# Weight & Fertility

At Alberta Reproductive Centre, we are aware that weight is a sensitive issue. We recognize that people come in all shapes and sizes which is not a reflection of overall health. We understand that stigma and assumptions related to excess weight can be detrimental. The purpose of this handout is to provide you with resources, information, and an understanding of our approach to procedures as we work within the guidelines from the College of Physicians and Surgeons of Alberta (CPSA) for Non-Hospital Surgical Facilities.

### Why does ARC need to know my weight?

At ARC, your weight will be used to calculate your Body Mass Index (BMI). BMI is one standardized way to combine your weight and height (Calculate Your BMI - Standard BMI Calculator (nih.gov). BMI is used in fertility studies and guidelines that inform clinical practice and treatment. It is also used by the CPSA in their standards to which ARC is held. We want you to have the safest and most successful fertility journey. With each patient's unique needs guiding our individualized care plans some recommendations or requirements may be determined with your BMI in mind.

Each patient will be individually assessed, however the ability to optimally deliver care may be limited depending on body habitus. Such limitations may include difficulties in visualizing anatomy such as the ovaries and lining of the uterus on ultrasound resulting in difficulty in follicle monitoring, decreased egg yield at egg retrieval, or a suboptimal embryo transfer. Suboptimal ovarian response despite increased doses of medication may result in a decreased chance of pregnancy with treatment. There may be safety concerns such as an increased risk of airway obstruction during procedures using sedation.

Based on the CPSA standards that require an Anesthesiologist involved in care when a patient's BMI ≥40, your ARC Physician may discuss the need for an Anesthesiologist (a physician who specializes in sedation during surgical care) to provide a consultation and be present during procedures such as an egg retrieval for your health, safety, and comfort. At this time Alberta Health Services does not pay for infertility treatments and these services are privately paid, thus the cost for the Anesthesiology consultation and cost for the Anesthesiologist to be present at your procedure would be billed to you.

If your BMI is ≥40 and you are pursuing pregnancy, you will also have a consultation with an Obstetrician who specializes in pregnancy and excess weight and whose services are covered by Alberta Health. Their assessment of your overall health and risks in pregnancy and delivery will then guide the conversation about treatment. This is inclusive of any patient wanting to achieve pregnancy with ARC, regardless of treatment type (ie. oral/injectable medications, insemination, IVF, embryo transfer).

Your ARC Physician will discuss the best possible options for success with you at your appointment. We want to ensure we meet every patient's individual needs, while also ensuring your comfort and safety. Your ARC team believes in patient-centered care where you are empowered to make informed decisions about your own care and wellness through different options that we offer (ie. Anesthesiologist, Dietitian, Psychologist).



# Weight & Fertility

## How does weight affect fertility?

Some patients who have excess weight may experience irregular ovulation and menstrual cycles, or no ovulation or menstrual cycles. Pregnancy rates are lower related to the lack of regular ovulation but also due to other related factors such as thyroid disease, insulin resistance, or diabetes. There is evidence that excess weight also decreases in vitro fertilization (IVF) success rates with lower overall pregnancy rates and higher miscarriage rates reported.

Patients who have excess weight can also have decreased sperm counts and sperm motility. They may have hormone imbalances including lower testosterone levels which are vital for reproduction. Other factors associated with excess weight may include sexual dysfunction, sleep apnea, diabetes, or scrotal hyperthermia. There is emerging evidence that excess weight in the sperm provider may impact embryo development, clinical pregnancy rates, and miscarriage rates.

### How does weight affect pregnancy?

With excess weight, there is an increased risk of developing pregnancy-induced high blood pressure (Preeclampsia), and pregnancy-induced diabetes (Gestational Diabetes) with an increased BMI. Patients with excess weight also have a higher chance of needing a Caesarean section and have an increased risk of complications during this surgery. Babies born to patients with excess weight in pregnancy, have an increased risk of preterm birth, decreased or increased birth weight, need for admission to the Neonatal Intensive Care Unit (NICU), and birth defects such as neural tube and heart anomalies. Not only is weight a factor, but contributing to the chance of these outcomes are obstructive sleep apnea, diabetes and preconception high blood pressure. Small weight reductions prior to pregnancy improve pregnancy outcomes.

## Should I pause fertility treatments to lower my BMI?

Your ARC Physician will consider all factors related to your history and health including your age and specific infertility factors prior to making a recommendation. You may be referred to an Obstetrician who specializes in pregnancy and excess weight and whose services are covered by Alberta Health. Their recommendations based on your overall health and possible complications in pregnancy or delivery may guide your decision about proceeding with infertility treatments. You may choose to work with them on lifestyle changes or use prescription medications to lose weight first.



# Weight & Fertility

#### How can ARC support me?

Your ARC Physician will review your individual history and suggest services to ensure that you have the safest fertility journey with us. You may be referred to an Obstetrician, or Anesthesiologist who specializes in reproductive care as an extension of your ARC treatment for further consultation. We have an ARC Dietitian who specializes in fertility who can help you through your journey and you can reach out to us if you want to book a consultation. We recognize that this can be a stressful time and we also have a Registered Psychologist available to support you if you are not already working with a therapist.

\*Adapted from ASRM Reproductive Facts: Weight and Fertility