## Your First Visit or Phone Consultation

Whether in person or over the phone, your initial fertility consultation is an important one. We want you to feel comfortable and able to ask any questions you may have. For many, your initial consultation with one of our physicians, nurse practitioners, or physician assistants is really just a discussion. The primary goal is for us is to listen and understand your hopes and expectations so that we can collectively create a suitable plan of action.

A provider will review your chart and discuss your medical history. Those coming to our office for an in-person consultation often take advantage of the opportunity to have bloodwork, a semen analysis, HSG, or other female and male testing done during their consultation.

You can expect your initial consult to last around 30-60 minutes. If you suspect or know that you are suffering from infertility, it is best if both partners (if applicable) are able to be present during the office appointment or phone consultation. The focus of this initial consultation is you, and ultimately you are in control of every decision that is made. With the incredible online resources available these days, many clients come to us already knowing what treatment they want. Others, however, require more guidance. Regardless of where you are in your understanding of your fertility issues, we are here to answer any and all of your questions as well as educate you on all of your treatment options.

After discussing your medical history and goals, we may recommend a certain course of action, but we will never force anyone away from the treatment they desire. At CNY Fertility, our

focus is always YOU. We don't focus on boosting our "success rates," and have never found the need to artificially inflate our numbers by denying treatment to those with "lower chances of success". Remember, odds and chances of success are merely statistics. Statistics are based on populations, but you are a unique individual.

A Financial Counselor will also be available to review your insurance coverage and the costs involved in any agreed-upon treatments. If you don't have insurance coverage, financing options can be explored as well. You will also have the opportunity to learn about Eastern holistic therapies that can improve your chances of conceiving—Yoga, Acupuncture, Massage, and Meditation.

#### PREPARING FOR YOUR CONSULTATION

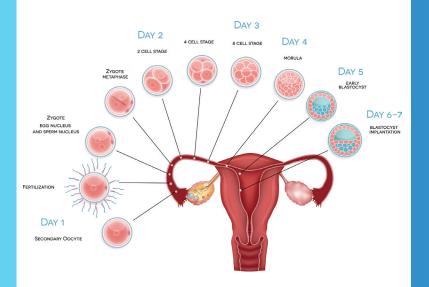
Here is a list of things we recommend you have prepared for your initial consultation:

- A copy of your medical records from your OB/GYN, primary care physician (PCP), or any other fertility center.
- Insurance cards for both partners (if applicable) if your consultation is in office.
- Insurance authorizations (if applicable)
- A list of questions: many couples and individuals find it helpful to write down a list of questions beforehand so they don't forget anything during their consultation. We are happy to answer your questions at any time, but your consult is a great time to get as many of them answered as possible.



## **CNY FERTILITY**

# The Basic Fertility Evaluation

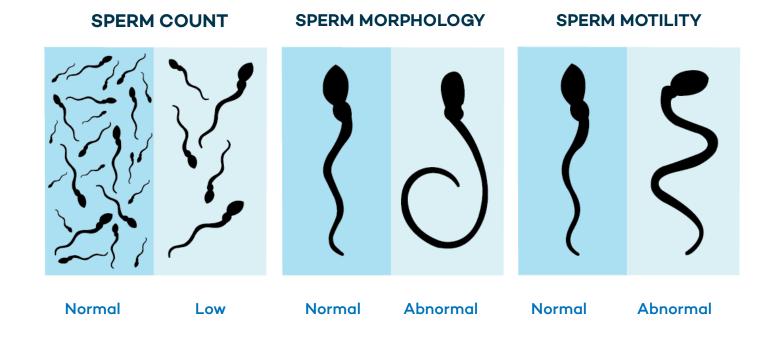


#### **FEMALE**

At this first visit, the woman will be asked about the regularity of her periods, if she experiences severe menstrual cramps, pelvic pain, vaginal bleeding, her method of contraception, any history of surgeries and infections. If previous fertility evaluation and treatments have been performed, these will be reviewed and the results evaluated. A painless vaginal ultrasound will be performed as well. There is no need to reschedule this appointment if you are currently menstruating. Preconception baseline bloodwork will also be drawn at your first visit.

#### RECOMMENDED DIAGNOSTIC TESTING FOR FEMALE

- Preconception baseline blood work
   (yearly) includes CBC (complete
   blood count), CMP (complete
   metabolic panel), Hepatitis,
   HIV, Cystic Fibrosis, Estrogen,
   FSH (follicle stimulating
   hormone), Progesterone,
   HCG (pregnancy hormone),
   TSH(thyroid), Testosterone,
   Rubella, Varicella, LH (lutenizing
   hormone), and Prolactin.
- If you have recurrent pregnancy loss or continuous failed implantation, additional testing will included: Lupus, NKC (natural killer cells), Karyotype (male and female), and ANA (antinuclear antibody).
- **Autoimmune testing** for recurrent pregnancy loss (if necessary).
- Hysterosalpingogram/Saline Sonohysterogram (HSG/SHG yearly) –to check condition of fallopian tubes and uterus.
- **Physical exam** and pelvic ultrasound (monthly).
- Hysteroscopy / Laparoscopy
   (diagnostic) –A surgical procedure done under anesthesia (general) to evaluate uterus for polyps, fibroids, endometriosis and adhesions.



#### **MALE**

The man will be asked questions regarding current and past medical conditions, past surgeries, infections, drug and medication use. A semen analysis should be performed to determine the likelihood of the man's ability to reproduce. This analysis can also help to determine appropriate next steps.

**Semen Analysis:** A typical semen analysis will evaluate all of the following:

**Total Volume:** 2-5 milliliters is a normal volume. A very low volume indicates that the seminal vesicles may not be making enough fluid or that these ducts may be blocked. It may also indicate a problem with the prostate gland.

**Sperm Count:** 40 million to 300 million is the normal range for the number of sperm per milliliter. Counts below 10 million are considered poor; counts of 20 million or more may be fine if motility and morphology are normal.

**Motility and Velocity**: 2 aspects of motility will be evaluated:

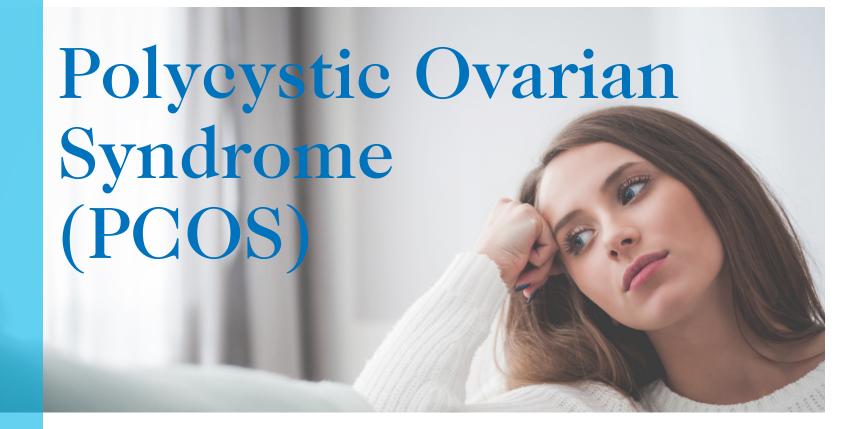
 The number of active cells as a percentage of the total number of cells (rated from 0-100%, at least 50% should be active) • The quality of the movement of the sperm (rated from 0-4. A score of 2 or more is satisfactory.)

Morphology: examines the shape and size of the sperm head. Normal results are when 14% or more of the sperm have normal shaped heads. Men with less than 4% of normal shaped sperm may have a significant infertility problem.

#### RECOMMENDED DIAGNOSTIC TESTING FOR MALE

- Semen analysis (yearly)
- Chromosome testing / male hor mone blood work (if necessary)
- Possible testicular/scrotal ultra sound to rule out varicocele
- Preconception baseline blood
  work drawn at consultation (with
  male factor infertility) TSH
  (thyroid), Testosterone, Prolactin, LH
  (lutenizing hormone), and FSH
  (falliele stimulating hormone)

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Polycystic Ovarian Syndrome or PCOS is one of the mostcommon hormonal endocrine disorders in women. Many women have it, and yet we don't know why, nor do we know the cause. In general, PCOS is really just that — polycystic ovaries. The basic difference between polycystic

and normal ovaries is that although the polycystic ovaries contain many small follicles with eggs in them, the follicles do not develop and mature properly, so there is no ovulation.

Women suffering from PCOS may experience high testosterone levels, which cause other signs and symptoms such as Hirsutism (excessive hair growth), male pattern baldness and acne. This high level of testosterone can prevent the ovaries from releasing an egg each month causing irregular menstrual cycles and, ultimately, infertility.

Many women struggle with PCOS for years, and it's only when they have difficulty conceiving and seek fertility assistance that they learn the reason for so many of their symptoms. In fact, it is estimated that more than 50 percent of PCOS cases remain undiagnosed.

PCOS is one of the leading causes of infertility among women and is responsible for 70% of infertility issues in women who have difficulty ovulating. It affects nearly 10 percent of women before they hit menopause. Postmenopausal women can also suffer from PCOS. There is some degree of heredity with PCOS. Some studies have found that if a mother has PCOS, there is a 50% chance that her daughter will have PCOS.

#### **SYMPTOMS OF PCOS**

Although many of its symptoms are unnoticeable, PCOS can affect a woman's fertility, menstruation, hormone levels, and physical appearance. Infertility can result from low levels of the hormones necessary to create an egg. If ovulation doesn't occur, progesterone, a hormone that thickens the lining of the uterus, is not produced. A woman's cycle will be irregular or absent without progesterone.

Women with PCOS are at additional risk for insulin resistance, type 2 diabetes, high cholesterol, high blood pressure, and heart disease.

#### PCOS TREATMENT SUCCESS RATES

Treatment for PCOS	Expected "Monthly" Success Rate
Metformin Alone	About 1-2%
Clomid	15% - if ovulating
Femara	15% - if ovulating
Injectable gonadotropins	20%
IVF, In vitro fertilization	50%

Many may be overweight and have difficulty with weight control, although you can be lean and still have PCOS.

PCOS cannot be diagnosed with one test alone, and symptoms vary from woman to woman. Additional warning signs include:

- PMS or pelvic pain
- Weight gain
- Acn
- · Increased hair growth on face, back or chest
- Sleep apnea
- Thinning hair/baldness
- Dandruff
- Elevated cholesterol
- High blood pressure
- Type II Diabetes

Women with PCOS often have higher levels of insulin in their blood than normal. Insulin regulates the amount of sugar in the bloodstream. Researchers believe that the overproduction of this hormone causes women's bodies to respond by producing excessive amounts of the male hormone androgen. In a healthy body, the ovaries make a tiny amount of androgen. But with PCOS, they start producing too much. This often causes you to stop ovulating, grow excessive facial and body hair, acne, and makes it difficult to sustain a healthy body weight. That is why proper diet is critical to those who suffer from PCOS.

#### **TREATMENT**

There is no known cure for PCOS, although it is possible to manage its symptoms medically and through lifestyle modifications.

The Ketogenic diet has produced very good results in managing the symptoms of PCOS. By reducing or eliminating carbohydrates altogether and increasing consumption of saturated fats, a ketogenic diet can lead to significant reductions in

body weight, and lower percent free testosterone, LH/FSH ratio, and fasting serum insulin in as little as six months.

#### **CONCEIVING WITH PCOS**

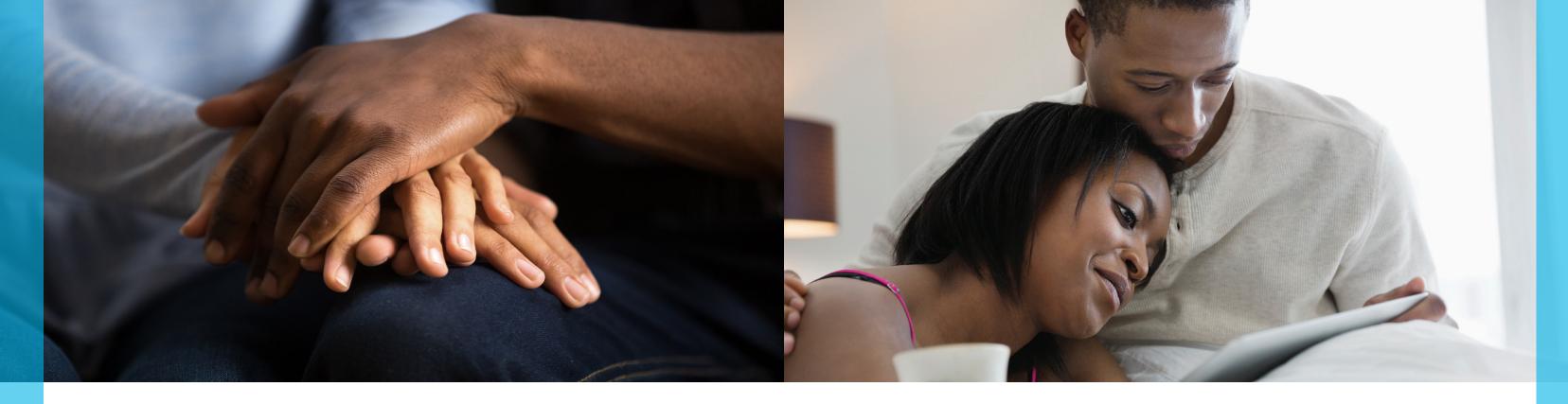
The good news is that your chances of getting pregnant with PCOS using fertility treatments are very good. The great majority of women with PCOS will be able to have a baby. Women with PCOS generally need ovulation induction in order to get pregnant. This can be accomplished through the use of oral medications such as metformin, Clomid or Letrozole (Femara). These medications can be effective in stimulating ovulation in some women with polycystic ovaries and anovulation. Metformin is used to reduce high insulin levels and stabilize your hormones. It can be used alone or in combination with Clomid or Femara.

Some women do not respond and ovulate with Clomid, but will respond well to letrozole. Injectables can also be used. For women who do not ovulate with Clomid or Femara, the traditional next step is to use injectable gonadotropins. The woman takes daily shots of FSH hormone for about 10 to 12 days in order to stimulate mature follicle development.

Progressing to IVF is usually recommended after ovulation induction with intercourse and induction with IUI have not resulted in pregnancy.

There are also some surgical interventions, including ovarian drilling. This is when a doctor punctures the ovary with a small needle carrying an electric current to destroy a small portion of the ovary. This surgical procedure may lower male hormone levels and help with ovulation, but it also carries a risk of developing scar tissue on the ovary and the benefits may only last a few months. Both the risks and the benefits of ovarian drilling should be discussed with your doctor to determine if it is the right treatment for you.

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## Unexplained Infertility= Inflammation

A diagnosis of unexplained infertility or idiopathic infertility is usually made when all of our testing is complete and there is not an obvious source of the problem. The man's sperm count looks reasonably normal in volume, motility, concentration and morphology. The woman has regular menstrual cycles which indicate she is likely ovulating. The hysterosalpingogram shows that the fallopian tubes and uterus are in normal condition. And, there are no obvious, systemic diseases (such as autoimmune diseases, diabetes, or previous history of cancer, radiation or chemotherapy) that may explain a history of infertility. Ovarian reserve is good and the woman has an AMH (Anti-Müllerian Hormone) level of greater than 1. It is important to understand what unexplained infertility really means:

The diagnostic testing we have available will only identify the major reasons why a couple may have a difficult time getting pregnant and staying pregnant, but it certainly cannot identify all of the reasons.

About 20-30% of couples will have no definitive diagnosis after completing a standard infertility evaluation. True unexplained infertility may be related to egg and sperm dysfunction, among other causes. These conditions are difficult to establish through conventional testing. If the fallopian tubes are blocked or there is no sperm, these are obvious major obstacles to becoming pregnant.

Unfortunately, there are no tests available for more subtle infertility factors such as inadequate egg quality which could result in fertilization failure. In today's fast-paced treatment paradigm, some patients prefer to move forward with treatment without further clarification. Although oftentimes appropriate, this strategy should not be applied to every patient/couple. Laparoscopy and hysteroscopy are minimally invasive, out-patient surgeries that can provide a diagnosis and sometimes even offer improved pregnancy rates if scar tissue or endometriosis is found and treated at the time of surgery.

It is humbling to put into perspective that even among fertile couples who have no issues getting pregnant, they only have a 20% chance of achieving pregnancy any given month they try. In otherwords, they are unsuccessful 80% of the time!

Dr. Kiltz believes that unexplained infertility is likely related to our daily environment, major and minor stress factors, and diet. Stress and our environment are known to affect cortisol and epinephrine levels, and have a significant effect on the immune system.

## UNEXPLAINED INFERTILITY IS COMPLEX AND LIKELY RELATED TO OUR DAILY ENVIRONMENT, MAJOR AND MINOR STRESS FACTORS, AND DIET.

There is considerable evidence that diets high in carbohydrates have not only created the significant obesity problem in our modern world, but also an explosive number of autoimmune issues that affect every organ system, including both the female and male reproductive systems.

#### It is our belief that inflammation is probably the number one source of fertility dysfunction.

This means reduced chances of conceiving and implanting, and a significant increase in miscarriages. It may even be related to spontaneous chromosomal abnormalities with DNA damage due to chronic or acute inflammation.

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## Treatment Options

After thorough testing of both partners and identifying potential factors contributing to a couple's infertility, treatment options will be recommended based on their individual needs.

If my uterus/fallopian tubes/ovaries are normal, with normal sperm and I appear to be ovulating, my per cycle success is:

Continued trying on own/month	1-5% per cycle	
Intercourse Cycles with Fertility Medications	1-5% per cycle	
Intrauterine Insemination (IUI) with Fertility Medications	10-20% per cycle	
In Vitro Fertilization (IVF) with Fertility Medications	20-50% per cycle	
Donor Eggs	40-60% per cycle	

#### **OVULATION INDUCTION**

For those women with ovulation disorders, Polycystic Ovarian Syndrome, or irregular menstrual cycles, an oral hormone medication such as Letrozole (Femara) may be prescribed. These medications are designed to stimulate **ovulation**. Letrozole is often combined with ultrasound to monitor the ovaries and blood tests to monitor hormone levels. Letrozole can be used in conjunction with both timed intercourse or intrauterine insemination. Gonadotropins are injectable fertility medications that work directly on the ovaries to produce follicles/eggs. The injections are given daily for approximately 10-12 days. During gonadotropin treatment, frequent monitoring with ultrasounds and blood hormone levels is necessary to closely monitor egg/follicle development. If a couple does not conceive after 3-6 cycles of gonadotropins, it is time to reevaluate and move on to alternative treatments.

#### **INTRAUTERINE INSEMINATION (IUI)**

For those women whose tubes are not severely damaged and have a normal HSG, intrauterine insemination (IUI) may be an option. In this fairly simple procedure, sperm is placed within the uterus around the time of ovulation. The woman's eggs are allowed to travel down her tubes on their own. Ovulation induction combined with IUI is often the first course of treatment. IUI alone offers a 3-6%\* conception rate per cycle while combining Letrozole with IUI may boost this up to 9%\*. Gonadotropins combined with IUI offers a 15-20%\* per cycle conception rate (\*minimal to mild tubal damage, normal to mild sperm abnormalities and women less than 40 years old.)

#### **IVF**

In Vitro Fertilization (IVF) offers a much higher chance of success per cycle for tubal damage than surgery. Tubal scar tissue is often inside the fallopian tube, but laparoscopic surgery can only repair the outside of the tube. During IVF, ovaries are stimulated to develop eggs and then the eggs are collected. The eggs are injected with sperm and incubated overnight to fertilize. The resulting embryos are incubated for up to 5 days and are placed in the woman's uterus.

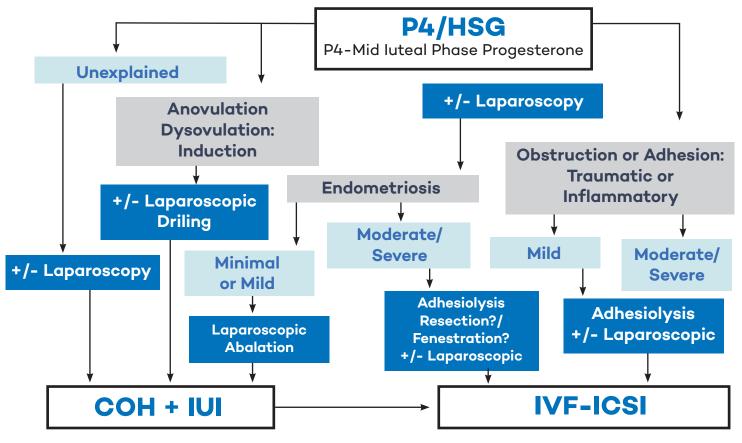
#### **DONOR EGGS / SPERM**

For couples and individuals who experience a lack of eggs or sperm, or whose eggs or sperm will not allow development into viable embryos, using donated eggs or sperm (or both in some cases) is a course of treatment worth consideration. Donors are usually anonymous, though not necessarily so—as in cases using family members or significant others. Egg donation is a viable option for women whose ovaries no longer produce eggs or whose eggs cannot develop into viable embryos. It is also an

option for those couples who wish to maintain a biological link by using the partner's sperm. Sperm donation has been around for many years and has been socially acceptable for some time. Not only can a single woman, or women who do not have male partners, become pregnant using donated sperm, but males who have severe sperm abnormalities or no sperm at all, or even potentially serious genetic traits they do not wish to pass on, can benefit. Donors are screened for STDs, heredity and genetic diseases and blood disorders. Donors can be found who are a close physical and mental match of the recipient.

Embryo Donation is now another option available to our clients seeking to either create, or expand their families. Often when families undergo IVF treatments, they are left with remaining fertilized eggs (embryos). This can place the parents in a difficult position when they begin to discuss what to do with the remaining embryos. Previously, the only options available have been to donate the remaining embryos to research, keep them frozen indefinitely, or to dispose of them. We are now able to add a fourth option, Embryo Donation.

#### Female Fertility Workup





#### WHAT'S REALLY INVOLVED?

In Vitro Fertilization (IVF) is the process during which a physician removes one or more eggs from a woman's ovaries and then, in an embryology laboratory, uses sperm to fertilize, or inseminate, them.

In recent years, IVF has become synonymous with fertility treatment due to its high rate of use by fertility clinics and its success rate. First performed successfully in 1977, IVF is now the most commonly used assisted reproductive technology (ART) procedure, with data indicating nearly 1.5 million ART cycles are performed globally each year.

Estimates suggest between one and two percent of all births in the United States now occur as a result of IVF, and that number only appears to be growing due to significant technological advances. IVF is commonly indicated for a variety of diagnoses, including:

- Advanced maternal age
- Unexplained fertility
- Fallopian tube damage or tubal ligation
- Male factor infertility
- Endometriosis
- Recurrent pregnancy loss

 Genetic abnormalities. At CNY Fertility, IVF is performed as an out-patient procedure in our offices. A Typical IVF Calendar (based on 28-day menstrual cycle). See diagram on page 31.

