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MEET OUR PHYSICIANS



Russell A. Foulk M.D.



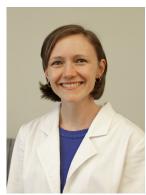
Shawn E. Gurtcheff M.D., M.S.



Deirdre A. Conway M.D.



Jason Parker D.O.



Jessie A. Dorais M.D.

Visit our website to view additional members of our team. www.IdahoFertility.com

INFERTILITY ACRONYMS

Commonly Used Acronyms

ART Assisted Reproductive Technology CC Cubic Centimeter (same as ML)

CD1 Cycle Day 1

E2 Estradiol (form of estrogen)

ER Egg retrievalEV Estradiol Valerate

FET Frozen Embryo Transfer
FSH Follicle Stimulating Hormone

(e.g. Follistim, Gonal F)

GnRH Gonadotropin Releasing Hormone HCG Human Chorionic Gonadotropin

HMG Human Menopausal Gonadotropin (menopur)

HSG Hytsterosalpingogram

ICSI Intracytoplasmic Sperm Injection

IM Intramuscular

IUI Intrauterine Insemination

IVF/ET In Vitro Fertilization and Embryo Transfer

LH Luteinizing HormoneML Milliliter (the same as CC)OD Ovum (Oocyte) Donor

PESA Percutaneous Epididymal Sperm Aspiration

PGD Preimplantation Genetic Diagnosis PGS Preimplantation Genetic Screening

PIO Progesterone in Oil

RPL Recurrent Pregnancy Loss

SART Society for Assisted ReproductiveTechnology

SQ Subcutaneous (also SC)
TESE Testicular Sperm Extraction

TDI Therapeutic Donor Sperm Insemination

Common Lab Test Acronyms

ABO-Rh Blood Type and Antibody Screen

AMH Anti-mullerian Hormone

E2 Estradiol

FSH Follicle Stimulating Hormone HCG Human Chorionic Gonadotropin

P4 Progesterone PRL Prolactin

T3, T4, FT4 Thyroid Function Tests

TSH Thyroid Stimulating Hormone



FERTILITY WORKUP

WHAT TO EXPECT AT YOUR CONSULTATION APPOINTMENT.

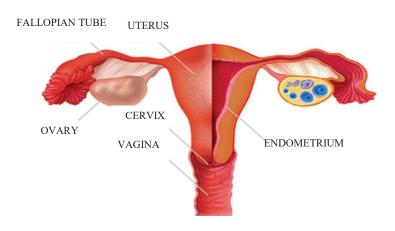
Your physician will begin with a review of your medical and personal histories. You'll likely discuss everything from family medical history to diet and lifestyle to your current sexual practices. Your healthcare provider generally conducts an ultrasound exam on female patients to assess uterus and ovaries. Male patients with known male factor may have a physical exam. Depending on your medical and lifestyle history, your physician will then conduct necessary testing to evaluate reproductive organs and function.

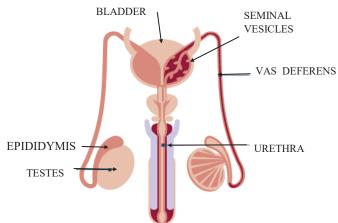
FEMALE EXAM

Exam consists of general physical exam and sometimes a breast exam. Comprehensive pelvic exam. Size, shape and position of reproductive organs can be determined with ultrasound examination.

MALE EXAM

Exam consists of general physical along with examination of the reproductive organs.





