

Gestational Surrogacy: The Immunology Behind It and Its  
*Halachic* Implications

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## Table of Contents

Abstract.....	3
Introduction.....	4
<i>Halacha</i> .....	5
Sole determinant of <i>halachic</i> maternity is the birth mother.....	5
Sole determinant of <i>halachic</i> maternity is the genetic mother.....	10
Determinant of <i>halachic</i> maternity is both the birth and genetic mother.....	13
Immunology Aspects Applicable to Surrogacy.....	14
A <i>Halachic</i> Reanalysis.....	19
Interview With a Surrogate.....	22
Conclusion.....	25
Acknowledgements.....	25
References.....	26
Appendix A.....	27

**Abstract:**

Gestational surrogacy is an option for a woman who cannot carry to term a fetus in her own womb. The woman donates her embryo, which was resulted from fertilization *in vitro*, to a second woman, the gestational surrogate, who carries the fetus and gives birth. While this is an innovative procedure that helps infertile couples have children, there are several problems discussed in the literature about surrogacy. Even though extensive research has been conducted on the biology and *halacha* behind surrogacy, there is still no clear-cut answer of the *halachic* status of the baby and the identity of the mother – the egg donor or the gestational carrier. Rabbinic authorities have debated the identity of the *halachic* mother of the child. Also of concern is whether it is better for the surrogate to be a Jewish or a non-Jewish woman. This paper aims to define the role of both the birth mother and the genetic mother to more fully understand the surrogacy process as a whole.

**Introduction:**

Technical advances in human reproduction have significant impacts within Jewish law (*halacha*). One such advance is gestational surrogacy, in which a couple undergoes *in vitro* fertilization with the resulting embryo implanted into a surrogate to carry the fetus to term. While surrogacy is one approach to infertility, many issues must be considered. Ethical concerns with surrogacy include the commercialization of surrogacy contracts and the commodification of children. As a result, laws have been established in several states in an attempt to resolve both of these issues. Another moral consideration is the potential health risks to the surrogate as a result of the transference of foreign fetal cells and their implantation within the surrogate's body. Fetal cells could, in effect, remain in the surrogate's body even after she gave birth to the baby. This continued presence of fetal cells in the birth mother could have long-term health effects, both beneficial and detrimental, such as an increased risk of autoimmune diseases [1].

In the analysis of gestational surrogacy, there are several *halachic* considerations that must be examined as well. These concerns include, but are not limited to, who is considered the *halachic* mother of a baby born from this surrogacy arrangement? Can surrogacy be practiced within an *halachic* framework? Surrogacy could additionally introduce the risk of adultery, incest, and consequent *mamzerut*. The issue of wasteful emission of semen may also be an *halachic* concern. This paper examines these issues further and introduces immunologic advances that could have further implications within *halacha*.

***Halacha:***

The primary *halachic* concern with gestational surrogacy is determining maternity. In a natural pregnancy, one woman performs both the acts of conception and of childbirth and, therefore, is considered both the genetic mother and birth mother. When the two acts, however, are separated and performed by two different women, how is maternity determined? Which act is considered the more important? Within *halacha*, is a mother defined as the woman who carried and delivered the baby or as the woman who contributed the genetic material? We learn from *Chazal* that a baby born to a Jewish mother is considered Jewish, but it is unclear which part of the process imparts the Jewish status onto the baby. Rabbis have been struggling with these questions for decades, leading to a *halachic* debate with countless opinions. The answer to these questions has tremendous implications: it determines the Jewish status of the child.

**I. Sole determinant of *halachic* maternity is the birth mother**

The most widely accepted opinion in *halacha* is that the surrogate alone is considered the legal mother. This ruling is accepted by major rabbinic authorities such as Rabbi Eliezer Waldenberg, Rabbi Aaron Soloveichik, Rabbi Yisrael Meir Lau, Rabbi Moshe Hershtler, Rabbi Moshe Sternbuch, and Rabbi Yosef Elyashiv [2]. The first biblical source used to support this opinion is the biblical account of the births of Yosef and Dina. *Targum Yonatan* presented an interesting interpretation of this event. Leah already had given birth to six sons and the two maidservants had each given birth to two sons. Leah prophesized that she was pregnant with another son and that Rachel was pregnant with a daughter. Leah did not want

Rachel to have a lesser share than the maidservants in the founding of the twelve tribes of Israel. She, therefore, prayed for the fetuses to be switched. This intra-uterine transfer was Divinely performed, and Leah gave birth to a daughter, Dina, while Rachel gave birth to a son, Yosef (*Bereishit* 30:21). This biblical interpretation suggested that birth determines maternity, while conception played no role. Leah conceived Yosef, but gave birth to Dina; Leah is identified as Dina's mother. Rachel conceived Dina but gave birth to Yosef; Rachel is identified as Yosef's mother.