#### THE PROCESS

An IVF cycle begins with the onset of your menstrual period. You will need to call our office on the first day of your menstrual cycle to schedule a baseline exam for days 2, 3 or 4 of your cycle. Your appointment will also include blood work and a transvaginal ultrasound. At this appointment your treatment protocol will be outlined, and we will give you oneon-one instructions about administering your medications that you will begin taking that evening.

Your appointments for follow-up monitoring will be scheduled, and we will monitor your progress every 2-4 days during your stimulation.

#### **STEP ONE:** Ovarian Stimulation

During a woman's normal ovulation cycle, only one egg matures each month. With IVF, it is best to have multiple mature eggs available, as this increases your chances of success. To do this, the ovaries must be stimulated to release additional eggs.

During the stimulation phase of an IVF cycle, you will use injectable medications to stimulate the ovaries to produce eggs. Follicle-stimulating hormone (FSH) and luteinizing hormone (LH), which are both produced naturally within the body, may be used. During this part of your cycle, you will need to come into the office several times for regular monitoring, which allows us to track the progress of follicle development using an ultrasound and adjust medication as needed. Stimulation typically occurs for 10-12 days.

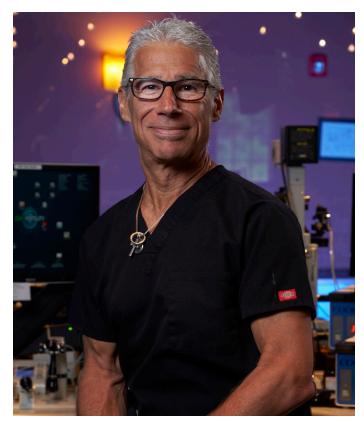
Once your follicles grow to approximately 13 mm and/or your estrogen level reaches a certain level, the staff will instruct you to begin your antagonist injection (Cetrotide or Ganirelix). The final step in the stimulation phase of treatment is the trigger shot.

The trigger shot helps the developing eggs complete the maturation process and begins ovulation. You will use either a human chorionic gonadotropin (hCG) or Lupron trigger shot. Egg retrieval will be scheduled 35 hours after this injection. You should not have intercourse during the time between the trigger injection and egg retrieval.

#### **STEP TWO:** Egg Retrieval

Egg retrieval is an office procedure that requires a sterile environment, which is why partners are not allowed to be present in the room. During the procedure, you will be temporarily put to sleep, and you will not experience any discomfort. Prior to your retrieval, you will meet with your doctor and an anesthesiologist, who will review your medical history and administer intravenous fluids.

**Egg retrieval can take anywhere from 5-20 minutes.** Using ultrasound as a guide, a thin needle is passed through the top of the vagina and into the ovarian follicles. This nonsurgical



procedure is possible because the ovaries are located directly next to the vagina. The needle enters the follicles and removes the follicular fluid which contains the eggs. The fluid is then examined under a microscope to identify the eggs.

Recovery takes about 30 minutes, and you will be able to walk out on your own. A responsible adult should drive you home after the procedure as it is unsafe to drive after receiving anesthesia. Egg retrieval is a very safe procedure and serious complications are rare.

#### **STEP THREE: Fertilization**

The number of eggs retrieved will depend upon your age and response to hormones. But on average, 6 - 12 eggs are developed. As soon as the eggs are identified under the microscope, they are placed in Petri dishes which contain a culture medium that very closely resembles your own body's fallopian tube secretion. The eggs, and subsequently the embryos, will develop in the Petri dishes just as they would in your own body. The dishes are kept in an incubator at a constant temperature of 37°C, 100% humidity and 5% CO2 concentration.

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At the time of egg retrieval, the male partner will collect his sperm by masturbating into a clean cup. If you're using a frozen sperm sample or donor sperm that was previously collected, the technician will verify those details with you. The semen is then washed and processed to remove the seminal fluid to get the highest quality sperm possible for fertilization.

It takes about four to six hours after retrieval for the eggs to finally mature to the point that they are ready for insemination. There are two ways that fertilization can occur: conventional insemination or intracytoplasmic sperm injection (ICSI).

In conventional insemination, an embryologist isolates the healthiest sperm and then combines the eggs and sperm in a Petri dish. They are left together in an incubator for about 18 hours, giving them time to combine on their own and fertilize.

During ICSI, a single sperm is directly injected into the center of an egg using an extremely small glass needle under a microscope. Although ICSI was originally developed to help couples with male factor infertility or previous low or failed fertilization, we are using ICSI even in normal cases to ensure that the best eggs are indeed fertilized.

The fertilized eggs, now called embryos, continue to grow in our IVF laboratory. In three to five days, you will return for embryo transfer.

#### STEP FOUR: Embryo Development

It's our goal to transfer the highest-quality embryo(s) in order to give you the greatest chance of reproductive success. Embryo development begins immediately after fertilization. An embryologist will examine each developing embryo during the 5 to 6 days following insemination, looking for progressive development. They look for a two- to four-cell embryo on day 2 and a six- to eight-cell embryo on day 3. After the eight-cell stage, rapid cell division continues and the embryo enters into what is called the blastocyst stage around day 5 or 6.

#### **STEP FIVE: Embryo Transfer**

One of our practitioners, along with the embryologist team, will examine the embryos before transfer to determine the likelihood that any given embryo will implant. The quality of the embryos is very important. Several other factors may determine how many embryos will be transferred, such as your age, how many years you have been infertile and the number of previous IVF cycles. Most couples with average embryo quality usually select between two or three embryos to transfer. Generally, the pregnancy rate increases as more embryos are transferred, but so does the chance for multiple pregnancies. These issues will be discussed prior to your embryo transfer.

The actual transfer is a brief procedure. The embryos are "loaded" into the tip of a catheter along with a very small amount of transfer medium. The catheter is then gently passed through the cervical canal and into the uterus. You usually won't feel this. The embryos are slowly expelled near the top of the uterus. This transfer only takes a few minutes. You will rest in our office for approximately 15 minutes and be discharged home to rest the remainder of that day.

#### **STEP SIX: Establishing Pregnancy**

To help your body prepare itself for the embryos, you will be given daily progesterone to supplement your own. This additional progesterone starts the day after egg retrieval and continues for at least two weeks. Progesterone is a hormone which transforms the lining of the uterus to be an ideal receptor for the embryos, increasing the odds of implantation, and assisting in establishing pregnancy.

#### After the embryo transfer, it's now up to nature.

The front and back walls of the uterus gently squeeze the embryos and keeps them in the uterine cavity. Your embryos cannot fall out, so there is no need to restrict physical or sexual activity. Even so, it is wise to wait a few days before resuming any strenuous activity.



#### **STEP SEVEN:** The Pregnancy Test

Two weeks after embryo transfer, you will need to have blood drawn so that a blood pregnancy test can be performed. Because the hormones used to trigger ovulation can still be in your system, at-home pregnancy tests can yield a false positive and should not be used. Often called a "beta" because it measures the beta chain portion of the hCG hormone emitted by the developing embryo, a blood pregnancy test will give a reliable indication of whether you are pregnant or not. This can be done at any lab of your choice. Your results should be available the same day.

If the pregnancy test is positive, we will repeat this test in 2-3 days to ensure an appropriate rise. An ultrasound will be scheduled for one week later to determine the implantation site and to detect a heartbeat, if possible. The heartbeat should be seen by four weeks after a positive pregnancy test. At this time, you will be given instructions regarding progesterone or other medication use.

Once a heartbeat is detected, there is a 90-95% probability that the pregnancy will continue to a live birth. There is only a 5-10% chance of miscarriage. IVF pregnancies are no higher a risk than natural pregnancies. Around 12 weeks into your pregnancy, you can return to your obstetrician for routine prenatal care. If the pregnancy test comes back negative, you can stop taking progesterone. Your period should start in a few days. You can begin another IVF cycle as soon after as you desire.

There are several factors to consider before deciding on how many IVF cycles you will try before moving on to other treatments. These factors include your response, age, previous number of IVF cycles, and the number of years you have been infertile. Just because you do not become pregnant after one, two or even three tries, does not mean your chances of becoming pregnant are slim.

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## ONY FERTILITY

## Preimplantation Genetic Testing (PGT)



## WHAT IF YOU COULD FIND OUT ABOUT THE HEALTH OF YOUR BABY BEFORE YOU WERE EVEN PREGNANT?

Preimplantation Genetic Testing (formerly known as PGS and PGD) are genetic tests that can be performed alongside IVF to provide important information about your embryo's health.

#### PGT-A: PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDIES

#### Which Embryo Should I Transfer?

After egg and sperm collection, fertilization, and several days of growth, IVF embryos are ready for transfer. Traditionally, embryos are graded based on morphology (shape, size, and appearance) as well as other visible characteristics; then, the one(s) with the best

grade is transferred. However, in recent years, it has been determined that what's on the inside—the embryo's genetic makeup—may be an even better predictor of an embryo's chance of implanting and leading to pregnancy. PGT-A is a test performed on embryos prior to transfer to determine the number of chromosomes present, providing important

information about their genetic health. This information can help your care team decide which embryo has the best chance of success.

#### Why Are Chromosomes Important?

Chromosomes are the structures within our cells that hold our genetic information. Humans typically have 46 chromosomes divided into 23 pairs. One chromosome in each pair is inherited from the egg and the other from the sperm. Because chromosomes are essential to development, embryos with missing chromosomes (referred to as monosomy) typically fail to implant, while embryos with extra chromosomes (referred to as trisomy) typically result in a miscarriage. There some cases in which embryos with extra or missing chromosomes can lead to a live birth, but often the child will be affected with a genetic condition that impacts their health and well-being. One trisomy that can result in a liveborn child is trisomy 21, also known as Down syndrome. While everyone is at risk of producing embryos with the incorrect number of chromosomes, this risk increases as a woman aets older.

#### How can PGT-A Help?

By identifying embryos with the correct number of chromosomes (also called euploid embryos), PGT-A can:

- Increase the chance of implantation
- Reduce the risk of miscarriage
- Reduce the risk of having a child with a genetic condition

#### Is PGT-A Right for Me?

PGT-A is appropriate for the vast majority of patients undergoing IVF. You may consider PGT-A if:

- You want to increase the chance of IVF success and potentially reduce the number of cycles required to achieve success
- You have previously had a miscarriage or failed IVF cycle
- You are 35 years old or older PGT-A is an IVF add-on that does not require any extra medications or procedures other than an embryo biopsy to collect the samples for the lab.

### PGT-M: PREIMPLANTATION GENETIC TESTING FOR MONOGENIC/SINGLE GENE DEFECTS PGT-A & PGT-M-

#### What's the Difference?

Unlike PGT-A, in which all of an embryo's chromosomes are screened, PGT-M involves testing embryos for an already known chromosomal or genetic abnormality. While PGT-A is appropriate for almost any IVF patient, PGT-M is an option for families who know they are at risk of passing on a specific inherited genetic disease.

This includes families in which:

- Both partners are carriers of an autosomal recessive condition
- The female partner is a carrier of an X-linked condition
- One partner has an autosomal dominant condition
- One or both partners carry a chromosome rearrangement

Couples undergoing PGT-M often decide to add on PGT-A testing as well to gain even more information about their embryos' health.

#### What Diseases can PGT-M Test for?

PGT-M can be performed for almost any condition in which the specific mutation or alteration is known, including cystic fibrosis, Fragile X syndrome, Huntington's disease, and inherited cancer syndromes (e.g. BRCA).

#### **How is PGT-M Performed?**

PGT-M is a more involved process than PGT-A

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because the PGT-M test is created uniquely for each family. First, the family will speak with a genetic counselor to determine if PGT-M is appropriate for them. If they decide to move forward, the PGT-M laboratory will begin to build the family's unique PGT-M test. Sometimes this involves getting DNA samples from other family members. Then, the couple will undergo IVF and a small sample of cells will be taken from the resulting embryos and sent to the laboratory for testing. Once the PGT-M procedure has been performed and embryos free of the genetic condition have been identified, an unaffected embryo is transferred to the uterus. Any additional unaffected embryos may be frozen for future use.

While PGT-M helps reduce the chance of conceiving a child with a genetic disorder, it cannot completely eliminate this risk. Prenatal testing is recommended for any resulting pregnancies to confirm the health of the pregnancy.

### PGT-SR: PREIMPLANTATION GENETIC TESTING FOR CHROMOSOMAL STRUCTURAL REARRANGEMENTS

PGT-SR is a genetic test designed to detect inherited rearrangements and increase the chance of a successful pregnancy. Chromosomal rearrangements are due to changes in the arrangement and/or size of the chromosomes. These types of rearrangements result in an increased risk of producing embryos with the incorrect amount of genetic material. If you or your partner are a carrier of an inversion, reciprocal translocation or a Robertsonian translocation, PGT-SR can be performed to improve the chance of a healthy pregnancy. If you think PGT may be right for you, talk to your care team about getting started. CNY Fertility partners with CooperGenomics, the leading reproductive genetics laboratory, to offer the highest quality Preimplantation Genetic Testing to our patients.

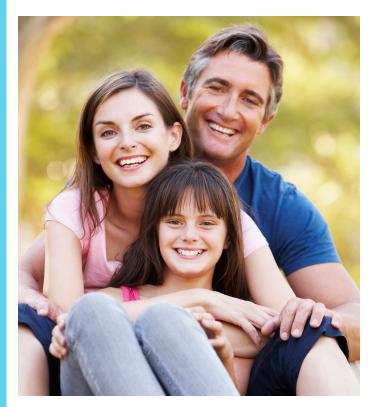
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Reprogenetics™ Recombine™ Genesis Genetics™

## NIV EEDTII ITV

## The Donor Decision



#### Making the decision to use donor eggs, sperm or embryos is a complex and important one.

When a couple decides to move forward with donor egg treatment, we provide them with a specialized donor care team featuring the following members:

- Donor nurse
- Clinical assistant
- Recipient liaison
- Financial coordinator
- Psychologist/social worker with expertise in fertility and third-party reproduction

Though the patient will not be using her own eggs, she will still be carrying the child, so she must undergo the same screening as all infertility patients (the same goes for her partner). After you have completed all testing and the physician has reviewed your results with you, you will then need to decide on a financial program. This is a situation unique to donor egg treatment, in that the financial program chosen can directly impact the treatment schedule.

#### **SELECTING AN EGG DONOR**

At CNY Fertility, our goal is to make the egg donor selection process as smooth as possible for our clients. One way we do this is by ensuring all of our donors have been through a rigorous screening process before they ever appear in our donor database. CNY Fertility actively recruits and screens young, healthy fertile women between the ages of 20 and 32. Although egg donors are compensated financially, we have found that the majority of women who donate their eggs are motivated by a strong altruistic desire to help others have families.

The recruitment process includes medical, genetic and psychological screening as well as personal interviews, routine bloodwork and lab tests. In addition, all donors must test negative for the AIDS virus, Hepatitis B and C, Syphilis, CMV and STDs such as gonorrhea and Chlamydia. All ethnic donors are tested for Tay Sachs (Jewish donors), Thalassemia and Hemoglobinopathies (Mediterranean descent), and Cystic Fibrosis. These tests are repeated every six months or before any donation for as long as the donors participate in the program.

Donors are screened and selected according to the regulations of the New York State

Department of Health, standards of the AATB and guidelines of the American Society of Reproductive Medicine. Our donor process is anonymous, but completely transparent, and the donor database provides patients with a wealth of information. Each donor has a profile featuring demographic characteristics (eye color, race, ethnicity, etc.)

Additionally, some recipients may opt for a known donor (i.e., a friend or family member) or go through an agency. In either instance, donors will still undergo the same medical and psychological screening as donors recruited by CNY Fertility.



#### **DONOR SPERM**

If you experience infertility due to a low sperm count, a complete lack of sperm or are a same sex couple or single parent, you can often still achieve a pregnancy using donor sperm. We can recommend several reputable sperm banks so you have a choice of donors. The sperm banks we recommend follow FDA guidelines when testing for infectious disease prior to releasing the sperm. Donor sperm can be used for insemination (IUI) or in vitro fertilization (IVF).

Choosing a sperm donor is a very important decision, and each person brings their own perspective to this challenge. You will select your sperm donor using the sperm bank's website. Sperm donors may or may not be anonymous, but donors often provide a childhood picture. The donor database offers personal demographics (i.e., hair color, height, ethnicity, etc.), and sometimes essays written by the donor. Some sperm banks even offer voice recordings of interviews with the donor. In some cases, recipients can find out if previous pregnancies have resulted from that donor's sperm. In the case of a known donor (i.e., a friend or family member), you will still need to have an

infertility work-up and the required FDA testing. From there, you will undergo an intrauterine insemination (IUI) or in vitro fertilization (IVF) cycle using the donated sperm. Additional frozen sperm specimens can be stored at our center for future use.

#### **DONOR EMBRYOS**

Often when families undergo IVF treatments, they are left with remaining embryos. This can place parents in the difficult position of deciding what to do with them. Previously, the only options available were to donate the embryos to research, keep them frozen indefinitely, or dispose of them. There is now offer a fourth option: embryo donation. Because of these parents' generosity, we are able to provide other clients the opportunity to use donor embryos for their cycle(s). While it can be difficult to come to terms with the emotions of not having your own biological child, using donated embryos can eliminate the imbalance of only onehalf of the couple having a genetic connection to their child. Using donated embryos can also be less expensive than using donor eggs. And, since the embryo is already created, another step in the process is eliminated.

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#### TRAVELING FOR FERTILITY TREATMENT

Many people hear about CNY Fertility, our affordable pricing and flexible payment plans and wonder "Too good to be true?". Then they do some research about CNY Fertility, discover our patients receive incredible care, our providers are dedicated to every client with 24/7 on-call nurses to answer urgent questions or resolve critical matters, and CNY Fertility is among the top 10 fertility clinics in the nation. The next question is usually "Can I travel to CNY for an IUI, IVF, Tubal Reversal or other fertility treatment?"

The simple answer is yes. In fact, over one-third of our clients come from outside the State of New York and about 3-5% from outside the United States.

Fertility treatment can be a stressful time, and certainly traveling for care can add an additional stressor, but most clients find the benefits of traveling to CNY Fertility far outweigh any additional inconvenience. Most of your treatment and all of your monitoring can be done remotely, so you only need to travel to CNY for your actual fertility procedures (insemination, egg retrieval, embryo transfer, tubal ligation reversal, etc.).

In fact, CNY Fertility makes the process as

simple and smooth as possible through our dedicated travel team. Our dedicated travel team will guide your remote treatment every step of the way from beginning to end. Even though your monitoring is done elsewhere, we will always be in control of what's happening. Our team will instruct you as to what tests are needed, make any necessary medication changes, answer your questions, and closely guide your treatment.

#### **HOW IT WORKS**

You might be asking, how does this even work, how often/when do I travel, how do I plan? To help explain it all, here are CNY Fertility's 9 Steps for Traveling to CNY Fertility for IVF.

#### **Step One: Schedule Your Consultation**

This may seem like a no-brainer, but the first step toward becoming a travel client at CNY Fertility is to schedule your initial consultation. We typically schedule appointments multiple months in advance, so we recommend you schedule your consultation as soon as you know it's something you'd like to pursue.

You can schedule your phone consultation by calling us at 844-315-2229 or by filling out an online appointment request form. If you leave a message or fill out the form, please allow up to one week for our team to respond. After you have scheduled your appointment, you can

focus on writing down a list of questions you and your partner have so you don't forget to ask anything during your consultation.

In preparation for any fertility treatment, we recommend women begin a high fat/low carbohydrate (keto) diet as well as a host of supplements: Ovavite, Theromega, Ovasitol, Vitamin D (if lower than 30), and DHEA (unless you have PCOS). For men we recommend the same high fat/low carbohydrate diet, Conception XR, Theromega, Ovasitol, Vitamin D (if lower than 30), and NeoQ10. You can buy these for a discount on the Theralogix website with the Provider Referral Code 113205. Additionally, if you have any medical records from prior treatment (including but not limited to blood work, ultrasounds, HSG, or semen analysis), it is very helpful to fax them to our office. Fax numbers can be found on our website at the bottom of every page.

#### **Step Two:** Your Phone/Video Consultation

Your initial consultation will most likely be over the phone. While you are welcome to come for an in-person consultation, the vast majority of our travel clients opt to have a phone/Facetime/ Skype consultation and forego the additional expense of travel. This is your time to ask all of those questions you've written down. You may also find it beneficial to record your consultation so that you don't have to worry about taking notes or remembering everything that was said (of course, we will be taking notes on our end, but your own record will be beneficial for referencing in the weeks and months to come). After your initial consultation, a nurse will call you within a week to review your treatment protocol, order your medications, answer any other questions, and prepare you for the beginning of your treatment cycle. If you don't hear anything after one week, please message or call us to check in and get started.

Prior to starting your treatment cycle, you will need to have all of your medications and an established relationship with a local fertility clinic, OB/GYN, hospital, or other laboratory capable of providing same-day blood and ultrasound results. After your medications and monitoring facility are in order, you can start treatment at the beginning of your next cycle. You will be instructed to call our offices with the first day of your cycle. If you do not have regular cycles, you will just need to have all of your meds and a monitoring facility lined up to get started. During this time, our financial team will review your insurance coverage and determine what costs are covered and which will be out of pocket. We are happy to share details about our interest-free financing options as well.

#### **Step Three: Begin Local Monitoring**

Monitoring refers to the appointments you will need to have at your local fertility clinic or OB/GYN in order to check on your blood hormone levels as well as follicle and uterine lining development. You will receive a call the day of your baseline appointment to go over your medications, injection instructions, answer any new or remaining questions, and provide you with a rundown of what your monitoring schedule might look like. Most patients need to have monitoring done every few days once they start taking medications right up until their trigger. During this time, our team will be continually reviewing your results, updating any medications, instructing you on next steps, and answering all of your questions.

#### **Step Four: Booking Travel to CNY**

We encourage you not to book your flights until you have a date scheduled for retrieval. Usually a retrieval date is scheduled about halfway through your stimulation as we need to see how your follicles/eggs are developing. The number of and duration of your trips to one of our offices in Syracuse or Albany depend on whether you are doing a Fresh Transfer or a Frozen Embryo Transfer (FET). You'll need to be in the area the day before any procedure and should not leave until the day after any procedure. If someone else is driving you, it is okay to begin your drive home the same day as your procedure.