BASICS NEEDED FOR CONCEPTION

4 COMPONENTS REQUIRED	TESTS FOR DIAGNOSIS
1. HEALTHY SPERM	SEMEN ANALYSIS
2. HEALTHY EGGS + OVULATION	BLOODWORK / HORMONE EVALUATION PHYSICAL EXAM AND ULTRASOUND
3. WORKING FEMALE ANATOMY	HSG (Hysterosalpingogram)
(UTERUS + FALLOPIAN TUBES)	and/or SALINE SONOHYSTEROGRAM
4. TIME	



THINGS TO THINK ABOUT WHEN YOU'RE TRYING TO CONCEIVE

Things to Think About When You're Trying to Conceive

There are many important steps that a couple needs to take when preparing to conceive a child. It is very important that both partners are ready physically and emotionally for this life-enhancing event. Consider preparing for pregnancy as if training for a great race. This race requires both good health and pre-race planning. There is no question that the state of health in which a pregnancy is established goes far in maximizing your baby's health. Listed below are some basic guidelines to consider.

MEDICAL PROBLEMS / MEDICATIONS: Make sure your physician is aware of any chronic medical conditions and medication use as well as supplements.

TOBACCO / CAFFEINE / ALCOHOL: Multiple studies have shown a strong link between smoking (any form of tobacco use) and male/female infertility. If you use tobacco products, PLEASE stop. Alcohol may be consumed in small quantities (no more than 1-2 drinks per day), but women should stop drinking completely once pregnant. Excessive use of caffeine should be avoided. A recent study showed caffeine intake in excess of 250 mg/day may be linked to miscarriage.

RUBELLA / CHICKEN POX / PERTUSSIS: If you have never had or been immunized against these diseases it is strongly suggested that you be immunized. Present guidelines are to wait one month after receiving these vaccines before attempting pregnancy.

INFECTIOUS DISEASE SCREENING: In keeping with national guidelines, testing for human immune-deficiency virus (HIV), syphilis, and hepatitis B/C is recommended unless there is documented evidence of immunity or written refusal.

PAP: We follow the most current guidelines for cervical screening. If you are not current in your pap testing, please let us know.

MAMMOGRAM: Annual screening mammograms are recommended in all women after age 40.

FLU VACCINE: For those patients at higher risk, influenza vaccine is recommended prior to the start of the flu season and is also recommended for pregnant women.

GENETIC SCREENING: Based on your family history and ethnicity, we can identify certain diseases for which you may be at risk of being a carrier. Please see additional information on the Genetic Carrier Screening page.

ZIKA: There is no vaccine to prevent Zika virus. Take steps to prevent mosquito bites. Use insect repellent; wear long-sleeved shirts and long pants; stay in places with air conditioning or with window and door screens. Choose an EPA-registered insect repellent. See: http://wwwnc.cdc.gov/travel/page/avoid-bugbites

We feel that it is important to your health and that of your future baby that you have received and read this information. Please feel free to address any questions you might have at your next appointment.



VITAMINS AND SUPPLEMENTS

EXERCISE / WEIGHT: Maintain regular physical activity 3 to 4 days a week concentrating on cardiovascular exercise. Walking is excellent and keep in mind exercise alone with no weight loss does improve fertility and pregnancy outcomes.

VITAMINS / FOLIC ACID: At least one month prior to conception, it is recommended that you take an additional 800 micrograms of folic acid daily. Adding this to a good quality standard multivitamin, even a chewable preparation, will meet your needs and avoid side effects. A typical "prenatal vitamin" once daily is another option.

MEN AND WOMEN	WOMEN	MEN
		MEN WITH LOW SEMEN COUNT, MOTILITY AND/OR MORPHOLOGY
Healthy diet Mediterranean Diet or brightly colored fruits and vegetables high in antioxidants Avoid tran-saturated fat (use olive oil for cooking and salads) and avoid processed food. Minimize carbohydrates and limit those to complex carbs and whole grains.	Antioxidants (especially important for women>37): Co-enzyme Q10: 600 mg/day Vitamin C: 500-1,000 mg/day Decaf green tea: 1 cup/day Pycnogenol: 40-60 mg 2x/day Folic Acid: 400 mcg/day (should be in prenatal vitamin) Vitamin D: 500-1,000 IU/day Omega-3 FAs: 500-1,000 mg/day For women with PCOS: Myoinositol: 2,000 mg/day (commercially available as Ovaboost or Pregnitude)	Antioxidants: Co-enzyme Q10: 400 - 600 mg/day Vitamin C: 500-1,000 mg/day Vitamin E: 1,000 IU/day Green Tea: 1-3 cups/day Pycnogenol: 40-60 mg 2x/day Dark chocolate: low sugar Omega-3 FAs: 1,000-2,000 mg/da Folic Acid: 400 mcg/day Zinc: 15-30 mg/day