Many *halachic* commentators, however, assert that a Midrash cannot be used as a source to derive a *halacha*. While this is primarily a non-legalistic, anecdotal source, Talmudic precedents, as well, indicate that the birth mother is considered the *halachic* mother. Talmudic tractate *Yevamot* (97b) recounted the ruling that twin brothers, whose mother converted to Judaism during her pregnancy, are forbidden to marry each other's wives but do not have to perform *chalitzah* to each other's widows. When a married man dies, leaving his widow childless, the brother of the deceased is obligated to marry the widow. To free the widow from this obligation and allow her to marry outside her first husband's family, the brother of the deceased must perform *chalitzah*. Through a deeper reading, this Talmudic account reinforces the idea that birth determines maternity. The *chalitzah* ritual only applies to brothers who have a common father, while the prohibition against brothers marrying each other's wives only applies to brothers who have a common mother. Conversion to Judaism, however, severs all pre-existing familial ties. The law of *chalitzah*, therefore, is irrelevant in this case of twins because their relationship through their father was dissolved. Yet, they are still related through their mother because the prohibition

of marrying each other's wives still applies. Rashi commented that this prohibition applied because the brothers were born to a common Jewish woman. Even though the mother was not Jewish at the time of conception, she was Jewish when her sons were born. It is evident from this case that birth determines maternity in *halacha*. This implies that the birth mother, *i.e.* the surrogate, would be considered the legal mother [3]. Rabbi Zalman Nechemia Goldberg, the Chief Justice of the Rabbinical High Court in Jerusalem, based on the above cited Talmud passage, ruled that the *halachic* mother in a case of surrogacy is the birth mother.

In a similar vein, Tosfot in the Talmudic tractate *Ketubot* (11a) noted that the child from a woman who converted to Judaism during her pregnancy was considered both Jewish and her heir [3]. During conversion, any familial ties were broken; since the child was considered the heir, however, some maternal relationship must have been established. Tosfot concluded that this relationship must have come into existence at birth, thus proving that the *halachic* maternity was determined by birth and not by conception.

There are many other proofs that can be brought showing that within *halacha*, the surrogate would be considered the legal mother. For example, there is a Talmudic term, "*ubar yerech immo*," which means that the fetus is regarded as a limb of the pregnant woman. This implies that the fetus is considered as a physical part of the surrogate and consequently acquires her religious status [1]. In addition, the *Sifra*, an *halachic* commentary on the book of *Vayikra*, described the case of a pregnant woman at *Matan Torah*. The case is

one in which this woman became pregnant before *Matan Torah* and gave birth afterward. The preparation for *Matan Torah* included immersion in a *mikvah* to be officially converted. This is the moment at which *Bnei Yisrael* became the Jewish people. The *Sifra* questioned the Jewish *halachic* status of the child. Does the Jewish status of the fetus depend on the time of conception, at which time the mother was not considered Jewish? Or does it depend on the time of birth, at which time the mother was considered Jewish? This case is parallel to a surrogacy case, as in the eyes of *halacha*, a different woman performed the act of conception and the act of childbirth. The *Sifra* concluded that the status of the child was entirely dependent on the birth. Thus, the child born after *Matan Torah* would be considered Jewish. Similarly, in our surrogacy case, the *halachic* mother would be the surrogate, *i.e.*, the birth mother.