#### **Step Five: Egg Retrieval**

Your egg retrieval will take place in either our Albany or Syracuse office. You must be in the

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area the day prior to your egg retrieval in order to avoid any travel delays and to make your day as stress-free as possible. You can not have anything to eat or drink from midnight on starting the evening before your surgery. Before your retrieval, you will have some basic bloodwork performed as part of your pre-op work up, as well as meet with a nurse, embryologist, doctor, and anesthesiologist. You will be placed on monitors and put under MAC anesthesia (no tube down your throat like general anesthesia) for the duration of the procedure. The procedure itself only takes around 10-15 minutes from start to finish. You will likely wake up afterward thinking "That was

Most clients take around 30 minutes to recover from their egg retrieval (of course, this varies, but you will never be rushed or pushed out of our office before you are fully ready to go). After your retrieval, you will be given instructions, and we'll discuss your options of having a fresh or frozen transfer. If your hormone levels are off or if your uterine lining is not prepared for a transfer on the day of your retrieval, we will highly recommend proceeding with a frozen embryo transfer (FET), thereby allowing your body to reset and providing a more comforting home for your embryos. During this discussion, we will review any medications you will be taking prior to and after your transfer.

We encourage you to rest and relax as much as possible following your retrieval. The following day, you may resume your normal daily routine (minus any intense exercise). If you are flying, we urge you not to leave the area until the day following your procedure to avoid any complications. If you traveled by car, you may have someone else drive you home the same day (NOTE: you can NOT drive yourself). If you are staying in the area for a fresh transfer, then the day is yours to rest and relax.

#### **Step Six: Embryo Transfer**

How far away you live and whether you are doing a frozen or fresh transfer will dictate many of the logistics surrounding your embryo transfer. If you're doing a fresh transfer, many clients within driving range return home, while those requiring air travel often stay locally for another 3-5 days to complete their transfer in the same trip as their egg retrieval. If doing a frozen transfer, nearly everyone returns home for FET monitoring, choosing to return to CNY the day before their transfer. If this is the case, we again recommend not booking any flights until a transfer day is determined.

Similar to the Egg Retrieval, you will need to be in the area at least one day prior to your transfer. If you are driving, you may return home the same day. If you are flying, we recommend you wait until the day after your transfer. The embryo transfer itself is a simple procedure that takes only a few minutes. No anesthesia or recovery time is needed. To help your body prepare itself for the embryos, you will be given daily progesterone to supplement your own. Many clients also choose to do acupuncture and/or intralipids prior to transfer. The day of your transfer, one of our practitioners, along with the embryology team will examine the embryos to determine the best embryo to transfer.

By the time of your transfer, we will have reviewed the quantity and quality of embryos as well as the number of embryos that you would like to have transferred. During the transfer, the embryos are "loaded," into the tip of a catheter along with a very small amount of transfer medium. Your physician, a member of the embryology team, and a nurse will confirm your identity to ensure the embryos are properly matched. The catheter is then gently passed through the cervical canal and into the uterus using an abdominal ultrasound to provide visual guidance during the transfer. The embryos are slowly expelled near the top of the uterus. After carefully removing the catheter, an embryologist will double check that the embryos indeed left the catheter using a microscope. At this time, a nurse will provide you with instructions for the two-week wait.

#### Step Seven: The Two-Week Wait (TWW)

This is quite an exciting time, but it can be very stressful and anxiety provoking as you (and

your partner) await the results of your first pregnancy test. We recommend abstaining from any intense exercise and instead focusing on spending time with your partner. Light exercise like yoga and walking is recommended.

#### **Step Eight: Your Pregnancy Test**

Your pregnancy test will be done at a local lab near your home two weeks after your transfer (hence the two-week wait). We highly recommend patients not use over-the-counter pregnancy tests. Trigger shots and fertility meds can produce false positives. After a BFP (Big Fat Positive), you will continue to be monitored by your OB/GYN with CNY overseeing your care for 6-8 weeks.

#### **Step Nine: Discharge from CNY Fertility**

At 6-8 weeks of pregnancy, you will officially be discharged from CNY Fertility and continue care for the rest of your pregnancy with your local OB/GYN. By this time, you will likely have seen your OB/GYN already for your first prenatal appointment, but this marks your official release from CNY Fertility's monitoring and care.

Last but not least, we do have some

ADDITIONAL NOTES REGARDING

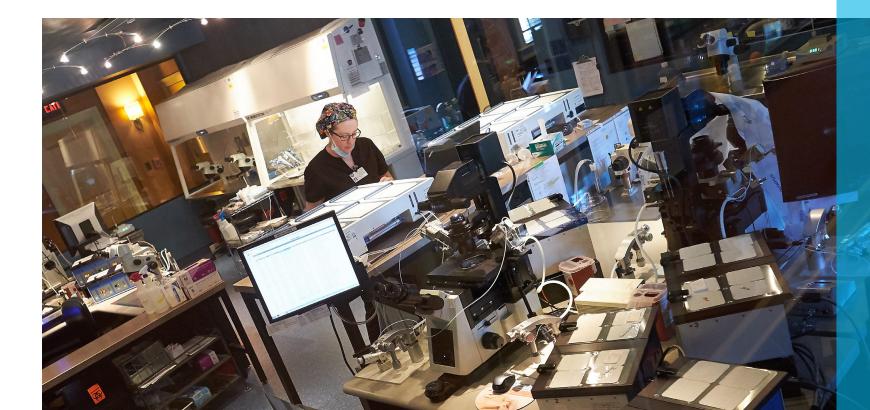
COMMUNICATION: We have a 24/7 on-call
nurse that can truly be used 24/7 for urgent
matters and questions. The patient portal web
correspondence is for general questions and will

be replied to within 24 hours. If you are having an emergency, you need to go to your local emergency department or urgent care facility.

#### WHY TRAVEL TO CNY?

There are many reasons to come to CNY for your treatment, but it mostly boils down to the incredible care you receive at CNY Fertility for a fraction of the cost of most fertility centers in the country. According to FertilityIQ, the average IVF cycle costs \$23,474. That includes \$5,000 for genetic testing (which is an additional service and at CNY Fertility costs substantially less – roughly \$300/embryo tested) and \$5,000 for medications. Subtracting the costs of both of these, the average IVF cycle costs around \$13,500.

At CNY Fertility, IVF is only \$3,900 while still maintaining the highest industry standards. When factoring in \$1,500 for potential travel expenses (air travel and hotel accommodations), you are still looking at a cost of only \$5,400. That translates into savings of \$8,000 or an extra IVF cycle and a half, which can make the difference between walking away after a failed cycle or having the opportunity to do multiple cycles and ultimately walking away with a baby in your arms.





Starting IVF can be so overwhelming. Add in IVF as an out of town patient, and it can all feel almost impossible! But luckily for us, we had the amazing travel team at CNY Fertility to support us, and they made the process much smoother than we imagined.

The first step for us was setting up our initial telephone consult. We ended up being extremely lucky and were able to get an appointment from the cancellation list about 6 weeks later. CNY Fertility is a very busy practice, so it can take some time to get a consult, but it's very much worth the wait.

Before our consult day arrived, we made sure to write down all of our questions so we didn't forget anything. We also made sure to set up a way to record our call, as was recommended by Dr. Kiltz, so we would have access to all the information he gave us at any time.

After our consult, a nurse with the travel team called to make sure we were clear on our protocol, answer any new questions we had, and explain how to access the forms in our patient portal. We were given a packet with an extensive checklist of all the testing and procedures we needed to complete prior to our IVF cycle. We also received our consent forms and prescription lists.

We had already completed most of the required testing with my previous fertility clinic, which really simplified things. I was able to take my lab requisition form for the blood tests I still needed over to a local lab and get blood drawn without any issues. If you want to get everything done before your consult, you can request a list of these labs/procedures from CNY and see if you can get with a local reproductive endocrinologist or OB/GYN to complete them.

As my checklist neared completion and day 1 of our IVF cycle got closer, I connected with Integrity RX to order all of our medications. They overnighted two huge boxes filled with everything that we would need; sharps containers, medications, syringes, alcohol wipes, and very detailed instructions on how to store and administer every medication.

I think the most daunting thing about being a traveling patient is figuring out where on earth you're going to do your monitoring\*. Being able to find a place who will book appointments for you at the very last minute, and has the ability to send stat results can be a challenge. Luckily for us, the fertility clinic we had been using in Texas has seen travel patients before and was familiar with my requests. So, we were able to do all of my labs and ultrasounds in one place. However, in communicating with other travel patients, I've learned that you can also call local

ultrasound clinics, and labs like LabCorp and Quest Diagnostics to assist you.

Once we had our checklist complete, our meds all accounted for, and a monitoring location locked in, all that was left to do was wait for day 1 of my cycle to begin. The day it finally arrived, I called and spoke with a nurse at CNY who uploaded my lab requisition form into my patient portal, and advised me which day I needed to go in for my baseline ultrasound and blood work. I then called my local clinic, set up my appointment, and sent over my lab requisition.

Our IVF cycle then began, and we went in every few days to measure the follicles in my ovaries and check my hormone levels. **CNY Fertility would call me in the afternoon and let me know how everything looked**, and either update my medication protocol or tell me to continue as I have been. Things really ramped up as my ovaries finally looked ready for the trigger shot and egg retrieval.

Once we had my retrieval date, we had about 3 days notice to be in Syracuse. This meant purchasing flights on short notice, but luckily we were able to find a great last minute deal! We booked a hotel in Syracuse located just a few minutes from the clinic and got ready to go. (Side note: if you're concerned about flying with IVF medications, don't worry! We carried on syringes and vials in a cooler bag and weren't given a single hassle by the TSA!)

We arrived in Syracuse the day before my egg retrieval surgery. It was all such a blur, so it was nice to have the evening to unwind and prepare myself mentally for my surgery the next day.

Our retrieval went off without a hitch, and we were able to retrieve 34 eggs! Because I was at a higher risk for Ovarian Hyper Stimulation Syndrome (OHSS), we decided to do a freeze all cycle instead of a fresh embryo transfer. This ended up being a very smart move because I did end up with OHSS which pushed our travel plans back a few days. Once we arrived home, we got our final embryology report: 17 made it to the blastocyst stage on day 5 and were successfully frozen! We planned our Frozen Embryo Transfer (FET) for my very next cycle.

Our FET pretty much followed the same pattern as our retrieval cycle, although we didn't have to go in

for monitoring appointments as frequently. We also had a little more notice before having to leave for Syracuse again. We stayed in Syracuse for 2 days during our FET before heading back to Texas. Once home, we did our "halfway labs" and then our long-awaited beta pregnancy test, which was positive! Our first FET was a success!

I strongly believe it was worth all of the extra steps that IVF as a travel patient requires. Most people will tell you that even with the price of monitoring at a separate clinic and last-minute travel, you still save so much money at CNY Fertility. They also have an extremely compassionate team. Seriously, Dr. Kiltz gives the best hugs!

I promise you, it sounds so much more overwhelming than it actually ends up being, and we are very happy with our experience at CNY Fertility.

-A CNY Fertility Graduate

\*Please note that CNY Fertility can help patients identify OB/GYNs, clinics, or labs in their area that can provide monitoring services. CNY Fertility has established a network of Monitoring Facilities across the nation that provide affordable monitoring and can turn around test results quickly.

If you have or know of an OB/GYN that would be interested in becoming a member of the CNY Fertility Alliance and offering monitoring services to travel patients, please have them contact us at 530-400-3864.



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When a man undergoes a vasectomy, it is most often used as a permanent form of birth control. However, life changes and many men decide they would once again like to have children. In this situation, a vasectomy reversal is often the preferred solution, however, another option includes a TESA/PESA in combination with IVF. In short, a vasectomy reversal is a surgery that reconnects the vas deferens, which was surgically severed during the vasectomy, once again allowing sperm (male gamete cell) to enter the semen (ejaculate). The vas deferens are the tubes that bring sperm from the testicles to seminal vesicles where they are allowed to mix with semen and become part of the ejaculate. By severing this tube, sperm is still produced in the testicles, but during orgasm, they can no longer be transported, mixed with semen, and eiaculated.

#### The Surgery

Very simply, during a vasectomy reversal, the surgeon will surgically reconnect the two halves of each vas deference, thereby allowing sperm to once again travel freely and mix with semen prior to ejaculation.

#### Recovery

Surgery usually takes about 2 to 4 hours, and you are able to go home the same day. **Recovery takes about 2 weeks.** Men should not have sex or ejaculate until your doctor tells you it is okay. Most doctors recommend that you wait 2 to 3 weeks to have sex.

#### How will i know if it was successful?

You'll know your vasectomy reversal was successful if sperm appear in your semen after a few months. Your doctor will collect semen samples and examine them regularly for 4 to 6 months after surgery, which is usually enough time for your counts to stabilize, although sometimes it takes longer.

#### Cost

The self-pay price for a **Vasectomy Reversal** is \$7,900 and includes: the cost of anesthesia, the surgery itself, a 2-week post-operative check-up, and regular sperm analysis/testing post-surgery. There may be additional fees based on your unique situation. After your initial consult, a \$4,000 down payment is required prior to scheduling surgery. In-house financing is available.

#### Other Alternatives

Men who have undergone a vasectomy and now wish to father a child have other options besides Vasectomy Reversal. if you hope to conceive naturally through intercourse, then having a vasectomy reversal is your only option. However, for those who this is not a concern, a Percutaneous Epididymal Sperm Aspiration (PESA) and Testicular Sperm Aspiration (TESA) coupled with In Vitro Fertilization (IVF) is also an effective option and offers a high chance of success at a more affordable cost. Consult with your doctor to decide which is the best option for you.

### Tubal Reversal with IVF

Many women decide to forgo the continuous and prolonged use of birth control and elect to have a tubal ligation after giving birth and completing their families. Having your "tubes tied", as it's commonly called, to prevent pregnancy is a fairly common procedure, but sometimes the unexpected happens or circumstances change within a family or with a partner, and a woman wishes to re-establish her ability to have children.

If you've had a tubal ligation procedure and wish to reverse it, CNY Fertility can perform tubal ligation reversal surgery on an out-patient basis at our Center of Superior Surgical Care using laparoscopic techniques that enable us to restore your fertility in a minimally invasive way. A tubal ligation reversal (TR), medically known as the Tubal Anastomosis, is the procedure by which a surgeon repairs a woman's fallopian tubes, thus restoring her natural fertility so that she will be able to again become pregnant. This microsurgery procedure enables us to reduce recovery time, makes the procedure affordable, and allows women to achieve high pregnancy rates post-surgery.

#### **The Surgery**

During a TR, our surgeon will reconnect both your left and right fallopian tubes by making careful incisions to reopen the surgically closed portion of your tubes. After ensuring that each tube is open by flushing them with colored water, the surgeon will then use sutures to reconnect the tubes. Once again, the surgeon will flush both tubes with liquid to ensure that each reconnected tube allows for sperm, egg, and embryo to flow freely through each tube without obstruction.

The surgery itself takes approximately 90 minutes. Tubal reversal enables most women to conceive naturally and without the use of fertility medications. Our medical team will consult with you to see if you're a good candidate for tubal reversal surgery or if you should choose In Vitro Fertilization (IVF), and to discuss the pros and cons of both options.

#### **Success Rates**

TR surgery at CNY Fertility offers our clients a fantastic opportunity to restore their natural

fertility, with roughly a 60-80% chance of attaining a natural pregnancy within two years of their surgery date. Your chance of becoming pregnant and delivering a baby is highly dependent on your personal fertility health and history. Our doctors will be happy to discuss your individual situation further during your consultation.

#### Recovery

Most women can resume walking the day of their operation and return to an exercise free version of their normal daily routine the next day. Still, we generally recommend those undergoing this surgery take off at least a week of work and abstain from all exercise for at least two weeks post-surgery. **Recovery time is generally 10-14 days.** 

#### Costs

Because tubal reversal is considered an elective procedure, it is unlikely to be covered by health insurance, Medicare or Medicaid.

#### THE SELF-PAY PRICE OF \$7,900 FOR TUBAL REVERSAL INCLUDES:

- The cost of anesthesia
- the surgery itself
- a 2-week post-operative check-up
- A complementary IVF cycle if you are unable to achieve pregnancy within 18 months of the surgery.

There may be additional fees based on your unique situation. In-house financing is available. Prior to surgery, patients are required to consult with one of CNY Fertility's doctors and have an ultrasound. We also require all surgical patients to have preoperative bloodwork. You will be given prescriptions for an antibiotic, pain medication, and possibly antinausea medicine.

Insurance may cover some of these additional fees.

After your initial consult, you will be required to make a deposit or first month's payment prior (if financing) prior to scheduling your surgery. We can usually schedule your surgery within a few months of your initial payment.

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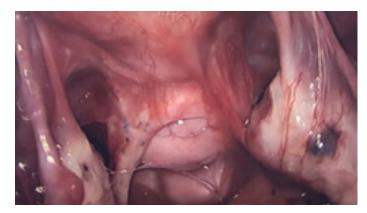
## CNY Fertility International Surgical Institute

#### PROVIDING MINIMALLY INVASIVE SURGERY FOR OUR FERTILITY PATIENTS

Specializing in Minimally Invasive Surgery (MIS), our expert surgeons at the CNY Fertility International Surgical Institute are recognized as leaders in the fields of laparoscopic and da Vinci robotic surgery. Sometimes referred to as "keyhole" surgery, MIS utilizes small incisions, tiny fiber optic lights and high definition monitors which allow our surgeons to correct many conditions without requiring patients to undergo major surgery or large incisions. Patients go home the same day and recovery time is generally shorter and less painful with minimal scarring.

#### We perform:

- Diagnosis and Treatment of Endometriosis
- Treatment of Fibroids (Myomas)
- **Tubal Reversal**
- Vasectomy Reversal



Endometriosis causing ovarian and pelvic adhesions



Solitary endometriosis nodule

## I Know Endo

#### BY MYRON O. LUTHRINGER. MD



The scientific community has yet to establish the exact cause and progression of endometriosis. Though many questions remain, thirty years of experience has allowed me to identify and successfully treat this common disease. Endometriosis (or "Endo") is a leading cause of infertility and may run in families. Up to 50% of affected patients may experience fertility issues. There is also a great variety of symptoms that may or may not be present in each patient. Many symptoms are not normal and should raise suspicion for endometriosis.

#### These include:

- crippling menstrual pain
- pelvic pain lasting throughout the month
- chronically heavy or long menstrual
- painful sexual activity (particularly with penetration)
- significant lower back pain with menses
- bowel or bladder disorders associated with periods
- allergies, migraines, or fatigue that tends to worsen around menses

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Many women experience no symptoms and are affected by "silent endometriosis". There is no definite non-surgical diagnostic test to confirm the presence of endo. Occasionally,

an ultrasound or pelvic exam can raise the suspicion if there are fixed, tender, nodular, or enlarged pelvic organs. Surgical observation and biopsy are the gold standards for diagnosis and treatment. Endometriosis starts when endometrial cells gain access to the abdominal cavity establishing a blood supply for survival. This causes a local inflammatory response leading to adhesions and scarring. There exists a poorly understood association with infertility at the chemical and immunologic levels. The pelvic reproductive organs (uterus, tubes, ovaries) are affected most often. Severe disease may involve the bowel, bladder, and distant parts of the body.

#### Endometriosis can influence fertility in multiple

- distorted anatomy of the pelvis
- adhesion formation
- scarred fallopian tubes
- inflammation of pelvic structures
- altered immune system functioning
- changes in the hormonal environment of the eggs
- disrupted fertilization
- impaired implantation of a pregnancy

Many different patterns of endo may be observed in the operating room. The surgical treatment will vary depending on the type and degree of the lesions encountered. The main goal of minimally invasive surgery (MIS) is to restore normal anatomy and function, leading to an increased pregnancy rate. One treatment plan does not fit all patients. Medical therapy to suppress hormones and regrowth may be used in combination with surgery. Even with the best medical and surgical treatment, reoccurrence may require repeat surgery in the future. Patients are encouraged to see their gynecologic provider should they demonstrate any of the above-mentioned symptoms.

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While other fields of medicine have understood for some time that our immune system is a common cause of many diseases, Reproductive Endocrinologists are only in the very nascent stages of grasping how important the immune system is to unlocking the mysteries of unexplained infertility. Our immune system is what keeps us alive, but it is also the source of numerous problems.

Reproductive Immunology is a field of medicine that studies the interactions between the immune system and the reproductive system. The current area of study in reproductive medicine is the role of the immune system in relation to recurrent pregnancy loss and repeated IVF failures. The immune system may react to an embryo as an "invader" and thus attempt to stop the growth of these cells.

Many treatments are being utilized in the field of reproductive medicine to reduce inflammation and suppress the immune system to support successful pregnancy outcomes.

For couples experiencing recurrent miscarriages, late pregnancy losses and repeated IVF failures, research and treatment in the area of immunology shows real promise, particularly in treating unexplained infertility. There are many different immunologic problems that can cause pregnancy loss, IVF failures and infertility.

Immunologic dysfunction is just one of a wide variety of problems that may lead to infertility and pregnancy loss. Indeed, a large number of pregnancies fail because of chromosomal abnormalities resulting in fetal demise. While we believe that these defects account for a very substantial portion of pregnancy losses, the defects occur randomly and thus are unlikely to be significant causes of recurrent pregnancy losses and repeated IVF failure, especially in younger patients.

"IT IS OUR BELIEF THAT DIET IS THE NUMBER ONE SOURCE OF CHRONIC INFLAMMATION AND FERTILITY DYSFUNCTION." Some of these problems can be measured with antibody testing: looking at anti-thyroid antibodies, rheumatoid factors or C-reactive protein, and looking at many other cytokines and white cell dysfunction, such as elevated natural killer cells. We can also take an endometrial sample to look at the pathology of the endometrial tissue to determine if there is abundant evidence of inflammation.

CNY Fertility offers the latest diagnostic testing and treatment options available for immunological conditions. Our oocyte enhancement and implantation enhancement protocols, in conjunction with our standard protocols, provide our clients with the very best opportunity for a successful pregnancy.

Recently, we have achieved success treating inflammation pharmacologically with low-dose steroids like Prednisone, Humira, intravenous immunoglobulins and intralipids which are made up of egg protein and soy fat. The fat appears to be a successful method of reducing the inflammation in our bodies.

However, since the source of inflammation is likely related to the food we eat, it only makes sense that making dietary changes can and will **reduce inflammation.** There is ample evidence that excessive amounts of carbohydrates, sugars, grains, fruits, fiber and vegetables along with milk products are very inflammatory to our bodies and increase the number of antigen/ antibody interactions. These white cells and cytokines that are enhanced in our bodies, in many cases, are not specific to a certain area. You might feel it in your joints, your skin, bowel, head, eyes, or you may not even feel it at all. But, you have a problem that results in repetitive pregnancy loss, failed implantation from IUI, IVF or natural cycles, or simply not conceiving.



#### **FAT IS WHERE IT'S AT**

The mitochondria of our cells need saturated fat (beef fat, pork fat, butter fat, and coconut fat). These are areas of research we are only beginning to study because we've had such a societal fear of fat. We've believed that fat gets us fat, but it's really fruit, fibers, vegetables, grains and milk that make us fat and chronically inflamed.