LIVE HAPPY AND HEALTHY: Stress is a normal part of life, but can be significantly magnified by fertility problems. Counseling may be helpful for those suffering from difficulties with stress. For most, the chances for pregnancy with fertility treatments are excellent.

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STRESS MANAGEMENT

Discovering difficulty in getting pregnant can cause a variety of emotions. Frustration is certainly a common feeling as well as loss of control, and anger. Infertility is not a topic easily shared or discussed so often couples or individuals end up feeling a sense of isolation as they are privately struggling month after month.

Although stress does not typically cause infertility, stress can have a negative impact on your mind and body. Body organs can work harder than normal and some productions of chemicals can be increased by stress. It is essential to take care of yourself physically as well as mentally and spiritually.

WAYS TO REDUCE STRESS

- Remember you are not alone.
- Talk to others who have experienced infertility and understand your emotions.
- Join a support group or online forum. Focus on your relationship with your partner.
- Talk to a therapist or counselor.
- Focus on Health:

Good nutrition: eating a balanced diet is essential to your physical and mental health.

Exercise.

Try stress reduction techniques: meditation, yoga or acupuncture.

- Educate yourself.
 - Learning as much as you can about the root causes of your fertility and
 - treatment options to overcome those causes can help you regain some of the control.
- Set time to focus on interests unrelated to infertility. Dealing with infertility can feel
 - consuming. It's helpful to take up an enjoyable hobby with your partner.

SUPPORT/COUNSELING RESOURCES



The Healing Group http://www.thehealinggroup.com (801) 305-3171

> Kathy Parker, LCSW 4505 Wasatch Blvd, Ste 380 SLC, Utah 84224 Phone: 801-671-1315



Chapters and Seasons Salt Lake City and Draper www.chaptersandseasons.com (801)203-0244

Kerri Abney, MSW, LCSW 1803 N 1220 W, Suite B Provo, Utah 84604 Phone: 385-236-2957



Utah Infertility Resource Center http://www.utahinfertilityresourcecenter.org (385) 313-0990

> Stephanie Voigt, PsyD Center for Human Potential 265 E. 100 S., Suite 250 Salt Lake City, UT 84111 Phone: 801-483-2447

www.IdahoFertility.com

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RESOURCES

ONLINE RESOURCES

Utah Fertility Center www.UtahFertility.com

American Society for Reproductive Medicine (ASRM) www.asrm.org

Society for Assisted Reproductive Technology (SART) www.sart.org

Attain IVF www.attainfertility.com

Idaho Infertility Resource Center www.idahoinfertility.com

Resolve: The National Infertility Association www.resolve.org

Center for Disease Control & Prevention (CDC) www.cdc.gov

Footsteps for Fertility www.footstepsforfertility.com

Path 2 Parenthood www.path2parenthood.com

Fertile Hope www.fertilehope.org

Fertility LifeLines www.fertilitylifelines.com

Genesis IVF www.genesisivf.com

Pacific Coast Reproductive Society (PCRS) www.pcrsonline.org

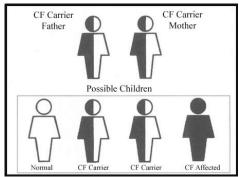
Reproductive Facts www.reproductivefacts.org



PRECONCEPTION GENETIC CARRIER SCREENING

Inherited genetic disorders in children of healthy parents are rare, but can be devastating. Every couple planning a pregnancy should consider whether they want to be tested to see if they are carriers of the most common genetic disorders. This handout briefly describes the testing available. Please feel free to ask questions about this process during your visits.