## "AT CNY FERTILITY, WE'VE BEEN INCREASINGLY FOCUSING ON DIET AS BEING THERAPEUTIC AND AS A WAY TO IMPROVE FERTILITY."

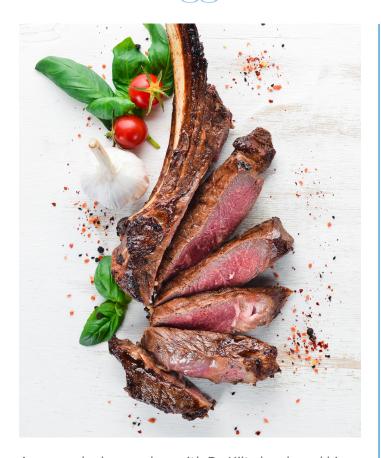
Increasing saturated fat intake and significantly reducing (or eliminating) carbs as part of a ketogenic food plan has yielded some eye-opening results. Our clients have many success stories to share. More than a few "ketobabies" have been born as a result of making these diet changes, many with no or limited reproductive assistance.

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# FOR COUPLES EXPERIENCING UNEXPLAINED INFERTILITY, RECURRENT PREGNANCY LOSS, AND REPEATED IVF FAILURES, WE BELIEVE IMMUNOLOGIC DYSFUNCTION MAY BE A ROOT CAUSE. ONE OF THE EASIEST WAYS TO IMPROVE IMMUNOLOGIC FUNCTION IS TO REDUCE INFLAMMATION BY EATING FAT AND REDUCING CARBS.

## Kiltz's Keto Cure:

#### Bacon/ Eggs/ Butter/ Beef/ Ice Cream



Anyone who has spoken with Dr. Kiltz has heard him repeat these five words – Bacon, Eggs, Butter, Beef, Ice Cream– like a mantra. They are the basis of Kiltz's Keto Cure or the B.E.B.B.I. Diet (pronounced "baby") and the foundation for many anti-inflammation food plans like the ketogenic and paleo diets.

Here is the simple truth: our bodies require fat for energy. If we can't eat fat or make fat, we die. Unfortunately, the majority of fat we consume is industrial, man-made fat. What we really need to be eating is nature's fat—that stuff that surrounds the animal or is intertwined and marbled in every nook and cranny of the meat. Choose fatty meats (like rib eye, pork belly, skin on chicken wings), skin on duck, bacon, fatty fish (like salmon), liver, eggs, butter, and heavy cream. Keep your meals narrow and simple. You may have also heard Dr. Kiltz refer to this as the Lion King/Queen Plan or Ferrari Fuel, but they are all the same thing.

#### Excessive sugar also leads to inflammation.

Most of us think of sugar as the container of white granular stuff we see on the coffee bar every day. In truth, all carbohydrates and all plant material (that's fruits, veggies, and fiber) are all converted to sugar as well and then into fat in the liver. Eating fat in its purest form is the simplest energy source for our bodies.

There are a lot of different food plans out there that focus on high fat / med-low protein / low carbs. They are pretty similar, but tend to differentiate themselves by their recommended fat and carb consumption. Paleo is about 20% protein, 70% fat, 10% carbs.

### Kiltz's Keto Cure is 80% fat, 20% protein, zero carbs. This is the key to health and wellness.

Any combination of bacon, eggs, butter, and beef (or fatty meat) is key to reducing inflammation. It's referred to as **The Lion King Plan**, because you're eating like the king of the jungle—high fat, a small amount of protein, and no carbohydrates. This means eliminating all fruits and vegetables as well, as they contain sugar and phytochemicals. A nice, fatty ribeye is a mainstay in Kiltz's Keto Cure.

#### "DR. KILTZ ALSO RECOMMENDS CLIENTS TAKE A LOOK AT INTERMITTENT FEASTING AS PART OF THE KETO LIFESTYLE."

Achieving ketosis means fasting between meals so that your body has time to use fat stores for energy and release ketones. Some refer to this as intermittent fasting, but since Dr. Kiltz is a proponent of eating one meal a day in the evening and giving the body time to rest and digest during sleep, he finds the term "intermittent feasting" to be more accurate. It's really in line with how prehistoric man lived: going for weeks without eating, not knowing

where or when his next meal was coming, feasting and then fasting, fasting, fasting while on the hunt for food. Dr. Jason Fung has a lot of good information on incorporating intermittent fasting into your lifestyle.

#### WHEN TO EAT:

Eat infrequently, once per day is best. Intermittent fasting (or intermittent "feasting" as we refer to it) is highly recommended with Kitz's Keto. This involves eating just one meal a day and allowing 12-24 hours between feedings. We are not herbivores. We're not grazers.

We're not meant to eat 3-5 meals a day with snacks in between, filling the gut with fiber and carbs that ferment and feed the bacteria and yeast causing more disease. It's best to eat just before bedtime, giving your body time to rest and digest while you sleep.

Our bodies are well- designed to go without food, yet most of us consume excessive calories that add fat to our bodies. Fat is meant to be there to help ensure our survival. We are meant to survive famine and drought, going weeks without food and days without water.

#### WHAT TO EAT:

#### Bacon, Eggs, Butter, Beef and Ice Cream.

Stay very narrow in your selection of foods. Stay away from lean meats and try to choose grass-fed, all-natural meats. You want to consume fatty meats like a rib-eye steak, not lean, fat-free chicken breast. You need to eat the fat. By adding fat, cream, butter, and eggs, you reduce inflammation, you reduce your appetite, you reduce your glucose levels, and your energy is so much better. All of the bowel problems go away, the skin problems and the joint problems are gone. Minimize the variety and simplify your meals. Eliminate pasta, bread, yogurt, milk, seeds, and nuts. Plant oils which harden when exposed to oxygen likely contain a multitude of plant antigens, which are harmful.

#### WHAT TO DRINK:

#### Water. Coffee. Tea

Copious amounts of water are not required. Have a cup of coffee or tea with cream or butter and a glass of water (still or bubbly with no added sugar) when you need it. The whole 8 glasses of water a day suggestion is overkill. Avoid alcohol in all forms.

Alcohol is toxic to your body.

#### **HOW MUCH TO EAT:**

Abundance is bad. Even though you're only eating one meal per day, portion control is still necessary. You will find that fatty meats are more filling than lean meats. You will likely feel full before you finish your meal.

#### **EXERCISE:**

Intentional movement is key, but avoid highenergy and high-impact exercise. Activities like running create additional friction, heat, trauma, and damage in the body. We are meant to walk, take in the sites, but don't run or churn away on the elliptical. Yoga is terrific. Tai Chi is as well. Slow movements accompanied by meditation and quiet thinking are great for your mind, body, and soul.

#### DR. ROB'S HOMEMADE ICE CREAM



**Note:** (recipe can be halved to make smaller portion depending on capacity of your ice cream maker)

#### Ingredients

- 2 pints Heavy Cream (no additives)
- 2 Tablespoons of pure cane granulated sugar
- 2 eggs (organic preferred)
- 2 Tablespoons pure vanilla extract

#### Instructions

Shake cream and pour into a large bowl. Add sugar, eggs, and vanilla extract. Whisk until well combined and frothy. Pour into ice cream machine and follow manufacturer's directions.

The Ketogenic

Food Plan

What we choose to put into our bodies can create inflammation and dysfunction, or it can be a source of wellness and healing. The Ketogenic Food Plan (yes, it is more than just a diet) is about eating to experience life, love, energy, and abundance.

For years and years, most of us believed what we were being told by health professionals, nutritionist and dietitians. Fat is bad. Eat low-fat. Eat plenty of fruits and vegetables. But in treating infertility, we have discovered the opposite to be true.

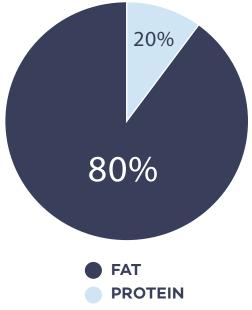
#### "FAT IS HEALING. FAT IS THE BUILDING BLOCK OF EVERY CELL IN OUR BODIES. FAT CAN REDUCE INFLAMMATION AND HELP OUR BODY TO REPAIR ITSELF."

The human body was built for survival, requiring fat and protein to provide the energy needed to bear the elements and go about the necessary functions of the day. The potential to eliminate our biggest health problems and concerns —including issues of fertility—has proven itself to be possible by going back to a basic diet, the one man first followed when he hunted the earth for sustenance. Increasing your saturated fat intake, limiting protein consumption, and significantly reducing (or eliminating) carbohydrates reduces inflammation throughout the body.

#### WHAT IS KETO?

The ketogenic diet or "keto" is a high-fat, adequate-protein, low-to no-carbohydrate diet that results in an overall reduction of glucose in the blood stream. It was first created back in the 1920s and 1930s as a treatment for epilepsy and diabetes. It was developed as an alternative to fasting, which had demonstrated success in controlling seizures. The later advancement of medications that could effectively control epilepsy saw the diet abandoned,

but renewed interest in the mid-1990s sparked research into using it to treat other disorders,

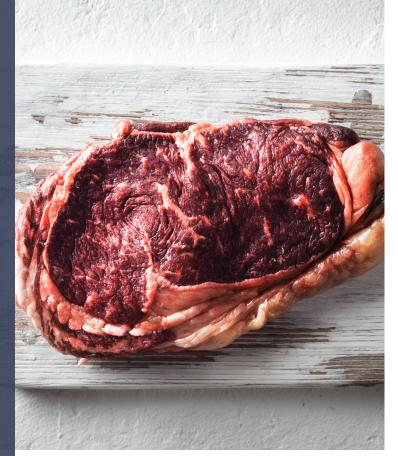


including heart disease, Parkinson's, Alzheimer's, ALS, diabetes, and a host of other medical conditions, including infertility.

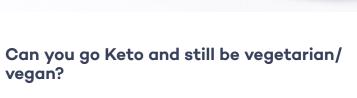
#### We use the term "ketogenic" to represent

**ketones.** Ketones are supposedly built when the body converts to burning fat instead of sugar. Dr. Kiltz believes we never burn glucose as fuel. Rather, we must convert sugar to fat for energy storage and the production of fatty acid short chain molecules to provide fuel for the mitochondria and thus ATP. ATP is the chemical energy produced by the mitochondria to keep the cells alive. Therefore, we are always burning fat (acetyl Co-A that comes from fatty acids) 24/7/365 regardless of what we're eating.

Our bodies can either make fat by converting carbohydrates and amino acids in the liver via insulin, or use the animal fat we eat for fuel. Acetoacetate, beta-hydroxybutyrate, and acetone are ketone bodies that can be measured. People perceive the elevated level of ketone bodies in the blood to be evidence of our bodies replacing glucose as a fuel source, but the presence of ketone bodies is really just a reflection of lower glucose levels. Ketone levels appear to be higher when glucose levels are lower. It's simply a matter of ratios.







Yes, although vegetarians will have an easier time doing this if they are still consuming eggs, butter, and cream. The key is to simplify the carbs and cook the vegetables down with some avocado oil, hemp seed oil or coconut oil. Don't consume them in the raw form. Raw fruits and vegetables contain a lot of bacteria, yeast, plant antigens and phytochemicals that can be dangerous and even deadly to our bodies. Phytochemicals are molecules that actually harm our bodies on a cellular level. They elicit immune reactions in our bodies that are damaging and deadly. Cooking down vegetables can kill bacteria and yeast and diminish the phytochemicals.

For couples experiencing unexplained fertility, recurrent pregnancy loss, and repeated IVF failures, we believe immunologic dysfunction may be a root cause. One of the easiest ways of improving immunologic function is to reduce inflammation by eating fat.

#### "IF WHAT YOU EAT ISN'T EITHER FAT OR A PROTEIN, IT'S SUGAR."

Vegetables are sugar. Whole grains are sugar. It's as simple as that. Keto is for everyone, not just fertility patients, the overweight, or diabetics. It's a lifestyle choice that has an immediate impact on your overall health and fertility.

#### If I'm trying to conceive, when should I go Keto?

NOW. There's no time like the present It only takes 2-4 weeks to change the body's metabolic environment and get rid of the inflammation or reduce it significantly.









## Getting Started on KETO

It's helpful to "buddy up" when starting Keto.

Adopting the Keto lifestyle with a partner or friend allows you to share, learn from and support each other. Many of our client couples go Keto together and find they are both happier and healthier. When it comes to fertility, both the man's and woman's health are important and play a role in conception.

And you don't have to go 100% Keto cold turkey. It's okay to take baby-steps and gradually incorporate the Keto lifestyle into your everyday living. Start by decreasing your carb intake and cutting out sugar. Consider eliminating all processed foods from your diet. If it comes in a bag or a box, it's processed. A good pantry and refrigerator clean-out can help reduce temptation. Donate unopened boxes and bags to your local food pantry. Then re-stock your refrigerator with real food, the way nature made it: fatty meats, poultry, and seafoods. Avoid foods with preservatives and coloring, both of which can be detrimental to our health. Buy organic when possible and grass-fed beef. Farmers markets are a great place to find locally grown/raised foods.

And don't expect to be perfect. None of us is. You will have days when you don't stick to your goals and you make bad food choices—you have a glass of wine with a friend or eat a couple French fries. That's okay. Just get back on track and stay focused.

The good news is that a keto diet is generally more fulfilling than one heavy in carbs and sugar.

Fats are filling. Even though you are eating less, you will feel fuller faster and not get hungry as fast because your sugar levels aren't on a roller coaster anymore.

#### GETTING STARTED ON KILTZ'S KETO:

- 1. Get rid of all sugar—any type.
- **2. Get rid of all grains** wheat, corn, rice, oats.
- 3. Get rid of all hydrogenated or partially hydrogenated oils (e.g. vegetables oils) canola oil, grapeseed oil, corn or sunflower oil, and most vegetable oils contain Polyunsaturated fatty acids (PUFAs) and are very inflammatory. These should be eliminated (or kept to a minimum like peanut or sesame oil).
- 4. Get rid of all fruits, vegetables, and fiber.
- **5. Eat the FAT!** Add full-fat heavy cream to your coffee. Eat rib-eye steak, fatty bacon, eggs, and butter. Don't trim the fat, eat it!
- **6. Practice Intermittent Feasting -** 1-2 meals a day spaced out

## Keto Resources

Making the decision to go keto can seem overwhelming at first. You wonder, "Where do I even begin?" Fortunately, there are lots of resources to reference: websites, articles, books, cookbooks, etc. At CNY Fertility, we are very fortunate to have Keto-expert Maria Emmerich as a CNY Fertility special consultant. Her books, website, blogs, and seminars are a priceless resource for anyone wishing to boost fertility and achieve countless other health benefits by going keto.

#### **MARIA EMMERICH** is a wellness expert in nutrition and exercise physiology.

She has a passion for helping others reach their goals of optimal health. She struggled with her own weight throughout childhood and decided enough was enough. She decided to study health and wellness so she could help herself and others stop wasting time feeling discouraged with their outward appearance and not feeling their

best mentally. Maria is an international and best-selling author of several books and cookbooks. She understands the connection between food and how it makes us all feel on the inside and out and shares answers to lots of nutrition questions at her website www.mariamindbodyhealth.com.

FAMILY BUILDING GUIDE

#### Maria's Books









#### Other Resources:

Dietdoctor.com Livinlavidalowcarb.com Kendberrymd.com

## THE CARNIVORE COOKBOOK The Complete Guide to Success on the Carnivore Diet with Over 100 Recipes, Meal Plans, and Science

#### **READ MARIA'S NEWEST BOOK**

Our diets have drastically changed due to the invention of agriculture around 7,000 years ago. Carnivore Cookbook explores what our bodies were really designed to digest and gives compelling evidence that we were designed to be primarily meat-eaters.

You'll learn why all plants come with a downside. Antinutrients are chemicals and compounds that act as natural pesticides or defenses for the plants against being eaten. Maria explains how antinutrients can rob your body of minerals and other nutrients and lead to autoimmune issues and leaky gut. There is even a protocol for healing autoimmune issues called the Carnivore Autoimmune Protocol: a detailed sys-

tem for stepping you through the various levels of carnivorous eating to find the point where your body responds best and is symptom free. You will also learn which foods are the highest in nutrient density to help your body heal.

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# Medicines for Treating Inflammation

"INFLAMMATION IS THE CAUSE OF ALL OF OUR DISEASES."

Inflammation is the cause of all of our diseases. Infertility is just another list of diseases caused by acute and chronic inflammation. Whether it's a bug—a microorganism—or it's due to glucose and glycation or other phytochemicals or plant antigens that actually damage and create an inflammatory response from our own body, we don't yet know.

Exactly why it happens in the uterus, tubes, ovaries or in the male reproductive organs, we're not completely sure, but it likely has to do with blood flow that deposits these microorganisms or plant phytochemicals and antigens in those areas. Plus, it's secondary to the excessive heat in the G.I. tract—the colon and small intestines. As the fermentation of these particles (fruits, fibers, vegetables) occurs, it creates an exothermic reaction which heats the local organs and damages all of them. Inflammation is the body's reaction to these insults.

We're constantly looking for ways to reduce inflammation. Reducing the quantity of plant molecules you put into your body as food and reducing the heat in your body by slowing it down can help.

Recently, we have achieved success treating inflammation pharmacologically with low-dose steroids like Prednisone, Humira, and intravenous immunoglobulins and intralipids, which are made up of egg protein and soy fat. The fat appears to be a successful method of reducing the inflammation in our bodies. We also use aspirin, NSAIDs, steroids, and antibiotics. Using low dose naltrexone and CBD oil or Cannabidiol in conjunction with acupuncture, massage, meditation, light therapy, and visualization is beneficial as well.

#### **LOW DOSE NALTREXONE (LDN)**

Because infertility may be due to the immune system's overreaction to one's own hormones, we may try prescribing low dose naltrexone (LDN). LDN is a therapy that has shown promise in a variety of health issues including infertility. Although originally developed decades ago for the treatment of heroin/opioid addiction because of its ability to bind with opioid receptors in the brain thereby blocking the effects of the drugs, it was discovered that in very low doses, naltrexone was helpful in treating autoimmune disorders, HIV/AIDS, cancer, and central nervous system disorders. Because it can balance and regulate the immune system without over-stimulating it, any condition that involves immune dysregulation may benefit from LDN. Since auto-immunity is a potential cause of infertility, LDN therapy is a useful treatment

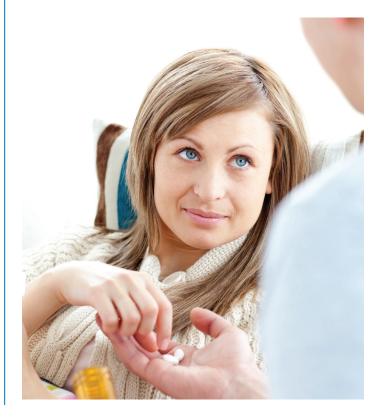
In lower doses, naltrexone still causes a very mild blockage of endorphin receptors throughout the body. The body's response to this binding is to compensate by increasing production of endorphins and enkephalins (our natural opioids). The brief blockage every night appears to be enough to effect a prolonged change in many aspects of the immune system and increases the body's ability to heal itself. In addition to treating Lyme disease, fibromyalgia, chronic fatigue syndrome, multiple sclerosis, Parkinson's, Hashimoto's thyroiditis, Crohn's disease, autism, and rheumatoid arthritis, LDN can also be helpful for depression because of its endorphin-boosting effect.

LDN boosts the immune system, the mechanism for which we do not entirely understand. LDN makes the immune system begin working at optimum levels again which includes the correction of the many imbalances which plague our body. Studies have also helped to uncover some relationships between the immune system, the hormonal imbalance of the body and the problems experienced by women with PCOS and

infertility in general. In the treatment of infertility, the goal is to stop any process in the body where the immune system is attacking its own tissues, which could hinder the fertility process, thereby improving one's ability to get (and stay) pregnant.

#### **TAKING LDN**

Patients who are prescribed LDN typically begin taking 1.5 mg - 4.5 mg by mouth once daily at bedtime. Although LDN is noted for being side-effect free because it stimulates the body's own mechanisms, there are clients for whom it is not well-suited, especially those being treated for addictions. LDN should not be used if you are taking Methotrexate or any narcotics. Some people do report vivid dreams, sleep disturbances, nausea (usually for the first 2 weeks), dizziness, headache and mild dry mouth, but sleep issues typically resolve themselves spontaneously. It is recommended that patients take LDN prior to beginning a cycle and continue, when recommended, throughout pregnancy. It will be temporarily stopped 4 days before oocyte retrieval and resumed the following day.



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#### OTHER MEDICINES FOR TREATING INFLAMMATION

The following medications enhance implantation and reduce inflammation in conjunction with our standard protocols.

**Prednisone:** This low dose steroid is taken orally. There is evidence that empiric treatment with low dose steroids may be beneficial in repeated pregnancy loss, even when the autoimmune testing has been negative. Side effects generally are minimal and mild when given in low dose, short term use.

Lovenox: A blood thinner, has been successfully used in promoting embryo development and preventing small blood clots from forming at the site of embryo implantation. It is administered by injection and has been an effective form of treatment for recurrent pregnancy loss. Although recommended for clients with known blood clotting disorders, Lovenox has been widely used empirically with infertility treatments to prevent miscarriage and for those with repeated unsuccessful fertility treatments.

HCG: Low dose HCG injections or HCG uterine wash. The corpus luteum provides the main source of progesterone support. The corpus luteum maintains its activity for 14 days. If an embryo fails to implant and HCG is not secreted, the activity of the corpus luteum will decline. The normal development of pregnancy depends on proper corpus luteum activity. Providing HCG, along with Progesterone, supports the luteal phase in infertility treatments.

**Neupogen:** Given either by injection or uterine wash, causes the body to generate neutrophils, a type of white blood cell which plays an important role in the immune system. You may benefit from Neupogen if you have experienced recurrent miscarriages or failed IVF treatments.

**IVIG:** Intravenous Immunoglobulin has been established as one of the most effective

treatments for multiple miscarriages. IVIG helps protect the embryo from the mother's immune system by suppressing many of the immune responses which commonly attack the embryo. It is administered via IV in our office.

Intralipids: Intralipids are a liquid emulsion of fat. They are mainly composed of soybean oil and egg fats. It is similar in effectiveness to IVIG, but significantly more affordable for couples who are seeking success after multiple miscarriages. Researchers believe it acts to suppress the body's natural killer cells and prevent embryo rejection. This is an IV infusion that is performed in our office and generally takes approximately 20–30 minutes. The recommendation is to infuse intralipids before IUI/Egg Retrieval/Embryo Transfer and weekly thereafter to 12-14 weeks gestation.

Prograf (Tacrolimus): Prograf is an immunosuppressant that was studied in woman with elevated Th1/Th2 cells. Prograf was studied and shown to improve reproductive outcome of women with repeated implantation failure. Prograf is taken orally twice daily beginning 2 days before embryo transfer and stops with pregnancy test. Patients with a history of skin cancer or any type of cancer should not take Prograf.

Metformin: Metformin is an insulinsensitizing drug primarily used to treat Type 2 diabetes, but it is also used for fertility.

Women with PCOS may benefit from taking metformin alone, along with letrozole, or during IVF treatment. Exactly how metformin improves fertility is unclear. Many women with PCOS have insulin resistance, where the body's cells stop reacting to normal levels of insulin. As a result, the body thinks that there is not enough insulin and triggers the production of more insulin than your body actually needs. Higher insulin levels seem to lead to higher levels of androgens, which lead to PCOS symptoms and problems with ovulation. Metformin lower excess

levels of insulin in the body, which may then help regulate the reproductive hormones and restart ovulation. Research shows that menstrual cycles become more regular and ovulation returns with the use of metformin.

**Humira:** Originally developed to treat rheumatoid arthritis, Humira is now frequently prescribed to treat many autoimmune disorders, inflammation, and to decrease the number of natural killer cells. Humira is an injectable medication used for clients who have not been able to achieve a successful pregnancy with other treatments by reducing the risk of immune system reactions that may cause embryo rejection. Plaquenil: Plaquenil is also used most commonly for the treatment of rheumatoid arthritis. We have introduced this medication to our clients in order to enhance implantation and prevent embryo rejection. Plaquenil inhibits the stimulation of cells that induce inflammatory responses in the body. Minimizing inflammatory responses in turn minimizes embryo rejection. Plaquenil is an oral medication taken twice daily.

HCG Booster Injections: HCG booster injections may be prescribed for use immediately following IUI or Embryo Transfer to help sustain a possible pregnancy. An HCG booster signals the corpus luteum to keep secreting progesterone, which in turn keeps progesterone levels up to help maintain the endometrium and help with implantation. Clients are prescribed daily injections of HCG to support a pregnancy.

#### CBD OIL (Cannabidiol): CBD Oil is an extract of hemp or the marijuana plant.

The same species that is used for THC and marijuana has also been used as an industrial product for thousands and thousands of years to make clothing, rope, plastics, fuel, and medicinals. Herbal medicine has been around for centuries and is the first pharmaceutical information that we have for understanding how things can help us or hurt us.

Cannabidiol has more recently been touted as an herbal medicine to reduce inflammation. There is evidence that it reduces the reactions of the white blood cells and other inflammatory markers on a local and systemic level. The exact mechanism is poorly understood. Whether you take it as a vapor, an oil under the tongue, rubbed on the skin, or in tablet form, there seems to be growing anecdotal and scientific evidence that reducing inflammation via CBD oil has benefits. It is legal throughout the United States as long as it does not contain significant amounts of THC. It must contain little to no THC, meaning less than 0.3%.

#### The intent here is not to create a high or a buzz.

There may be side effects, so potential users must be cautious in deciding whether to use it initially and/ or continue using it. Certainly, if you are pregnant, we currently recommend NOT using it. Although, without THC, it's likely just another pharmaceutical agent that has some benefits to reducing inflammation and may reduce miscarriages and preterm labor and delivery.

One to two dropperfuls of 500-750 mg. of THC in a 30 ml vial seems to be an adequate dose, although the exact dose response has not been determined for any individual. This may be one of those trial and error treatments, whether you vape it, take it under the tongue, or take it topically. Different varieties have been mixed with MCT oil, olive oil, or hemp seed oil in order to dilute the concentration of the CBD oil. There are likely hundreds of thousands of chemicals coming from any hemp plant, and many of them may have other effects that we don't yet understand. Your decision to use CBD oil must be based on some of your own research.

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## Nutrients for Male & Female Fertility



For both men and women, nutrition has a big impact on fertility, and vitamins are one of several ways to improve your health.

When trying to get pregnant, there are some additional nutritional needs to consider because your daily requirements are not the same as when you are pregnant or not attempting to get pregnant. When dealing with infertility, there are often many factors at play: sperm health, egg quality, ovulation, ovarian lining, etc.

"Taking specific high-quality preconception vitamins is one way women can improve their bodies and egg quality when trying to conceive."

For men, it is often assumed that they don't have much to be concerned about when it comes to boosting fertility. This is not the case. Even when a man's semen analysis comes back as "normal," there is significant evidence that a man's sperm can cause failed fertilization or arrest the development of an early stage embryo. Certain antioxidants and other nutrients can help improve sperm structure and function. While it is important to know that supplements can be a vital source of proper nutrition when trying to get pregnant, the food you eat will always be the primary source of nutrition. For that reason, we recommend all of our clients, male and female, follow the B.E.B.B., Ketogenic, or Paleo food plans to truly optimize vour fertility.

#### **NUTRIENTS FOR FEMALE FERTILITY**

For women, we recommend the following vitamins:

- Ovavite
- Theromega
- Ovasitol
- Vitamin D (if blood levels less than 20ng/ day)
- DHEA (unless PCOS)

#### **NUTRIENTS FOR MALE FERTILITY**

For men, we recommend the following vitamins:

- ConceptionXR
- Theromega
- Ovasitol
- Vitamin D (if blood levels are less than 20ng/ml)
- NeoQ10

#### WHERE SHOULD I BUY MY **SUPPLEMENTS?**

CNY Fertility has partnered with Theralogix® to offer a comprehensive line of certified nutritional supplements. We chose to partner with Theralogix because all of their supplements have been approved by a Medical Advisory Board comprised of nationally reputed physicians and scientists after a detailed review of the most recently published scientific data.. To order supplements from Theralogix®, go to Theralogix.com and use the Provider Referral Code(PRC): 113205 to get your discount.



## CNY Fertility **CREATING HOPE FOR OVER 20 YEARS**





#### PROTECTING YOUR HOME'S AIR **QUALITY:**

A recent global study on the effects of air pollution concludes that toxic air may be damaging every organ and virtually every cell in the human body, causing harm from head to toe, including dementia, heart and lung disease, fertility problems, and reduced intelligence. In fact, there are more than 70,000 scientific papers demonstrating that air pollution is affecting our health.

Perhaps the most disturbing impact of air pollution is the damage to reproduction and children. Fertility is reduced and miscarriages increased by exposure to air pollution. How does it happen? Ultrafine particles pass through the lungs, are readily picked up by cells, and carried via the bloodstream exposing virtually every cell in the body.

The main reason for the far-reaching damage from air pollution is systemic inflammation. Immune cells think pollution particles are bacteria, so they go after it and try to kill

it by releasing enzymes and acids. These inflammatory proteins spread into the body, affecting the brain, the kidneys, the pancreas and every organ system. From an evolutionary perspective, our bodies have evolved to defend against infections, but not pollution.

There is also evidence that poor sleep can be a consequence of breathing toxic air, which has its own lasting effects on day to day living.

And while the possibility of controlling the air we breathe 24/7 boggles the mind, we can control the air we breathe in our homes and while we sleep. Intellipure has an air purification system that can provide the highest level of air cleaning performance while eliminating more than 99% of particles in the air.

CNY Fertility is proud to have partnered with Intellipure to offer the same air purification systems we use in our offices to our clients for use in their homes. Please visit www.intellipure. com for more information, and don't forget to use the code CNYFERTILITY to save 20% on your Intellipure home air purifier.

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#### Air Quality & Fertility

- Ultrafine particles can be especially dangerous for pregnant women. Ultrafine particles can penetrate into the lungs and extra-pulmonary organs which can transfer toxic compounds to the fetus and placenta.
- Women exposed to air pollution while pregnant have a higher risk of developing cardiometabolic diseases later in life, such as heart disease, diabetes, and stroke due to increases in oxidative stress, inflammation and endothelial dysfunction.
- Exposure to high levels of pollution can result in sperm DNA damage, leading to male-mediated infertility, miscarriage, and other adverse reproductive outcomes.
- · Emerging studies suggest air pollution is also closely related to various birth complications, low birth weight, and increased risk of still birth.

#### Infants & Air Quality

- · A fetus exposed to air pollution during pregnancy has an increased risk of cancers, such as leukemia and Hodgkin lymphoma, respiratory diseases, allergic disorders and anemia as an infant
- · Children exposed to air pollution early on in life can also develop structural and volumetric abnormalities in the brain, as well as auditory, vestibular, and cognitive deficits.
- · According to the World Health Organization, more than 50% of premature deaths due to pneumonia among children under 5 are caused by the particulate matter (soot) inhaled from household air pollution

#### The Environmental Protection Agency Recommends:

- Eliminate the source of pollution
- Use chemical-free cleaning products
- · Clean the air with a high efficiency, portable air cleaner



#### The Intellipure Difference

- Effectively eliminates >99% of all particles
- Reduces mold, bacteria, virus, fungi, heavy gases and odors
- Each unit is individually tested and certified to provide the highest level of air cleaning performance

#### DFS TECHNOLOGY: TESTED TOUGH

Laboratory test research shows that DFS system significantly reduces airborne bioburden in clean-rooms. It trapped and inhibited bacteria, and also improved the filtration performance of a filter media by two to three orders of magnitude. (Control and Monitoring of Bioburden in Biotech / Pharmaceutical Cleanrooms

intellipure<sup>®</sup>

Exposure of bacteria on the surface of the internal filters in the DFS Air Cleaner can significantly reduce their survival rate. (Effect of the DFS Air Cleaner on the Survival of Microorganisms Fannin)

The DFS system units can remove all particles passing through the system with near-zero count at the exhaust side of the DFS system of all particles larger than 0.007 micron. (Supporting case study by University of Buffalo IUCB, Baier, Ciriano, et al)

Bring healthy air to your home with the world's best air purifier. CNY Fertility has partnered with Intellipure to offer a 20% discount to our clients. Use code: CNYFERTILITY





#### **LGBTQ+ & FAMILY BUILDING OPTIONS**

At CNY Fertility, we believe families are defined by love, not gender, sexual orientation, or gender identity. We work every day to ensure that all of our clients have the opportunity to love, nurture, and grow the family of their dreams. We are proud to serve the LGBTQ+ community and couples who are seeking to become parents. We are committed to helping you find the family-building option that best suits your unique circumstances and is as inclusive and encompassing as possible.

#### **GAY MEN**

The path to parenthood for gay partners requires a surrogate or gestational carrier along with an egg donor. In this process, we use an egg from a donor and sperm from either male partner to create an embryo, which is then placed inside the uterus of a gestational carrier.

#### SURROGACY/ GESTATIONAL CARRIER

A surrogate is a woman who agrees to help another individual or couple have a baby by achieving a pregnancy using her own egg and carrying a pregnancy to term. A gestational carrier is a woman who performs this same service using an embryo created with another woman's egg. While a surrogate has a biological link to the baby, a gestational carrier does not. Both surrogates and gestational carriers are used by many gay couples who want to have a baby.

When gay men choose to have a baby using a surrogate or gestational carrier, pregnancy is usually achieved through in vitro fertilization (IVF). During the IVF procedure, sperm (usually from one of the male partners, but sometimes from a donor) is combined with the egg to produce one or more embryos. To produce multiple eggs for use in this procedure, the donor's ovaries are stimulated with the help of fertility medications. The eggs are harvested and combined with sperm to produce embryos, which are then transferred into the woman's uterus to achieve a pregnancy.

In some cases, gay men choose a woman they know to be their carrier. Others are able to find a surrogate by using an agency or attorney that specializes in this service, or even via websites that link prospective parents with women who want to be carriers.

The decision to have a baby using a surrogate or gestational carrier should be made thoughtfully and after careful consideration. We also strongly recommend all patients work with an experienced reproductive attorney who can provide legal counsel and prepare the necessary agreements, even in cases where a friend or relative serves as the gestational carrier.

#### **LESBIAN WOMEN**

After a thorough fertility evaluation, some lesbian couples will proceed with a natural intrauterine insemination (IUI) with donor sperm, where we follow the progression of your natural menstrual cycle but help time the IUI so that it falls within the window during which you are most fertile. Some couples will proceed with an IUI but also utilize gentle stimulating medication. These medications will usually generate more than one egg, giving the couple a greater chance of fertilization and implantation during that cycle. Other couples might proceed with IVF or reciprocal IVF.

Lesbian couples may choose to proceed with an in vitro fertilization cycle (IVF) in order to retrieve the eggs from one partner, inseminate the eggs with donor sperm, and then transfer the embryo(s) into the other partner's uterus,

who then carries the pregnancy. This is called reciprocal IVF and allows both partners to play an active role in the conception process.

#### FERTILITY PRESERVATION PRIOR TO TRANSITIONING

Transgender people planning a medical transition face an important decision about future family planning and fertility preservation. Fertility preservation options may include sperm, egg, embryo, ovarian tissue or testicular tissue cryopreservation.

For transgender females, the process of fertility preservation is actually relatively straightforward. Before starting hormones, these patients can freeze their sperm at CNY Fertility and store it indefinitely for potential use in the future. Transgender males have a slightly more complicated process, because they have to consider whether to freeze their eggs before starting hormones like testosterone that will make it much less likely, and even impossible, to retrieve eggs in the future. Egg retrieval does require certain medications to ensure an adequate number of eggs are available along with a short surgical procedure.

We advise our transgender clients to carefully consider how important a biological connection to future children might be to them down the road before proceeding with any treatments.





#### **INTRODUCING...CNY PRESERVE**

#### THE NEWEST OUTGROWTH OF CNY FERTILITY

Many people aren't ready to start a family during their most fertile years, and there are lots of reasons to preserve your fertility until the time is right. Freezing your eggs or embryos is a way to protect and insure your family-building options for another time. We are further empowering women to take charge of their future. Whatever your reason – the opportunity to pursue other goals, military service, or medical treatment –we're creating options for those who might not otherwise have them.

High quality doesn't have to mean high cost. CNY Preserve offers affordable care starting with a complimentary consultation.

#### WHEN SHOULD YOU CONSIDER FERTILITY PRESERVATION?

There are a number of situations and reasons why someone might consider freezing their eggs or embryos. Some of the most common are:

 Wanting or needing to delay childbearing in order to pursue educational, career or other

- personal goals
- After receiving a cancer or other serious medical diagnosis
- Prior to military service
- You have diminished ovarian reserve and may need extra stimulation over time in order to get the number of eggs or embryos needed for the highest chances of future pregnancy.

#### When Delaying Childbearing

Many women focus on building careers not families during their prime reproductive years, ultimately delaying parenthood until egg quality is not optimum. Failure to find an ideal partner with whom to have and raise children can also be a factor. Choosing to preserve eggs or embryos while in your 20s or early 30s is a way of ensuring that the family of your future can become a reality.



We are proud to provide free egg freezing for oncology patients

#### **Before Medical Treatment**

When you receive a cancer diagnosis or any serious medical diagnosis, your focus is likely on treatment, success rates, and processing the emotions of what it all means. It's easy to overlook future fertility preservation. But if you haven't started a family yet or have dreams of growing the one you have, it is an important consideration. For women who are about to begin medical treatment, time is of the essence. An unfortunate side effect of many chemotherapy drugs, radiation treatment, and surgical interventions is infertility. It's important to investigate all of your options prior to beginning any treatment. CNY Preserve will work with your medical team throughout the process to ensure your treatment and fertility goals do not negatively impact each other.

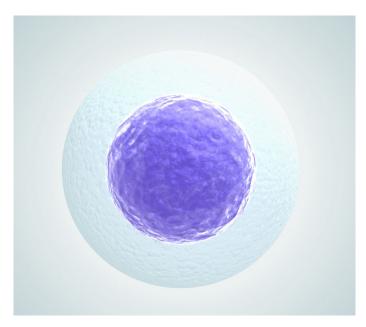
#### **Prior to Military Service**

Serving in the military can sometimes result in t injuries or other impairments that negatively affect your ability to have a family. Freezing eggs or embryos prior to deployment is a wise choice for many military personnel who may be in harm's way while serving our country and want to protect and preserve their future ability to have children.

#### **HOW DOES IT WORK?**

To give you the best chances of conceiving after treatment is completed, we recommend egg or embryo freezing. In order to freeze eggs (also called oocytes) and/or embryos, the eggs must first be retrieved. This part of the process is identical to IVF and can be completed in as little as two weeks.

Patients take hormone injections to stimulate the ovaries and allow a greater than normal number of eggs to develop. Once the eggs have adequately matured, they are removed with a needle using ultrasound for guidance. This procedure is done under sedation and is not painful.



Women not currently in a committed relationship may opt to have the eggs frozen unfertilized. Later, when the patient is ready to attempt pregnancy, the eggs will be thawed, injected with a single sperm in a process called Intracytoplasmic Sperm Injection (ICSI) to achieve fertilization, and transferred to the uterus as embryos.

#### **Embryo Freezing**

If a patient wishes to freeze embryos, eggs are removed from the patient and fertilized in a test tube with the sperm from a partner or donor. The resulting embryos are then frozen approximately 3-5 days after fertilization and stored as long as necessary.

To give you the best chances of conceiving in the future, we freeze eggs and embryos in a flash freezing process called vitrification.

Oocytes and embryos are immersed in a series of solutions which dehydrate the cells and replace water molecules with cryoprotectant or "anti-freeze" to prevent the formation of ice crystals and protect the integrity of the cells during the freezing process. The eggs or embryos are loaded into specially designed straws and placed in liquid nitrogen tanks for storage.

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Once you decide to move forward with treatment, it generally takes 10 to 14 days to complete stimulation of the ovaries for the egg retrieval.

Pregnancy rates from frozen eggs depend on the women's age at the time they are frozen and not the age at which she thaws, fertilizes, and transfers the resulting embryo. We see the best results for women younger than 35 at the time of egg freezing.

Preservation of embryos has a higher success rate of future pregnancy than preservation of eggs, so if you have a partner or might consider a sperm donor, this is a great option to discuss with your provider.

If you're about to begin cancer treatment, we will work directly with your oncology team to ensure your fertility preservation is expedited so your treatment can begin quickly and to ensure that any hormones used in the process do not stimulate unwanted cell growth.

Due to the time sensitivity, you can expect an accelerated treatment plan.

#### **How Many Eggs Should I store?**

As a general rule, we recommend women store at least 10 eggs for each pregnancy attempt. Studies indicate that egg thaw survival rates average around 75% and fertilization rates are expected to be 75% in women 35 years old and younger. In real terms, if 10 eggs are frozen, 7 are expected to survive the thaw, and 5 to 6 are expected to fertilize and become embryos. We generally transfer one embryo in women 35 and younger.

#### **Plans & Pricing**

CNY Preserve provides the highest quality fertility care at a cost that is less than one-third of the national average.

#### **CNY SUCCESS STORY**

"CNY made it possible for me to freeze my eggs at a time in my life when it otherwise wouldn't have been an option. I am so grateful that it is their mission to make this process affordable for women like me who might not have the resources to make this choice. Egg Freezing has allowed me to invest in my future so that I can invest in myself today. Thank you CNY." – Julia, Venice, CA



#### Plans & Pricing

We provide top quality fertility care at 1/3 of the average national price, so you can keep your standards high and costs low.

Egg Freezing (One Cycle)	PRICE \$2,900
Embryo Freezing (One Cycle)	PRICE \$3,900
Monitoring	PRICE \$950
First Year Egg Storage	PRICE FREE
Storage Beyond First Year	PRICE \$350/yr

## Sperm Freezing

#### PRESERVING FERTILITY IN MEN

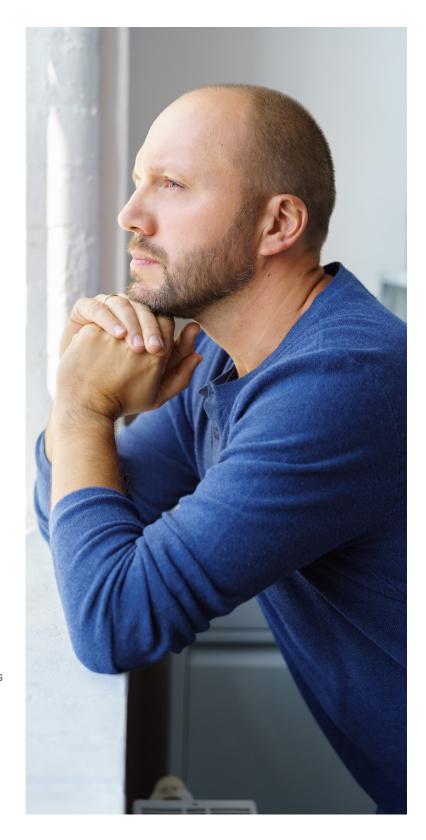
Fertility preservation in men is generally much easier and quicker than with women. It involves collecting a sample of semen and freezing it. In men about to begin medical treatment, sperm must be banked before any chemotherapy or pelvic radiation therapy begins in order to avoid damaging the sperm. Sperm can be frozen the same day you contact us. Once vitrified, the sperm can be stored indefinitely. Sperm can be thawed later and used for intrauterine insemination or in vitro fertilization.

Even if a man has only a few live sperm in his semen, they can be used for in vitro fertilization (usually ICSI) and offer a good chance of pregnancy. In this situation, when the sample is thawed, the healthiest sperm are captured and injected into the woman's harvested eggs in the laboratory.

For men storing sperm, a single ejaculation sample will produce an average of 5 vials of sperm. It is typical to use 1-3 vials for each artificial insemination attempt. For best results, we recommend men store multiple samples.

#### HOW LONG CAN SPERM REMAIN FROZEN?

Sperm are stored in a liquid nitrogen tank at -196° C for long-term storage. Our experience is that long-term storage does not affect sperm quality and when stored correctly, they can remain frozen indefinitely.







# **CNY Healing Arts**

### **EAST MEETS WEST**

It's easy to believe that fertility treatment is strictly a modern day science made possible solely through the advances of high-tech medicine. But as good as modern science is, many couples trying to get pregnant find the results they are after with the assistance of ancient medical treatments such as acupuncture and massage. Sometimes acupuncture and massage are that something extra that help ensure the success of a fertility treatment over and above what typical western protocols alone can accomplish.

At CNY Fertility, we've found that the best and most effective fertility treatment plans are created by incorporating both eastern and western medicine ideas. Dr. Kiltz was so impressed with the results achieved through massage, acupuncture and yoga, that he created CNY Healing Arts so that these services could be provided under the same roof to CNY Fertility clients.

### **OUR PHILOSOPHY**

The Fertile Secret is within each of us. By finding our place of peace and balance amidst the demands of life and the stress of infertility, we renew our lifegiving potential. Dr. Kiltz sees this potential in all of his clients. Recognizing the toll that infertility was taking on their lives, he felt a deep desire to offer a more balanced approach to treating infertility. By reconnecting his patients with the power of positive thinking, he sees men and women improve the quality of their lives on their journey to conception.

### **OUR TREATMENTS**

With inner peace comes deep healing. Our holistic approach is designed to support the physical, emotional and spiritual aspects of your fertility. Acupuncture, massage, nutritional

counseling, yoga and specialized workshops, alongside assisted reproductive technology, returns your body to a place of balance from which conception can occur.