Every normal person carries genes that may give rise to a child with a genetic disorder if the child inherits a copy of the abnormal gene from both parents. These are called recessive genes and their prevalence varies among ethnic groups. When both parents are carriers of the same recessive disease, there is a 1 in 4 (25%) chance that the pregnancy will inherit the trait from both parents and have the disease, a 1 in 2 (50%) chance that the child will inherit the trait from only one parent and be a carrier, like the parents, or a 1 in 4 (25%) chance that the child will not inherit the trait from either parent and will not be a carrier or have the disease.



Carrier status for a from generation to generation. cific genetic test. Following is a table er frequencies in different ethnic groups.

recessive disease is passed silently Frequently, carriers are identified only by a spelisting some of the more common diseases and carri-

Ethnic Group	Disease	Carrier Frequency	
Ashkenazi Jewish	Canavan Disease	1 in 40 (2.5%)	
	Tay Sachs Disease	1 in 30 (3%)	
	Cystic Fibrosis	1 in 25 - 29 (4%)	
	Familial Dysautonomia	1 in 30 - 32 (3%)	
African American / West	Sickle Cell Anemia	1 in 6 - 12 (8 - 16%)	
African	Other Hemoglobinopathies	1 in 30 - 75 (up to 3%)	
European Caucasian	Cystic Fibrosis	1 in 25 - 29 (4%)	
	Fragile X 1 in 178 women (0.5%)		
	Spinal Muscular Atrophy	1 in 47 (2%)	
Hispanic	Cystic Fibrosis	1 in 46 (2%)	
Mediterranean / South Asian	Beta Thalassemia 1 in 20 - 30 (3 - 5%)		
SE Asian (Thai, Vietnamese, Laos) Alpha Thalassemia 1 i		1 in 20 (5%)	



PRECONCEPTION GENETIC CARRIER SCREENING

Cystic Fibrosis

Cystic fibrosis is one of the most common genetic conditions. It causes chronic lung and intestinal problems, poor weight gain and other symptoms, usually beginning in early childhood. Although treatment for cystic fibrosis has improved, life span and quality of life remain limited.

Fragile X

Fragile X is the most common cause of inherited intellectual disability. It is caused by a change in a region of the X chromosome, called the Fragile X Mental Retardation (FMR-1) gene, which leads to characteristic clinical features. These include developmental delay, autism, hyperactivity, and sometimes physical features. People at particularly high risk include the following:

Individuals with intellectual disability, developmental delay, or autism

Individuals with a family history of Fragile X or unexplained developmental delay

Young women with elevated levels of follicle-stimulating hormone and premature ovarian failure or with a family history of premature ovarian failure

Individuals with a personal or family history of intention tremor or ataxia

Spinal Muscular Atrophy (SMA)

SMA is characterized by severe muscle weakness and loss of voluntary muscle control. Symptoms can begin in infancy and include breathing and swallowing problems, and difficulty crawling. The most severe cases can result in death before two years of age.

Sickle-Cell Disease

Sickle-cell disease is a blood disorder that occurs most commonly in African Americans or in people of Mediterranean descent. Its severity can range from mild to life threatening.

Thalassemia (Cooley's Anemia)

Thalassemias are a group of anemia-like blood disorders that occur most commonly in people of Mediterranean background, African Americans and Asians. These conditions can range from mild to life threatening.

If you choose to be tested for these conditions, the best time to be tested is when you are **planning** a pregnancy. Screening usually involves only a simple blood test. If the results are normal for either parent, the concern for having children with these disorders is greatly alleviated. Even if both of the parents are carriers, they can still have normal, healthy babies, but it does mean there is a degree of risk. Prenatal testing can be done.

If you are interested in carrier screening, or if you would like additional information from a genetic counselor, please inform your provider as soon as possible. We are happy to assist you in arranging these services. Genetic counselors can also address your risk of specific diseases that may run in your family, as well as the risk of chromosomal abnormalities in women of advanced reproductive age, and testing which may be available.