### THE FERTILITY BENEFITS OF MASSAGE

CNY Healing Arts offers traditional massage techniques as well as techniques focused specifically on the treatment of infertility.

### The Fertile Secret Massage:

The Fertile Secret Massage is a relaxing and enjoyable way to increase blood flow to the reproductive organs, properly position the uterus, remove blockages and open the pelvic and hip region. Our fertility massage combines the principles of Maya Abdominal Massage, acupressure and breath work to balance the hormonal system and support conception.

The Fertile Secret Massage combines deep therapeutic touch with soothing abdominal massage. Your practitioner will customize your bodywork according to the stage of your menstrual cycle, using deeper abdominal work during the follicular phase (before ovulation) and focusing on relaxation during the luteal phase (after ovulation). In women, the pelvic region and reproductive organs tend to hold a lot of emotions. Expect your massage to be cleansing and detoxifying, physically and emotionally, leaving you with a deep sense of mental peace. Physical touch encourages the body to release oxytocin, contributing to increased pleasure. This massage is perfect for anyone desiring to conceive and can also be customized for pregnancy and postpartum care.

### Maya Abdominal Massage

This massage technique applies anatomy, physiology, herbology and naprapathy (the study of the ligaments, joints and muscles) with Ancient Maya healing techniques to address common female and male complaints. The technique works by relieving congestion and blockages to improve the flow of chi and fluids of the circulatory, lymphatic and nervous systems to prevent the progression of chronic disease symptomology.

Dr. Rosita Arvigo has been instrumental in developing this massage technique. She began her research in Belize over 30 years ago and apprenticed with one of the last traditional healers in Central America, Don Elijio Panti. Don Elijio taught Dr. Arvigo Maya Abdominal Massage, as well as the use of traditional medicinal herbs which have come to represent her Rainforest Remedies.

CNY Healing Arts offers the Arvigo Techniques of Maya Abdominal Massage in addition to Abdominal Massage for Fertility. Maya Abdominal Massage is a trademarked massage practice that is very specific and can be performed only by certified practitioners. It uses external, non-invasive manipulation to reposition reproductive organs, improve blood flow to digestive organs and the pelvic region, decrease inflammation, and improve the overall health and wellness of the pelvic region. A daily self care routine is also taught during the treatment which helps to further facilitate changes in the body. It has been documented to improve fertility issues in up to 30-40% in women and provide relief for a number of other issues for both women and men.

Our massage therapists have worked with certified Maya Abdominal Massage practitioners and massage therapists from different backgrounds to create a unique abdominal massage experience that is found only at CNY Healing Arts, with our clients in mind.

### **BENEFITS OF FERTILITY MASSAGE**

### For Women:

- Increases blood flow to the reproductive organs
- Nourishes follicles with fresh blood supply and oxygen
- Helps to break down scar tissue and
- Helps to resolve blockages in the fallopian tubes
- Re-aligns the uterus
- Relieves stress and anxiety
- Improves digestion and absorption of
- Reduces inflammation due to PCOS, cysts or fibroids

### For Men:

- Early stages of prostate swelling
- Benign Prostatic Hyperplasia
- Prostatitis
- Impotency problems

MANY COUPLES TRYING TO GET PREGNANT FIND THE RESULTS THEY ARE AFTER WITH THE ASSISTANCE OF ANCIENT MEDICAL TREATMENTS SUCH AS ACUPUNCTURE AND MASSAGE.





### **Customized Massage**

Allow our highly skilled therapist to create the appropriate session to fulfill your needs. This massage is designed to aide with any of the following conditions: Stress reduction, improve relaxation, increase circulation, relieve pain and discomfort from injuries, headaches, back pain, whiplash, carpal tunnel/thoracic outlet syndromes, plantar fasciitis, fibromyalgia and multiple sclerosis.

### **Hot Stone Massage**

Heated basalt lava stones are massaged into the muscles, warming the tissue while melting tension away. Our oil is applied with long flowing strokes throughout the body incorporating the warmed stones for deep ease and warmth. Emerge feeling renewed, relaxed and rejuvenated.

### **Hot Poultice Massage**

The poultice we use combines organic green tea and lavender, herbs that are specific for relaxing and relieving tight, sore muscles. The herbs are wrapped in traditional Thai fashion, creating a wonderful massage tool that is steamed and applied to the body using specific, purposeful massage techniques (techniques which are mostly compressive, broaden the muscles, inducing them to relax more readily). Massage with the hot, moist herbal ball softens tense muscles, decreases inflammation, calms the nervous system, and improves circulation. The combination of the heat, herbal properties and massage technique make the tissue more receptive, while inducing a more profound relaxation. The aroma of the steamed herbs has a relaxing effect as well.

### Prenatal Massage

Prenatal massage can help moms-to-be find relief from the aches, pains and stresses of pregnancy. Regular massage sessions can help maintain health, reduce swollen ankles by increasing circulation throughout the body, as well as relieve lower back pain and sciatica. Our experienced therapists will use special positioning and cushioning for comfort and safety. The massage is done in a side-lying position with a pillow gently supporting the back and stomach.

### **Signature Citrus Body Scrub**

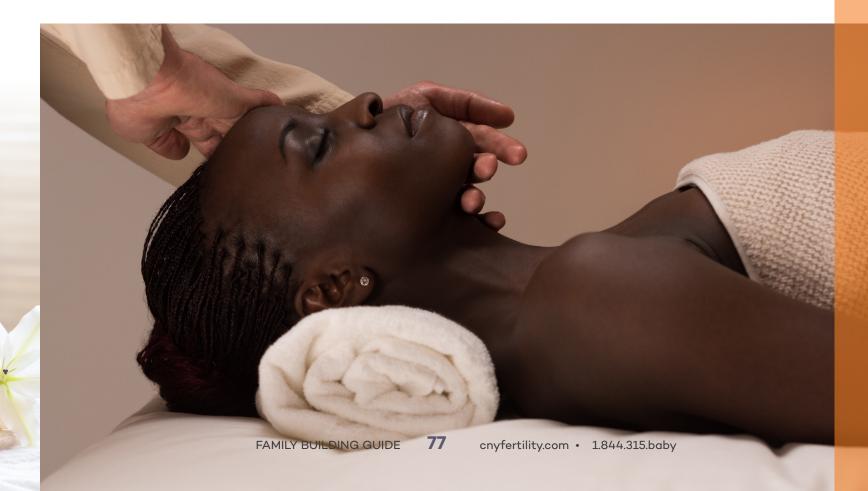
Our Body scrub is a wonderful way of cleaning, softening and moisturizing your skin while allowing more well-being and peace into your life. This treatment includes an invigorating application of your choice of organic sugar or Dead Sea Salts infused with citrus oils to promote clarity of thought and total refreshment for the body and mind. A customized hydrating massage with our Citrus Cream follows your scrub application. A special treatment that will leave you feeling balanced & refreshed with a natural healthy glow!

### **Reiki Treatments**

Reiki is a gentle hands-on healing technique to reduce stress, relieve pain, and facilitate healing. Your therapist will energize various body systems on levels that promote healing, clarity, and focus.

### **Foot Reflexology**

through foot reflexology and gentle massage. Foot reflexology restores balance within your system. The treatment starts with a warm foot soak to promote circulation and blood flow to your pelvic organs. Next, we examine the feet to look for clues regarding what might be happening in the rest of your body. Finally, experience a relaxing foot massage aimed at the areas of your body on which you want to focus. This treatment can stand alone, or be added to any other treatment selection.



# Acupuncture

## EMBRACE THE RESTORATIVE POWER OF ACUPUNCTURE

Acupuncture is one part of a complete system of healing known as Traditional Chinese Medicine, or TCM, that has its roots in China dating back several thousands of years. **TCM** also includes dietary therapy, herbal medicine, body work and other adjunctive techniques. Acupuncture uses small, almost hair-thin, surgically sterilized and disposable needles that are placed in certain points on the body. These points are located on energetic channels. In TCM terms, it is the strategic use of these points that regulates and balances the flow of energy and blood in the body, thus allowing for symptom relief.

Laboratory and clinical studies have shown Acupuncture to have an effect on the central and peripheral nervous systems. It causes the brain to release opioids, the body's natural pain killers, as well as other endorphins that moderate the stress response and help to balance hormone levels in the body. Acupuncturists at CNY Healing Arts are extensively trained in assisting those attempting to achieve pregnancy naturally and those who are undergoing fertility treatments. Each day, they work together with the staff at CNY Fertility Center to assist couples in achieving their dream of pregnancy. And, they continue to work with women, once pregnant, to moderate symptoms and help to prepare a woman's body for labor and delivery.

## BENEFITS OF ACUPUNCTURE FOR INFERTILITY

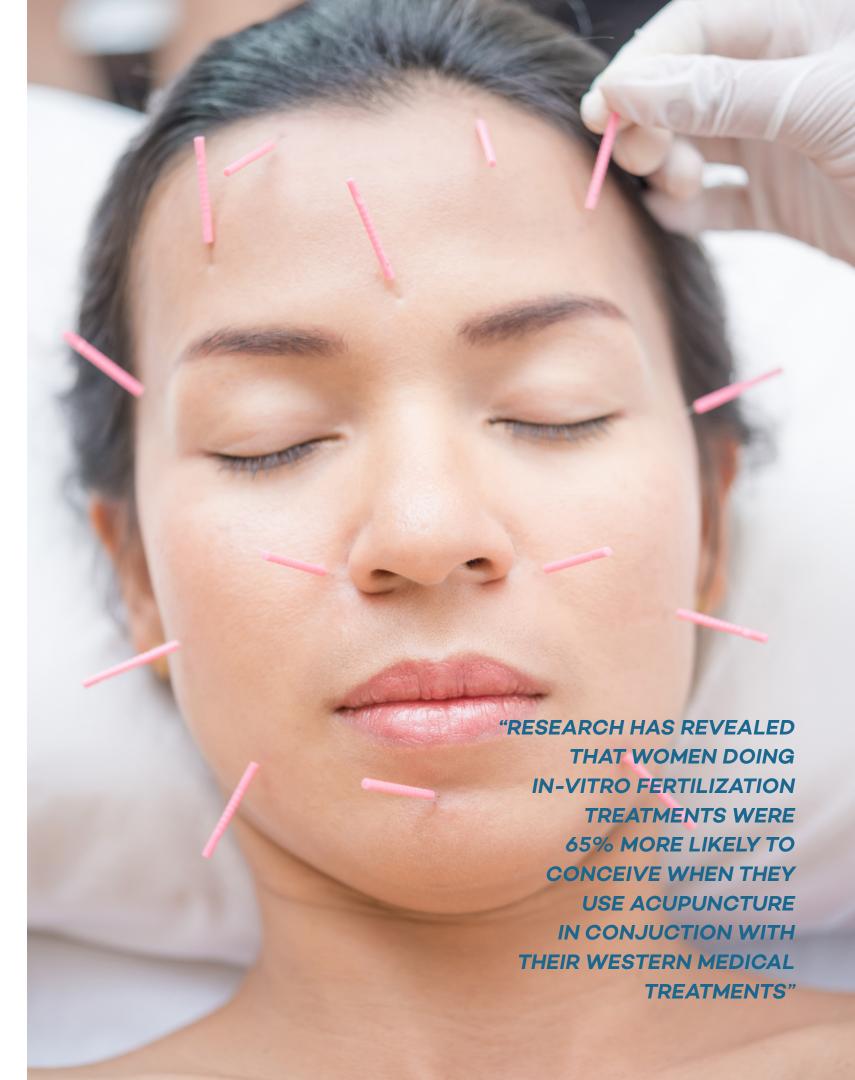
- Regulate menstrual cycle
- Improve sperm count and motility
- Reduce stress and anxiety associated with infertility
- Normalize hormone and endocrine systems
- Improve blood flow in the uterus
- Decrease chance of miscarriage
- Increase the chance of pregnancy for women undergoing in vitro fertilization (IVF)

Research has revealed that women doing invitrofertilization treatments were 65% more likely to conceive when they used acupuncture in conjunction with their western medical treatment.(1) Additional studies support the significance of acupuncture for the outcome of assisted reproductive medicine,(2) and that acupuncture administered on the day of embryo transfer significantly improves the reproductive outcome of IVF/ICSI.(3) Acupuncture is also associated with higher clinical pregnancy rates and live birth rates.(5)

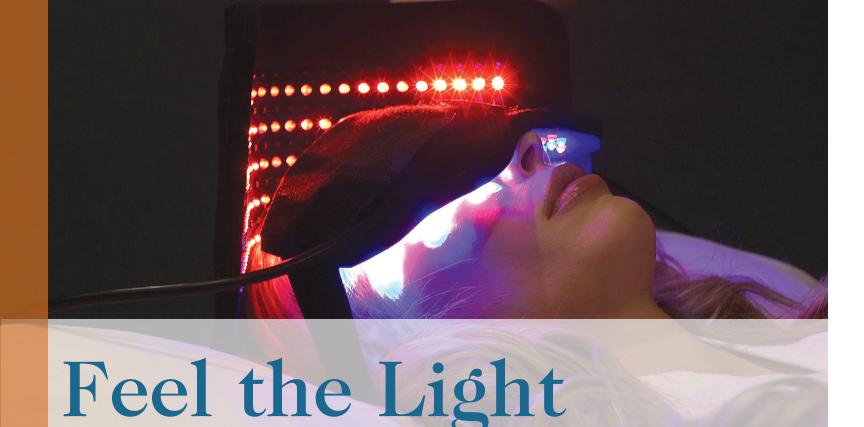
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4. Udoff, L.C., G. Zhang, S. Patwardhan, Z. Wei, and H.D. McClamrock. "The effect of acupuncture on outcomes in in-vitro fertilization (IVF)." 20 Apr. 2006. 9 Apr. 2009 <a href="http://clinicaltrials.gov/ct2/show/NCT00317317">http://www.ncbi.nlm.nih.gov/pubmed/21297382</a>



<sup>1.</sup> Manheimer, Eric, Grant Zhang, Laurence Udoff, Aviad Haramati, Patricia Langenberg, Brian M. Berman, and Lex M. Bouter. "Effects of acupuncture on rates of pregnancy and live birth among women undergoing in vitro fertilisation: systematic review and meta-analysis." British Medical Journal (2008). BMJ medical publications of the year. 7 Feb. 2008. 9 Apr. 2009 <a href="http://www.bmj.com/cgi/content/full/bmj.39471.430451.BEv1">http://www.bmj.com/cgi/content/full/bmj.39471.430451.BEv1</a>.



### **LED LIGHT THERAPY**

Over the past ten years, CNY Fertility has been very successful at improving outcomes for our clients by incorporating eastern medicine with hightech western protocols. A new therapy we are recommending is LED Light Therapy, which has myriad benefits for our fertility patients, but also helps improve overall wellness in anyone. LED Light Therapy is a useful tool for improving circulation throughout the body by increasing the formation of new capillaries, stimulating the production of collagen, and stimulating the release of adenosine triphosphate (ATP) which is the major carrier of energy to all cells.

# How Light Therapy Can Enhance Your Fertility:

LED Light Therapy (or Light Emitting Diode Therapy) is a very effective, non-abrasive, noninvasive, and restorative treatment. Our skin has the ability to absorb and utilize light which creates a therapeutic response. Light therapy uses specific color wavelengths to penetrate different levels of the skin, providing a wide range of benefits.

Light may be able to enhance your fertility by returning you to balance. By working directly over your eyes, we can affect your entire endocrine system by sending light frequencies to your hypothalamus.

By elevating nitric oxide levels in the body and increasing the formation of new capillaries that replace damaged ones, Light Therapy increases vascularity (circulation). New capillaries accelerate the healing process by carrying more oxygen and more nutrients required for healing. They are also able to carry away more waste products. This can be an essential component in preparing your body for pregnancy, especially if you have endometrial lining issues.

Collagen is an essential protein used to repair damaged tissue and to replace old tissue. It is the most common protein found in the body and is the substance that holds cells together. **LED Light Therapy can stimulate the production of collagen.** By increasing collagen production, less scar tissue is formed. There are studies that prove collagen is an essential nutrient for the ligaments that support your uterus. If you have any prolapse concerns, collagen induction may help you reverse this pattern.

ATP, or adenosine triphosphate, is the major carrier of energy to all cells throughout the body. Increases in ATP allow cells to accept nutrients faster and get rid of waste products more quickly by increasing the energy level in the cell. All food turns into ATP before cells utilize it. ATP provides the chemical energy that drives the chemical reaction of the cell.

Light Therapy is able to stimulate the release of ATP. Increased ATP helps support your fertility by giving you the cellular energy you need to maintain a healthy pregnancy. A lack of energy can be a contributing factor to recurring miscarriage and may be an underlying cause of chronic inflammation and immune disorders.

Edema, the swelling or natural splinting process of the body, has two basic components: liquid and protein. Research has shown that the lymph vessel diameter and the flow of the lymph system can be doubled with the use of Light Therapy. The venous diameter and the arterial diameters can also be increased. This means that both parts of edema (liquid and protein) can be evacuated at a much faster rate to relieve swelling. A well-functioning lymphatic system is an essential part of your overall fertility. A sluggish lymphatic system can contribute to chronic inflammation and immune disorders.

### Light Therapy Pre-and Post Embryo Transfer:

New capillaries can increase blood flow which assists in a more rapid and greater healing response. An IVF transfer can be considered an "invasive" procedure and improved healing may help ensure implantation. Photons of light energy enter the body as negative ions. This requires the body to emit positive ions, like calcium among others, to go to the area being treated. These ions assist in firing the nerves, thereby relieving pain and reducing the excitability of nervous tissue. This may assist your fertility especially after embryo transfer when you want a calm, assimilating environment for implantation.

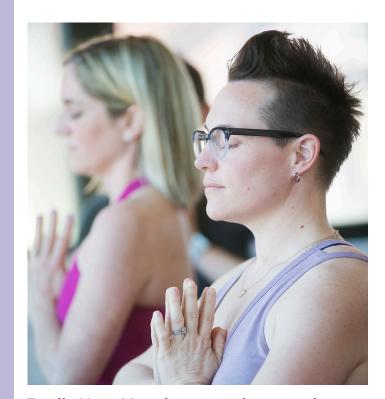
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# Fertile Hope Yoga



### INTRODUCING FERTILE HOPE YOGA



Fertile Hope Yoga is a sacred space where mamas-tobe can expect miracles.

Fertile Hope Yoga is the brainchild of CNY Fertility's resident fertility Yogi, Erin McCollough. Born from her in-person yoga for fertility classes she has taught for over a decade in Rochester, New York. Fertile Hope Yoga is the first-of-itskind online platform serving and supporting clients of CNY Fertility from around the globe. It is a comprehensive yoga fertility program for women experiencing IUI, IVF, ICSI, egg donor cycles, ovulation induction, frozen embryo transfer (FET), or any reproductive assistance or procedure during their fertility journey. CNY Fertility has partnered with Fertile Hope Yoga as another way to support our clients both near and far.

But it's more than just yoga...

What if releasing your emotions and sharing your fertility story meant you could go from 1 in 5 women to 1 in 2 women who become pregnant?

Statistics from a Harvard research study show patients who participated in a mind-body program for a 10-week period (which included yoga and meditation) conceived 3 times more often. If you've been keeping your fertility journey private (outside of a few close friends), you're in good company. Holding in your emotions and trying to avoid the pain by not being too optimistic may feel like a safe choice, but releasing your emotions and opening up to share your story is one of the best things you can do for your health.

Stop stressing and start loving your fertility journey! Fertile Hope Yoga includes comprehensive online yoga courses and private coaching for women who believe in a holistic approach to fertility wellness. It is a sacred space to share stories, focus on the power of positive thoughts, and expect miracles. It is a wonderful gift and resource for women no matter how you're trying to conceive (natural cycle or receiving IUI/IVF or FET treatments with the help of a doctor), and an opportunity to build an unshakable foundation while supporting your unique fertility journey. You'll hear from women who have been in your shoes and see how other women's Fertile Hope stories have transformed their lives. We support women in all types of partnerships: single moms by choice, mom

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and mom couples, mom and dad couples, and couples experiencing secondary infertility.

The support you'll experience will set you up for lifelong success as a mother, partner and woman. You'll become so much bigger than your fertility story.

Fertile Hope Yoga will help you learn about getting pregnant, how to reignite your hope, and everything else your doctor doesn't discuss with you. Western medicine might be one part of your equation, but just as important is -Addressing and rewiring your underlying beliefs... Embracing who you are, where you are right now... Shoring up support, love, and a net of people to catch

That's how you overcome any obstacle, persist, and succeed in your fertility journey.

Working hand in hand with a reproductive endocrinologist and fertility clinic, Erin is the only yoga teacher to develop a program that addresses all of this. Her methods are proven and safe. This is where your new Fertility Story begins. Let Erin and Fertile Hope Yoga show you the way.

### "GO FROM HOPELESS TO HOPEFUL WHILE BOOSTING YOUR FERTILITY"

The **NURTURE** yoga for fertility online program offers a deliberate way of practicing yoga that honors exactly where you are in your cycle no matter how you are trying to conceive.

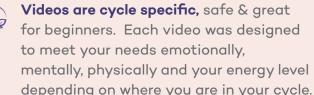
The cycle specific yoga sequences meet your needs physically, mentally and emotionally exactly where you're at - maximizing benefits for what is needed to increase pregnancy rates in that part of your cycle. Your reproductive organs and body will experience an energy boost and blood flow creating a positive physical environment for your miracle baby.

### WHAT IS INCLUDED IN NURTURE?



Access to 10 pre-recorded Fertile Hope Yoga Videos designed to increase pregnancy rates. You can stream anytime,

anywhere, and on any device (videos range in length from 15 to 75 minutes).

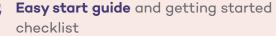




**4 Paths within the program** (Yoga for Natural Fertility, Yoga for IUI/IVF, Yoga for Frozen Embryo Transfer, and Yoga for when you are "on a break").









**Downloads** - Gratitude Journal, Fertility Affirmation Deck, Fertility Yoga 101 Guide

Cheers to miracles!





Fertile Hope Yoga Founder Erin McCollough

### Here's What Other are Saying About Fertile Hope Yoga

# "FERTILE HOPE YOGA IS THE BEST CLUB I NEVER WANTED TO JOIN."

Nobody wants to sign up for this, and I didn't think I needed yoga. It's the best club I never wanted to join. I was also really uncomfortable opening up to all of these women I didn't know and uncertain with how I would feel about it. I was harboring so much grief that I couldn't even effectively communicate with my own husband and family. I was angry. I honestly thought the first or second IUI would get me pregnant and little did I know it would be 4 failed IUI's before turning to surgery, IVF and yoga to get our miracle baby. I was able to better connect with my center and find grounding.

I consider myself a pretty balanced person, but my experience with infertility was crushing and debilitating. My self-worth was so low and I felt I was having trouble succeeding in other areas of life. I became overwhelmed with despair when friends and close family members announced pregnancies— and then experienced overpowering guilt for not being able to celebrate their happy news.

My own journey fractured my relationships with very close friends— and even my loving sister—because people had such trouble relating to my situation while they enjoyed their own paths to parenthood. The yoga group was always there, eternally patient and always encouraging—always understanding and never judgmental.

The friendships and closeness grounded me and enabled me to make clear decisions to find my way to my wonderful son.



Sasha Tulgan | New York, NY FET Success Story + Fertile Hope Yoga Graduate

### "I FOUND MY VOICE AND HAVE BECOME MORE OPEN WITH MY EMOTIONS AND WORDS."

The Fertile Hope Yoga program is **transformative**. It's a safe space that not only allows you to realize that you are not alone, but also gives you the time and place to begin sharing your journey. It has given me the chance to find my voice.

I'm not overly emotional or communicative by nature, so dealing with infertility and loss was difficult. Fertile Hope Yoga helped me find the words to talk about the plethora of emotions I was feeling. When I started the program, I was talking about my journey with only a select few and keeping mum.

Now I talk to everyone about our fertility journey (when appropriate— not the cashier at the grocery store. That teen probably doesn't really care.) I have become more open with my emotions and words. I loved hearing everyone's stories.

"THIS WAS ONE OF THE BEST EXPERIENCES OF MY LIFE AND I WILL BE FOREVER GRATEFUL TO ERIN AND ALL OF THE WOMEN WHO SUPPORTED US ON OUR JOURNEY."



Katya Metidieri | Rochester, NY FET Success Story + Fertile Hope Yoga Graduate

### FREE YOGA FOR FERTILITY COURSE

Get off the emotional roller coaster of anxiety and develop a sustainable sense of inner strength and faith regardless of the many unknowns, imperfections and no guarantees.

Try Fertile Hope Yoga for free. No risk and no credit card required.
You'll receive immediate access to the tools that will help you rewrite your fertility story.

To get started, simply visit: fertilehopeyoga.com/free-trial or scan this





# AIND BODY SMILE

# Mind Body Smile

### WITH DR. ROB

15 Things You Should Do Every Day to Feel More Connected to Your Mind, Body, Spirit and the Universe as a Whole:

### 1. COUNT YOUR BLESSINGS

Start the day by counting your blessings and saying THANK YOU to God for this day. As they say, if you want to find happiness, find gratitude.

### 2. CONNECT WITH NATURE

This can be as easy as sipping your coffee outdoors on your deck in the quiet morning, breathing in the fresh air and listening to the birds. Or, try taking a walk in the woods.

### 3. UNPLUG

Don't forget to turn off your computer, phone, tablet, and TV. Detach yourself from these distractions so that you can relax and tune into what's happening on the inside.

#### 4. MOVE

Go for a walk, a swim, take an easy bike ride, paddle your kayak. It's best if it's not too strenuous.

### 5. SLOW IT DOWN

Your body doesn't need to work so hard. Stay off the elliptical. You don't need to churn out 10 miles on the treadmill or on the roads. Less is more. Strenuous exercise causes inflammation, but don't just sit still.

### 6. FLEX YOUR ARTISTIC MUSCLES

Whether this involves writing a poem or short story, or just recording your thoughts in a journal, painting a picture, making pottery, playing an instrument, or dancing. Tap into your creative side every day.

## 7. PRACTICE MEDITATION, DEEP BREATHING, AND/OR YOGA

You will find yourself more connected to yourself as a result.

### 8. READ OR LISTEN TO A BOOK

Whether it's in your car to and from work or in a quiet corner during lunch, make sure you are reading and continuing to learn every day. There are so many wonderful authors to learn from.

### 9. SHARE AN ACT OF KINDNESS

It can be as simple as holding a door, giving blood, or buying a coffee for the guy behind you in the line at Starbucks.

### 10. KEEP A JOURNAL

and spend time writing in it every day. Record your thoughts and feelings. Your entries don't have to be long.

### 11. LISTEN TO YOUR INNER GUIDE

To do this, sit quietly and comfortably. Close your eyes, breathe in deeply, and exhale. Focus your attention on your breathing. Let thoughts come and go. Allowing yourself to live in the moment will reduce anxiety and stress, and you will have the wisdom to listen to your inner guide. You will suddenly find that things in your life have a beautiful flow and you feel you are exactly where you should be at each moment in time.

### 12. BE MINDFUL & PRESENT

Being mindful means being aware of one's present moment and all of the senses, functions, and delights associated with that moment. It may sound simple, but it is not something that comes easily to most of us. Use your senses to describe each moment that you are experiencing. Repeat to yourself what you are doing "I am sitting on my couch under a warm blanket." Don't allow your mind to take you to the past or the future.

### 13. BE FORGIVING

The act of forgiveness is one of the most noble and loving things we can do. Forgiveness is a choice, and it is very much an internal decision. When we forgive, we are choosing peace and emotional wellness over anger, resentment and emotional immaturity. When we deny forgiveness, we are holding ourselves hostage to negativity. Choosing forgiveness allows us to move out of pain and into peace. It will add balance to our lives and create deeper relationships with others.

### 14. LEARN TO LET GO

Attachment to desire is one of the primary reasons for human suffering. We easily attach

ourselves to ideas, fantasies, expectations, and hopes. When we let go of attachments, we close the door on suffering. Letting go doesn't mean throwing away or giving up. It simply means that we are happy with who we are and what we have at this very moment, and that we do not put all of our happiness into an external desire. Letting go enables us to tap into our inner strength and healing.

### 15. DANCE WITH LIFE

Learning to seek out joy in life is the goal here. Trust that the river of life will provide you with a magical dance. Let your feelings be your guide. It may seem impossible if you are in a place where external events are having a negative effect on your energy and vibration, but when you change the way you view the negative events, the events themselves will change in response to your renewed way of thinking. One way to start experiencing joy right now is to try to hold your smile for as long as you can. Think about things that make you smile. Don't let negative thoughts creep into your mind. If they do, simply envision yourself pushing them back out and maintaining your position of joy.

If you're interested in reading more encouraging thoughts and ideas from Dr. Kiltz, pick up a copy of his latest book *Daily Inspirations*.

In it, Dr. Robert Kiltz shares the inspirational quotes and contemplations that lifted his spirit and guided his personal reflection. He shares his lessons for learning to slow down, breathe deeply, and look inward for the strength and inner guidance you need to feel connected with the universe, achieve your goals, and live the life of your dreams.

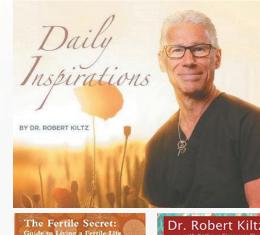
Copies are available for sale on-line at several retailers including Amazon and in our CNY Fertility offices. During your next visit, pick up one for yourself and one for a friend or download the e-book at www.authorhouse.com.

And be sure to check out his other books also available for sale online - The Fertile Secret: 10 Steps to Living Your Most Fertile Life (with Kathryn Simmons Flynn) and The Fertile

Secret: Guide to Living a Fertile Life. Dr. Kiltz's blog, Mind Body

FAMILY BUILDING GUIDE

Smile, can be found at www.mindbodysmile.com.







FAMILY BUILDING GUIDE 86 cnyfertility.com • 1.844.315.baby

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### **ALBANY**



**CNY Fertility Center - Syracuse** 195 Intrepid Lane Syracuse, New York 13205 315-469-8700

Our Syracuse office is just a short drive from the heart of the city. In your free time, catch an SU game or spend a couple hours at Destiny USA, New York's largest shopping, dining, and entertainment center.

Before or after your appointment, relax at our Healing Arts Wellness Center & Spa located just upstairs from our CNY Fertility offices. Enjoy a massage, take a yoga class, have an acupuncture session, or a nutrition consultation while you're here.

Grab a healthy drink at our Fertile Grounds Café and take a moment for yourself in our comfortable surroundings.

### **BY AIR**

Nearby Syracuse International Airport offers convenient flights from all major cities and airlines.

### **BY TRAIN**

Amtrak's Empire Service offers frequent daily trains between NYC and Syracuse, departing

FAMILY BUILDING GUIDE

from Penn Station and arriving at Syracuse Regional Transportation Center.

### **BY CAR**

Our offices are located just off of Rts. 81 and 481, easily accessible from points east and west on the New York State Thruway. Take exit 1 (Brighton Ave.), toward Nedrow. Then turn left onto East Brighton Ave. Take a left onto Intrepid Lane. Our building is up on your left.

### WHERE TO STAY

**Maplewood Suites Extended Stay** 315-451-1511 400 7th North Street Liverpool, NY 13088 5 miles to office (offers airport shuttle, discounted rate when you mention CNY Fertility, free breakfast)



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**CNY Fertility Center - Albany** 38A Old Sparrowbush Road Latham. New York 12110 518-690-0700

Our Albany office is conveniently located near major cities like Boston and NYC, just a few hours drive away and even closer by plane or train. With comfortable and reasonably priced lodging options, affordable fertility care at CNY Fertility is easily accessible to patients on the east coast. While you are in the area, be sure to schedule a treatment at our Healing Arts Center located upstairs from our CNY Fertility office. You can enjoy a relaxing massage, take a yoga class, or have an acupuncture session. Our offices are not far from world-class shopping and many fine dining options.

Nearby Albany International Airport offers convenient flights from all major cities and airlines.

Amtrak's Empire Service offers frequent daily trains between NYC and Albany, departing from Penn Station and arriving in the Albany-Rensselaer train station.

Our offices are located just off of the New York State Thruway / Rt. 87. Take 87N toward Albany

International Airport / Montreal. Take Exit 7 and merge onto NY-7E toward Troy / Cohoes. Take exit onto US-9 toward NY-9R. Continue onto Sparrowbush Road, then turn right onto Old Sparrowbush Road. Our building is up on your

### **Holiday Inn Express**

518-783-6161 400 Old Loudon Rd Latham, NY 12110 less than 1 mile (offers airport shuttle)





**CNY Fertility Center - Rochester** 2244 East Avenue Rochester, NY 14610 585-244-1280

Located in the heart of the Finger Lakes Region, our Rochester office is within an hour of several nearby Finger Lakes—Canandaigua (45 min.), Conesus (40 min.), and Keuka (1 hour). Depending on the season, there is always something to see and do. And don't miss a chance to schedule a treatment at our Healing Arts Wellness Center & Spa located upstairs from our CNY Fertility office. You can enjoy a relaxing massage, take a yoga for fertility class, or have an acupuncture session. Grab a healthy smoothie, pressed juice, or cup of coffer or tea at the Fertile Grounds Café while you visit. Spend a few minutes relaxing in our comfortable atmosphere between spa treatments or just catch your breath.

### BY AIR

Nearby Greater Rochester International Airport offersconvenient flights from all major cities and airlines.

### **BY TRAIN**

Amtrak's Empire Service offers frequent daily trains between NYC and Rochester, departing

from Penn Station and arriving in the Rochester station.

### BY CAR

Our offices are located just off of the New York State Thruway. Take Exit 45 and merge on I-490 toward Rochester. Take Exit 25 toward Fairport/ East Rochester and merge onto NY-31F. Turn left onto Fairport Road/NY-31F. NY-31F become East Ave/NY-96. Our offices are approximately 2 miles ahead on the right.

### WHERE TO STAY

Rochester Plaza 585-546-3450 70 State Street Rochester, NY 14614 3.8 miles from our office



cnyfertility.com • 1.844.315.baby

**CNY Fertility Center - Buffalo** 835 Hopkins Road Buffalo, NY 14221 716-688-5131

**BUFFALO** 

Our Buffalo office is conveniently located near major international cities like Toronto, Ontario, and all points in Western New York. Enjoy some of Buffalo's world-famous foods or take in a game or two with one of Buffalo's professional sports teams. Beautiful Niagara Falls is just a short ride away.

Nearby Buffalo Niagara International Airport offers convenient flights from all major cities and airlines.

Amtrak's Empire Service offers frequent daily trains between NYC and Buffalo, departing from Penn Station and arriving in the Depew station.

Our offices are located just off of the New York State Thruway. Take Exit 25A and merge on I-290 toward Niagara Falls. Take Exit 6 (NY-324/ Sheridan Drive) toward Harlem Rd/NY-240 and merge onto NY-324. Turn right onto Sheridan Drive/NY-324. Turn left onto Hopkins Road/87.

CNY Fertility's offices are approximately 2 miles ahead on the right.

Residence Inn by Marriott Buffalo Amherst 716-632-6622 100 Maple Road Amherst, NY 14221 3 miles from our office



# MONTRÉAL



CNY Fertility Center – Atlanta 924 West Spring Street Monroe, Georgia 30655 770-266-0933

Our newest office location and first outside of New York State is in suburban Atlanta, 35 minutes east of downtown Atlanta and 45 minutes from Hartsfield Jackson International Airport. Before or after your appointment, be sure to enjoy an organic coffee or tea and a local artisan treat at our wellness center/coffee shop where you can learn from a certified herbalist or discover the power of essential oils and aromatherapy. There's lots to see and do while visiting Atlanta: visit the Georgia Aquarium, Centennial Olympic Park, tour the Jimmy Carter Presidential Library & Dark, tour the Jimmy Carter Presidential Library & Dark, Museum, or grab a bite at the Krog Street Market.

### **BY AIR**

Nearby Hartsfield Jackson International Airport offers Convenient flights from all major cities and airlines.

### **BY CAR**

Our offices are located just off of GA-138. Turn right onto West Spring Street/US78 Bypass East/ GA-10 Business. Our Offices are ahead on the left.

### WHERE TO STAY

Please call our office for lodging suggestions.



CNY Fertility Center – Montréal 6363 Transcanadienne, Ste. 105 Montréal (QC) CANADA H4T 1S3 514-508-1114

CNY Fertility's first international location in historic Montréal is just 15 minutes from Pierre Elliott Trudeau International Airport. Take advantage of the full range of women's health services, including counseling, to help put you completely at ease as you begin your fertile journey.

There's lots to see and do while visiting Montréal: tour Old Montreal, visit the Montréal Museum of Fine Arts, Mont-Royal, Biodome, and the Basilica of Notre Dame. And don't forget to treat yourself to some poutine. Nearby Pierre Elliott Trudeau International Airport offers convenient flights from all major cities and airlines.

Please call our office for lodging suggestions.



# NY FERTILITY

### **COLORADO SPRINGS**



CNY Fertility Center – Colorado Springs 265 S. Parkside Drive Colorado Springs, CO 80910 877-475-BABY

There's no shortage of things to do—indoors and out—when visiting our Colorado Springs office. With more than 300 days of sunshine per year and over 30 natural attractions, including the famous Pikes Peak, Garden of the Gods Park, Seven Falls, and Cave of the Winds, you'll have difficulty narrowing down your list. Hiking, walking, or just relaxing, there are lots of beautiful vistas to enjoy.

### BY AIR

Nearby Colorado Springs Airport and Denver International Airport (about 75 min away with 20 shuttles per day to Colorado Springs) offer convenient flights from most major cities and airlines.

### WHERE TO STAY

The Antlers (a Wyndham Hotel) 866-925-7881 4 S Cascade Ave Colorado Springs, CO







# Join Dr. Kiltz For A Fertile Fireside Chat

# Tune in Every Sunday at 10:00 am (EST) LIVE on Facebook and Instagram

The fertility journey can be overwhelming.
There's so much to learn: names of hormones,
anatomy lessons, what to take when, and when
to just wait. It's confusing. Like a whole other
language, and you're already on an emotional
roller coaster. We're here to help.

Every Sunday, we're hosting a casual fireside chat with Dr. Kiltz to answer your questions-simple and complex--about all things fertility. Join Dr. Kiltz as he explains the newest treatment protocols, what hCG wash is and why you might consider it before your next embryo transfer, and why you should be eating fat, plus so much more. No question is off limits and no question too absurd. Whether you're already a patient or just starting to tip your toe in the fertility pool, all are welcome.

Pull up your comfiest chair (and your lap top) and join us in real time for some information, inspiration, and affirmation.

And if you can't tune in live, send us your questions in advance. Transcripts of our chats remain on our Facebook page so you can read through and listen to the Q&A when it's convenient for you.



For our Spanish-speaking clients . . . Join Dr. Maribelle Verdiales every Wednesday evening from 8-8:30 p.m. (EST) as she provides fertility updates entirely en Español.

LIVE on Facebook and Instagram





# CNY FERTILITY

# CNY Fertile Financing<sup>TM</sup>

# MAKING PRICELESS AFFORDABLE<sup>TM</sup>

There is the overwhelming impression that fertility treatment is cost-prohibitive and only celebrities and the very wealthy can afford to pay for this type of medical care. At CNY Fertility, this is not the case. Dr Kiltz founded CNY Fertility with the mission of making fertility treatment affordable to all. You will find that most fertility centers around the country are 2-3 times more expensive than CNY Fertility. CNY Fertility Center provides affordable and compassionate fertility care without sacrificing quality. In addition to participating with and accepting most insurance plans, we offer multiple cycle discount plans, Fertile Financing options that are interest free, and an IVF Refund Plan. Our goal is to provide affordable fertility care, so that your dreams can come true. Prior to your first visit, a CNY Fertility financial counselor will evaluate your insurance coverage so you have a better understanding of which costs are covered and which will be out of pocket. We strive to work with clients to find the financial arrangement that best suits you.

### **PAYMENT PLANS**

CNY Fertility offers payment plans for most treatments, including IVF, FETs, Donor IVF, Tubal Ligation Reversals, Vasectomy Reversals and more. As part of our mission to provide accessible, state-of-the-art fertility care, we allow all of our clients to establish very simple payment plans for up to two years.

### What You Need to Know:

- All of our payment plans, whether for IVF or other fertility treatment, have the same payment structure. Once you understand how it works for one treatment, you understand how it works for all treatments.
- There is a \$250 fee for every 6
  months you finance. This equates to
  approximately \$40 a month. There are no
  other fees or interest payments.
- There is no credit requirement.
- You must have an active credit or debit card.
- We require only your first month's payment prior to beginning treatment (or prior to scheduling your appointment for tubal ligation reversals)
- Vasectomy Reversals require a \$4,000 down payment.
- You can pay any amount up front and finance the remaining balance. For example, if you want to pay \$2,000 toward your IVF treatment upfront and then finance the rest for two years, you would need to pay off \$2,900 over two years (that is a \$1,900 balance from the IVF treatment and \$1,000 in account management fees)
- If you pay off your balance before your agreement is over, you do NOT have to pay the monthly management fee for any months remaining.

### **How to Estimate Your Monthly Payment:**

Step 1: Add up the total for your treatment. Step 2: Add the account management fee to the number above.

Step 3: Divide the number obtained by adding the first steps together by the number of months you want to finance payments over (up to 24 months).

Step 4: You should now have an estimate of your expected monthly payment.

### **Example using IVF:**

**Step 1:** \$3,900 (IVF) + \$800 (monitoring) = \$4,700 total treatment cost

**Step 2:** \$4,700 +\$1000 (\$1000 because I want to finance for 24 months, so that is \$250 x 4 =\$1000) = \$5,700 total amount to be financed

**Step 3:** \$5,700/24 = **\$237.50** 

Step 4: \$237.50/month for 24 months.

### THE FERTILE GUARANTEE PROGRAM

Having a child is one of the most significant decisions you will make in your lifetime. At CNY Fertility, we understand that the price of IVF treatments can be a barrier for couples that are struggling with infertility. That's why Dr. Kiltz and his team are working every day to continue Making Priceless Affordable™. However, some people want more assurance that their investment will result in a successful pregnancy. That is why CNY Fertility offers The Fertile Guarantee.

The Fertile Guarantee program includes all of these services:

- 75% refund if you don't bring a baby home in your arms
- Up to 6 IVF cycles (must complete all Frozen
- Embryo Transfers before moving on to the next
- fresh IVF)
- Cryopreservation of embryos from those 6 cycles
- 1 yr storage of embryos

- Monitoring
- Egg Retrieval
- Anesthesia
- ICSI
- Assisted hatching
- Embryo Transfer
- FET's of embryos created during these cycles

*Excludes:* Medications, IVF screening tests prior to the initiation of medications, such as, hysterosalpingogram, and non-IVF surgeries. Initial pregnancy test and early pregnancy bloods and ultrasounds.

It is important that you understand the total cost of treatment up front. Many IVF centers advertise a low cost estimate that does not include many essential aspects of treatment such as monitoring, retrieval anesthesia, ICSI, assisted hatching, cryopreservation of embryos and FET's. Our guarantee program price of \$20,000 includes all of these services.

### **AFFORDABLE MEDICATIONS**

CNY Fertility also works with several outside programs and pharmacies to bring you the best pricing for your medications. The Compassionate Care Program is designed to help uninsured, income eligible patients overcome financial barriers and better afford fertility medications. Eligible patients may save 25%, 50% or 75% off the self-pay price of Gonal F. Cetrotide and Ovidrel.

WE STRIVE TO WORK WITH
CLIENTS TO MAKE CARE
AFFORDABLE AND TO FIND THE
FINANCIAL ARRANGEMENT
THAT BEST SUITS YOU.

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# You're Not Alone

### SUPPORT AT CNY FERTILITY

It goes without saying that infertility can be a stressful experience. Experts often say that infertility is a life crisis for some couples. The emotions that arise are very real and can be difficult to navigate. Caring for your emotional well-being is as important as treating your infertility, and we understand that each couple's experience and needs are different.

CNY Fertility provides the support you need to help you and your partner through all stages of your fertility journey. Often couples struggling with infertility find it difficult to confide in friends and family. And sometimes well—intentioned comments such as "When are you going to start a family?" or "Just relax and it will happen" only make the situation more stressful. Sharing your frustrations, anxiety, and sadness with others enduring the same struggle can help. Whether you're more comfortable in a group setting, one-on-one or as an observer, CNY Fertility has the support you need to reduce the stress associated with infertility from a medical, emotional, and financial perspective.

### Fertile Friends One-On-One Program Fertile

Friends pairs clients together based on their experiences with infertility. This program was created because many clients have said that friends and family who have helped them cope with other life issues just can't compare to the understanding and support provided by another person who is going through the same struggle to conceive.

### **Circle of Hope Support Group**

The Circle of Hope Support Group meets monthly at each CNY Fertility Center/CNY Healing Arts Center location. The group is moderated by one of our team members, and is open to all clients. During the group session, clients are invited to share their personal experiences, seek support, and gain helpful tools for coping with the emotional ups and downs of infertility. Guest speakers will also occasionally join the group to share knowledge and their own personal journey.