Please note that *some insurance companies cover genetic testing and others do not*. Please verify coverage with your insurance company prior to testing. Diagnosis codes that may be necessary to verify insurance coverage include ICD-10 codes: Z01.419 (Testing of female genetic disease carrier status) and Z31. V26.34 (Testing of male for genetic disease carrier status); and CPT codes: 83890, 83894, 83896, 83898, 83912.

The **Obstetrix Maternal Fetal Medicine** offers genetic counseling and testing services, and may be reached by calling **(208) 528-2925**.



COMPREHENSIVE FERTILITY TREATMENTS

TREATMENT OPTIONS

Ovulation Induction

Intrauterine Insemination

Donor Sperm Insemination

Advanced Reproductive Techniques:

- In-vitro Fertilization
- Intracytoplasmic Sperm Injection (ICSI)
- PESA/TESE For Men With Vasectomies
- Preimplantation Genetic Diagnosis (PGD)
- Gender Selection
- Elective Egg Freezing
- Oncofertility (Fertility Preservation For Cancer Patients)
- Gestational Carriers /Surrogacy
- Ovum Donation
- Gestational Carrier Program

Treatment for Repeated Miscarriages

Advanced Reproductive Surgery

- Operative Hysteroscopy
- Laser Laparoscopic Gynecologic Surgery
- Myomectomy and Uterine Reconstruction

Andrology Services:

- Surgical Sperm Retrieval Methods (PESA, TESE)
- Semen Analysis, Sperm Preparation
- Sperm Cryopreservation
- Short Term Sperm Storage



PRE-CYCLE TESTING / NEXT STEPS

Call IFC on Cycle Day 1 (first day of full menstrual flow, not spotting). If your cycle starts over a weekend please call the following Monday.
Be aware that some medications are ordered through specialty pharmacies. The pharmacy will be calling you to get or verify delivery information. We will be instructing you when to take these medications.
HCG (trigger shot) - used to time ovulation Progesterone - supports uterine lining after ovulation
Schedule blood draw for preconception labs and infectious disease screening. Previous labs may be used if drawn less than one year prior. Order may be used if you prefer having them drawn at another facility.
Schedule baseline ultrasound (Done on Cycle day 2-3).
Male partner scheduled to have blood draw for infectious screening. Previous labs may be used if drawn less than one year prior.
Begin birth control pill, one by mouth daily, on cycle day 2, 3, and 4. Continue until otherwise instructed per your calendar. Take only the active birth control pills and discard placebo pills (typically the last week of the pill pack).
Schedule HSG (hysterosalpingogram) to be done cycle day 5-10.
Schedule water ultrasound (saline sonogram/sonohysterogram/SIS).
Schedule semen analysis to be done at IFC. Schedule (Cryo backup) if you wish to have the sperm frozen and stored as a backup for IVF cycles.
Schedule Plan of Care (POC) appointment with IVF coordinator.
Schedule financial consult.
Schedule follow-up visit with physician.
Other



QUICK REFERENCE PROTOCOL (IVF)

COMMON TREATMENT PROTOCOL

1		SCHEDULE PLAN OF CARE WITH NURSE
2		CALL CYCLE DAY 1
3		BASELINE ULTRASOUND
4	5953	FOLLOW MEDICATION CALENDAR
5		FOLLICLE ULTRASOUNDS
6	4	HCG TRIGGER
7		EGG RETRIEVAL
8		EMBRYO TRANSFER
9		SCHEDULE PREGNANCY TEST

- INJECTION VIDEO TUTORIALS: IDAHOFERTILITY.COM>PATIENT RESOURCES MENU
- IVF STEP BY STEP TUTORIAL: SEE OUR UTAH WEBSITE VIDEO
 UTAHFERTILITY.COM>TREATMENT/IVF MENU>ADVANCED TECHNIQUES/IVF