### Fertile Hope Yoga

Fertile Hope Yoga offers comprehensive online yoga courses and private coaching for women who

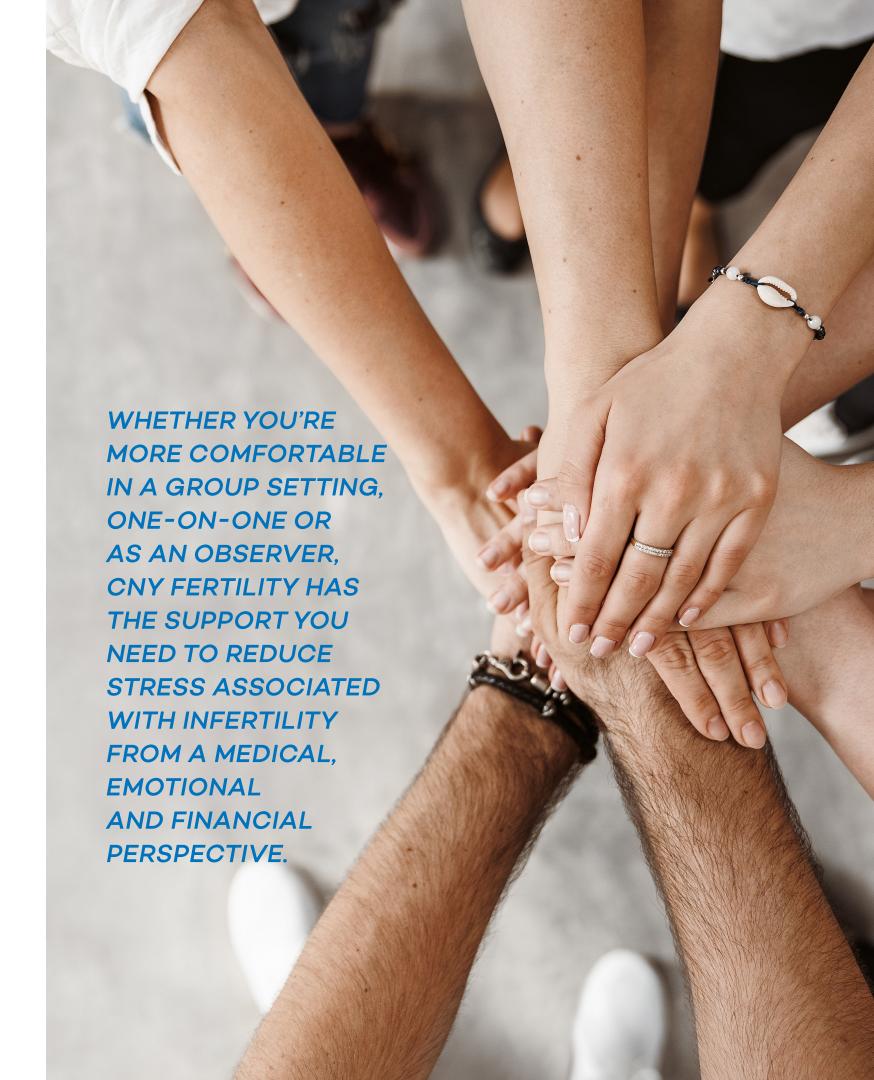
believe in aholistic approach to fertility wellness. It is a sacred space to share stories, focus on the power of positive thoughts, and expect miracles. It is a wonderful gift and resource for women no matter how you're trying to conceive. Visit www.fertilehopeyoga.com for additional information.

### **Monthly Support Webinar**

We recognize that some of our clients are unable to make it to in-office support meetings. Luckily, we are able to offer an Interactive Fertility Support Webinar. This allows clients to listen in and ask questions from the comfort of their own homes. Additional information and calendar can be found on our website www. cnyfertility.com.

### **Private One-On-One Support**

If you are looking for a more private one-on-one support situation, CNY Fertility can recommend several counselors who have successfully worked with fertility clients in the past.





CNY Fertility Center is committed to offering information about each family building option. Some of our clients have found adoption to be their most promising path for creating a family. There are many things to consider when planning to adopt: eligibility, financing, domestic or foreign, adoption provider, and if embryo adoption is a possibility. There are many children who need loving homes.

Adoptions can be performed by a private agency, public agency or through an adoption lawyer. Choosing a reputable adoption provider is important for a positive adoption experience.

When deciding to adopt a child from the US, there are many avenues available. There are different types of agencies which provide domestic adoptions. You may choose to use a private agency or to use an adoption attorney for an independent adoption . Adopting a child from a foreign country is another way to build your family. International adoptions must comply with the laws of the adoptive child's country, and typically require travel to that country.

There are also many children in foster care awaiting safe and happy homes. The parental rights of many children who are placed in foster care will eventually be terminated, allowing them to then be adopted. The majority of these children are older and have special needs, however infants are sometimes available.

### **EMBRYO ADOPTION**

Couples who have completed their family building after fertility treatments may have extra frozen (cryopreserved) embryos. Some couples decide to give their extra embryos to an embryo adoption agency. Following a screening and qualification process, a recipient couple can adopt the embryos and have a frozen embryo transfer. Legal documents and agreements will be signed by all, the embryo adoption agency will step couples through this process.

CNY Fertility is happy to provide additional information about all of these alternatives.



### Ideally begin 30-90 days prior to the start of treatment

The simple dietary and supplement guide to improving your fertility

in preparation for care at CNY Fertility & Preserve

Preparing for Treatment: for Everybody

### The simple guide to improving your fertility in preparation for care at **CNY Fertility and Preserve**





#### Welcome to CNY.

My hope is that we can be helpful, and I want you to know that the CNY Fertility team is here to assist you in every way possible. Through decades of clinical experience, CNY Fertility has discovered that our external environment often creates a hostile internal environment that causes inflammation and leads to infertility.

Inflammation and the subsequent infertility it creates are a pervasive opponents that are best treated with a multi-pronged approach that can incorporate dietary changes, nutritional supplements, pharmacological immunology, mind-body and "eastern" therapies, along with surgical interventions for both males and females.

The origin of inflammation is best understood through the recognition that we are unknowingly placing an excessive amount of these environmental toxins into our bodies in the form of fruits, vegetables, fiber, and lean meats. We don't realize that they are all converted to simple sugar and that plants have defense systems too. They are foreign particles to the human body and cause a constant inflammatory response. Excess glucose causes glycation and fermentation in the belly, creating heat, methane gas, alcohol, acetyl aldehyde (similar to the compost pile in your yard that steams with a foul smell), which are destroying the gut and sending this destruction throughout the entire body including the ovaries, testis, and all reproductive organs.

In my opinion, when it comes to food, less is best. By not putting these food groups into your body in excess variety and frequency, you allow your body to heal and do what it naturally wants to do. Fasting and intermittent feasting is my solution. By eating once or twice a day at most and allowing 12 to 24 hours between feedings, you allow the body time to rest and digest. The B.E.B.B.I. Diet bacon, eggs, butter, beef, and ice cream (Kiltz's ice cream), pronounced "baby", is one of those "opposites" that I have seen so many clients embrace with incredible success. Maria Emmerich is our keto food guide. We recommend following her and considering having a one-on-one coaching session via her website.

Still, modern medicine is a great complement to the natural healing and wellness practices that have been with us for thousands of years. I recommend adding some level of an immune protocol (see below) which may include Intralipids, Lovenox, Prednisone, Low-dose aspirin and Plaquenil to your treatment. Some more aggressive treatments may include IVIG, Humira or Paternal Leukocyte Immune Treatment (LIT), also known as the male immunization treatment. We often recommend 1.5 to 4.5 mg of Low Dose Naltrexone (LDN) a day. LDN is known as the "miracle drug" because of the way it simply reduces inflammation. Similarly, cannabidiol or CBD is an ancient herbal remedy that can also play an important role in reducing inflammation.

To further assess your fertility, a laparoscopy and hysteroscopy can be done to look for intraabdominal endometriosis and scar tissue that may be impeding your fertility due to the inflammation in and around the ovaries, tubes and uterus. This is a silent disorder and can be present without you knowing. Often the only symptoms are infertility, miscarriage, or failed implantation.

Additionally, the use of donor eggs, sperm, embryos or gestational surrogacy may assist your journey significantly. CNY Fertility's donor team is happy to discuss these options with you further if desired. Attached to this document is a quick reference guide with links for more information on all of the things I recommend for preparing your body for fertility treatment. I have seen many clients adopt some of these recommendations and call the following month to cancel their treatment because they became pregnant naturally. If this happens, it is important to stay on the inflammation-reducing plan. There may also be other treatments we can recommend to reduce the chances of miscarriage and premature delivery.

Your faith and belief in a positive outcome will guide you and help you on the way. Keep the faith! Know and imagine you are already fertile and a beautiful child is coming into your life. Joining a supportive community like those in our support groups and fertility mentorship program can be an important part of your success. Yoga for fertility in person at our centers and online at fertile hope yoga, can be another great way to improve fertility, join a supportive community, and foster the belief in a positive outcome. If you have not read The Secret by Rhonda Byrne, you should check it out. My book, The Fertile Secret is also a good resource. Please visit CNY Fertility's website for blog posts and information on lots of fertility topics, and take a look at our Family Building Guide.

Thank you for sharing your journey. I look forward to helping your dreams become your reality.

Dr. Robert Kiltz 315-416-9872 (cell) www.cnyfertility.com

### CNY Fertility

### Women

- BEBBI (Kiltz's keto, bacon, eggs, butter, beef, ice cream). See doctorkiltz.com and keto magazine
- Ovatite, prenatal vitamin with vitamin D, coq10, methylfolate
- Theromega, omega 3 fatty acids
- Ovasitol (inositol) one packet 2 x per day
- Vitamin D (if blood levels less than 20ng/ml)
- DHEA (25 to 75 mg/day) to improve egg quality quantity - unless PCOS
- Low Dose Naltrexone LDN 1.5 to 4.5 mg per day
- Human Growth Hormone (HGH) 6-24 units per day (for low egg reserve or poor quality) or topical HGH (Somaderm gel for OTC form)
- Avoid high impact exercise, keep it cool

### SHOP SUPPLEMENTS

\*LDN is a prescription medication that can only be prescribed by your local provider or by CNY after your consultation

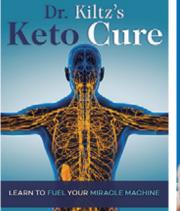
### Men

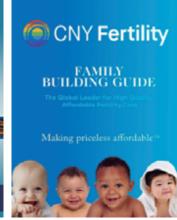
- BEBBI (Kiltz's keto, bacon, eggs, butter, beef, ice cream). See doctorkiltz.com and keto magazine
- Conception XR, male fertility vitamin
- Theromega, omega 3 fatty acids
- Ovasitol (inositol) one packet 2 x per day
- Vitamin D (if blood levels less than 20ng/ml)
- NeoQ10
- Low Dose Naltrexone LDN 1.5 to 4.5 mg per day
- Clomid 25 qd (improves sperm production and function)
- hCG 250 units per day (improves sperm production and function)
- Human Growth Hormone (HGH) 6-24 units per day (for low egg reserve or poor quality) or topical HGH (Somaderm gel for OTC form)
- Avoid high impact exercise, keep it cool

### SHOP SUPPLEMENTS

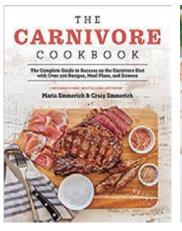
\*LDN, Clomid, & hCG are prescription medications that can only be prescribed by your local provider or by CNY after your consultation

### Helpful Resources





FAMILY BUILDING GUIDE





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IC	IUI	IVF	FET					
				NS	Natural s	tim		
				Oral Low	Letrozole	or Clomid w	ith trigger	
				Mini	Letrozole	10 mg x 5 d	fsh 150 x 10 d	antag/hcg 10k trigger
						fsh/hcg	fsh/menopur	
				Low	fsh stim	150/20	75/75	antag/hcg lupron trigge
				Standard		300/20	225/75	antag/hcg lupron trigge
				Moderate		450/20	300/150	antag/hcg lupron trigger
				High		600/20	450/150	antag/hcg lupron trigger
				Super High		900/20	450/450	antag/hcg lupron trigger
				FET Medicated	Estrace /	Progesteror	ne	

### Sample Immune Protocols (in addition to stimulation protocol)

LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Aspirin 81 mg qd	Aspirin 81 mg qd	Aspirin 81 mg qd	Aspirin 81 mg qd
Prednisone 5 mg bid	Prednisone 5-10 mg bid	Prednisone 10 mg bid	Prednisone 10-20 mg bio
Z pack or doxy	Z pack or doxy	Z pack or doxy	Z pack or doxy
Antihistamine (Pepcid, Claritin, Benadryl)	Antihistamine (Pepcid, Claritin, Benadryl)	Antihistamine (Pepcid, Claritin, Benadryl)	Antihistamine (Pepcid, Claritin, Benadryl)
Dietary and supplementary support	Dietary and supplementary support	Dietary and support	Dietary and supplementary support
	Intralipids, weekly	Intralipids, weekly	Intralipids, weekly
	Lovenox 30 mg qd	Lovenox 30 mg qd	Lovenox 40 mg bid
		Plaquenil 200 mg qd or Prograf 0.5 - 1 mg bid	Plaquenil 200 mg qd or Prograf 1 mg bid
		Neupogen sq 60 mcg qd	Neupogen sq 60 mcg qd
		hCG Boosters 250	hCG Boosters 250
		PRP / HCG wash	PRP / HCG wash
		HGH 6u, Somaderm, or SeroVital	HGH 6u, Somaderm, or SeroVital
			LIT
			IVIG 20-40 grams q 4 weeks
			Humira 40 mg x2 q 2-4 weeks

# Check List of implantation treatments and oocyte quality and quanity boosting, mostly with inflammation reduction

Aspirin 81 mg start of cycle or earlier
Prednisone, 5-20 mg qd or bid, start of cycle or before
Doxy 100 mg bid or zpack, start of cycle for 5 days
Weekly intralipids, 100ml 20% may be given to 12 weeks or longer
Lovenox 30-40 mg qd vs bid, beginning of cycle and continue up to term pregnancy
Neupogen 60 mcg qd, with stim or with transfer preparation
HGH 6u, Somaderm, or Serovital per day pre stim or with stim or transfer
Plaquinil 200 mg bid
Prograf 0.5 to 1 mg bid
Humira 40 mg x 2, 2 weeks apart, or cimzia 400 mg x 2 q 2 weeks then 200 mg q 2-4 weeks
IVIG 20-40 grams q 2-4 weeks
Hysterosocpy d and c (scratch) / +/- era
Laparoscopy for endo adhesions myoma, or empiric use of orilissa / lupron for 30-60-909 days
Prp (platelet rich plasma) wash
Hcg (Human Chorionic Gonadotropin) wash
Hcg sq boost 250 qd
Neupogen wash
Metformin, 500 mg to 2000 mg per day
Orilissa 150-200 mg qd and letrozole 5mg 1-3 months
Ovasitol / inositol
Antihistamine protocol (claritin - 10mg am / pepsid 20 mg / benadryl 25 mg)
Ovavite female / conception xr for guys / omega 3 fatty acids
LDN, low dose naltrexone, anti inflammatory, 1.5 to 4.5 mg per day, night best
CBD oil, 15-30-60 mg per day, anti inflammatory, start low and up dose if tolerated well
Keto , look at drkiltz.com for full advice and start immediately, best diet for health and wellness for all, even with pregnancy
Yoga / tai chi / light easy workout
Meditation / prayer / positive vision practice
Slow down and cool down
Acupuncture / massage
Natural / mini stim / standard stim / moderate stim / high stim
Gestational carrier / donor oocytes / donor sperm / donor embryo
Guys, hcg 250 boosters, clomid 25 mg, keto, LDN, CBD oil, slow down, cool down, massage , acupuncture
Viagra vaginal suppositories to improve blood flow to uterus

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# Dr. Kiltz's B.E.B.B.I Diet



Bacon | Eggs | Butter | Beef | Ice Cream

The single best way to reduce inflammation throughout the body is to adopt a high fat, low protein, near zero carbohydrate diet, such as Dr. Kiltz's B.E.B.B.I Diet.

### What is the B.E.B.B.I. Diet?

Pronounced "BABY", the B.E.B.B.I. Diet is a high fat (80%), medium protein (20%), zero carbohydrate food plan that focuses on bacon, eggs, butter, beef (or other fatty meat), and ice cream. It's also referred to as The Lion King Plan or the Carnivore Plan, because you're eating like the king of the jungle—high fat, a small amount of protein, and no carbohydrates. This means eliminating all fruits and vegetables as well, as they are carbs and contain sugar and phytochemicals.

In combination with intermittent feasting, the B.E.B.B.I. Diet has been shown to help boost fertility in both men and women by naturally reducing inflammation throughout

### Why B.E.B.B.I.?

Diet is the number one source of chronic inflammation and fertility dysfunction. Making changes to what, when, and how frequently you eat can heal your body and reduce inflammation.

The excessive and repeated consumption of carbohydrates, sugars, grains, fruits, fiber and vegetables is very inflammatory to our bodies. Constant sugar in the bloodstream, along with plant phytochemicals and antigens cause an immunologic response. White cells and cytokines are enhanced. You might feel it in your joints, your skin, bowels, head, eyes, or you may not even feel it at all. Heat in the gut and bowels carries over to the reproductive organs in both men and women damaging the uterus, tubes, and testes. Untreated, chronic inflammation can result in repetitive pregnancy loss, failed implantation during IUI, IVF or natural cycle, or simply not conceiving.

### Fat is Essential... Sugar & Carbs are NOT!

Contrary to what we've been told and what many of us believe, fat is healing. Fat is the building block of every cell in our bodies. Fat can reduce inflammation and help our body repair itself. It's really fruits, fibers, vegetables, grains and the constant ingestion of carbs that make us fat and chronically inflamed.

Our bodies require fat for energy. If we can't eat fat or make fat, we die. The mitochondria of our cells need saturated fat (beef fat, pork fat, butter fat). Unfortunately, the majority of fat we consume is industrial, man-made fat. What we really need to be eating is nature's fat—that stuff that surrounds the animal or is intertwined and marbled in every nook and cranny of the meat.

Excessive sugar leads to inflammation. All carbohydrates and all plant material (that's fruits, veggies, and fiber) convert to sugar and then to fat in the liver. Carbohydrates and sugar are non-essential nutrients. Our bodies require zero carbs and zero sugar.

Eating fat in its purest form is the simplest energy source for our bodies.



### Dr. Kiltz B.E.B.B.I Diet











Intermittent Feasting



Eating a meat-based or carnivorous diet provides all of th essential nutrients your body needs. A vegetarian diet-ever with "super foods" and their antioxidants—cannot deliver some of these essential vitamins and minerals. This is why most vegetarians must take supplements.



Bacon

Eggs

**Butter** 

Ice Cream

### WHAT TO EAT

Beyond bacon, eggs, butter, beef, and Kiltz's Keto ice cream, I recommend that you stay very narrow in your selection of foods. Minimize the variety and simplify your meals. Eliminate pasta, bread, yogurt, milk, seeds, and nuts. Stay away from lean meats and try to choose grass-fed, allnatural meats. B.E.B.B.I. is about streamlining and simplifying.

You want to consume fatty meats like a rib-eye steak, not lean, fat-free chicken breast. You need to eat the fat. By adding fat, cream, butter, and eggs, you reduce inflammation; you reduce your appetite; you reduce your glucose levels; your energy is so much better; and your body begins to heal itself.

Fat in its best and purest, most natural form comes from animals (lard, tallow, butter, ghee, duck fat). Secondarily, there are several fruits and vegetables that are high in fat,

like coconut oil, cocoa butter, and hemp seed oil. Stay away from vegetable oils like soybean, canola, vegetable, sunflower, and corn oil.

### **Good Meal Choices:**

- Rib Eye Steak or other cut with good marbling
- Pork Belly
- Liver/organ meats
- Pork/Lamb Shoulder, Chops, Ribs. Brisket
- Skin-on Chicken thighs and wings fried in own fat

### WHAT TO DRINK: Water, Coffee, Tea, Bone Broth

Have a cup of coffee or tea with cream or butter and a glass of water (still or bubbly with no added sugar) when you need it. Avoid alcohol in all forms. Alcohol is toxic to your body. Purchased or homemade bone broth is another great addition. It's a great snack and a soothing way to start or end the day.

### WHEN TO EAT

Beef

Once per day is best. Intermittent fasting (or intermittent "feasting" as I refer to it) is highly recommended with the B.E.B.B.I. Diet. This involves eating just one meal a day and allowing 12-24 hours between feedings. We're not meant to eat 3-6 meals a day with snacks in between, constantly filling the gut with fiber and carbs that ferment and feed the bacteria and yeast in our gastrointestinal tract causing more disease. Our bodies are well-designed to go without food, yet most of us consume excessive calories that add fat to our bodies. It's best to eat just before bedtime, giving your body time to rest and digest while you sleep.

### **HOW MUCH TO EAT**

What you eat is far more important than how much you eat. You will find that fatty meats are more filling than lean meats, and you will likely feel full before you finish your meal.

### **EXERCISE**

#### Intentional movement is key, but avoid excessive exercise.

Activities like high intensity running or spin class create additional friction, heat, trauma, and damage in the body. We are meant to walk, take in the sites, not run or churn away on the elliptical. Yoga and Tai Chi are ideal options. Slow movements accompanied by mediation and quiet thinking are great for your mind, body, and soul. I urge clients to slow it down. That doesn't mean stop moving, but be cognizant that strenuous exercise heats up the body and takes the blood flow away from your core where it's needed.

## Getting Started on Kiltz's Keto the B.E.B.B.I. Diet

- **GET RID OF ALL SUGAR**
- GET RID OF ALL GRAINS (Wheat, corn, rice, oats)
- GET RID OF ALL HYDROGENATED OILS (AKA VEGETABLE OILS)—Most vegetable oils contain Polyunsaturated Fatty Acids (PUFAs) and are very inflammatory
- GET RID OF ALL FRUITS, VEGETABLES. AND FIBER.
- ADD THE FAT! Add full-fat heavy cream to your coffee. Eat rib-eye steak, fatty bacon, eggs, and butter. Don't trim the fat, eat it!
- PRACTICE INTERMITTENT FEASTING -(1-2 meals per day spaced out)

### **Helpful Resources:**

DoctorKiltz.com

Dietdoctor.com

Livinlavidalowcarb.com

Kendberrymd.com

Carnivoreaurelius.com

Kevinstock.io

Shawn-baker.com

Mariamindbodyhealth.com

# Ice Cream

#### **INGREDIENTS:**

- 1 Pint of High-Quality Heavy Cream (preferably grass-fed)
- 2 TBSP of granulated pure cane sugar
- 2 TBSP pure vanilla extract (can use vanilla bean scraped as well)
- 1 egg (organic preferred) (optional)

### NOTE:

Recipe can be doubled depending on the capacity of your ice cream maker

### **DIRECTIONS:**

Shake cream and pour into a large bowl. Add sugar, egg, and vanilla extract. Whisk until well combined and frothy. Pour into ice cream machine and follow manufacturer's instructions.



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