There is yet another biblical source showing that the surrogate should be considered the legal mother in *halacha*. A verse in *Megillat Esther* stated, “And [Mordechai] had brought up Hadassah, that is Esther, his uncle’s daughter, for she had neither father nor mother...and when her father and mother died, Mordechai took her to himself for a daughter” (2:7). The Talmud (*Megillah* 13a) commented that this verse was seemingly repetitive. The verse restated that Esther’s parents both died; yet, why is that even necessary? Rashi presented a logical interpretation that can be extrapolated to a surrogacy case as well. Rashi explained that as soon as Esther’s mother conceived, Esther’s father died. Subsequently, Esther’s mother died during childbirth. Rashi further commented that, in general, fatherhood begins at fertilization while motherhood begins at birth. Since Esther’s father died prior to egg fertilization and Esther’s mother died immediately prior to giving



birth, Esther truly had no father or mother. Apparently, the act of giving birth conferred motherhood. According to Rashi's interpretation of this verse, a surrogate, not the egg donor, would be considered the *halachic* mother.

One further Talmudic source for the surrogate being the *halachic* legal mother is found in *Yevamot* (69b), which states that an embryo less than forty days into gestation is considered like "*maya b'alma*," or mere water. This statement implies that the embryo at this stage of early development lacks a maternal-fetal relationship [1]. The assumption, therefore, is that conception does not impart *halachic* motherhood. Consequently, the *halachic* mother is not the genetic mother, but rather the gestational – or birth – mother.

In the late 1800's, Rabbi Kamelhar addressed the issue of determining maternity in the hypothetical case of a pregnant woman who had previously received an ovary transplant [4]. He held that *halachic* maternity was determined by the birth mother, since the ovary became a physical part of the recipient's body. The transplanted ovary no longer had a connection to the organ donor, so the ovary donor would not be considered the *halachic* mother of a child conceived from her egg. He based his reasoning on fascinating laws that seemingly have no connection to childbirth, namely the laws of *Orlah* [3]. According to the biblical law of *Orlah*, one may not eat fruit produced by a newly planted tree during the initial three years after planting. A passage in the Talmud *Sotah* (43b) discussed an agricultural case involving this law: the branch of a two year old tree was grafted onto the trunk of a six year old tree. What would be the law regarding the fruit from the two year old

branch? Would the law of *Orlah* apply to it? Rabbi Kamelhar answered that the nourishing source essentially determined the law. In the case of the tree, therefore, the law of *Orlah* would not apply to the fruit from the two year old branch which was nourished from a six year old tree. So, the fruit could be eaten. This same law, according to Rabbi Kamelhar, can be applied in the case of a human ovary transplant. Since the ovary assimilated into the body of the recipient into which it was transplanted and the ovary now received nourishment from the ovary recipient, any subsequent egg conception would be considered to be from the ovary recipient, not from the ovary donor. This case showed that the sole determinant is gestation and this concept can be extrapolated to a case of surrogacy. This analogy with agricultural laws evoked much debate, which will be shown in the subsequent sections.

## II. **Sole determinant of *halachic* maternity is the genetic mother**

There is a second view that the genetic mother alone would be considered the *halachic* mother. A Talmudic proof for this can be found in *Niddah* (31a) which stated that there are three partners in the creation of a human being: God, the father, and the mother. The father contributed to certain parts of the baby, such as the bones, nails, and brain. The mother contributed to other parts of the baby, such as the skin and hair. God contributed to the spirit, soul, sight, hearing, speech, ability to walk, understanding, and rational thought. This source essentially explained that the mother is the one who contributed genetic material which formed, in the words of the Talmud, the skin and hair of the baby. Rabbi Shlomo Goren, a previous Chief Rabbi of Israel, interpreted this Talmudic statement to mean that *halachic* fatherhood and motherhood are both established at conception [1]. This suggested that the origin of the ovum, the female reproductive cell, was the sole determinant of maternal status

[5]. It is her genetic contribution that essentially formed all of the child's attributes. In a surrogacy case, therefore, the biological mother would be considered the *halachic* mother.

There are multiple other cases in the Talmud which can be extrapolated to a case of surrogacy and which show that the genetic mother would be considered the legal *halachic* mother. One such case is found in *Sanhedrin* (91b): a person's soul enters the embryo at the time of conception, because this is the exact moment that God decreed the embryo's destiny. Since ensoulment occurred at conception, then so too, motherhood would be imparted at conception. As a result, the genetic mother would be the *halachic* mother of the child.

Yet another Talmudic source is in *Yevamot* (42a) which stated that if a non-Jewish married couple converted together, they need to separate from each other for three months after their conversion. This separation was necessary to be certain that a child born to them was conceived after their conversion to Judaism and, therefore, would be considered Jewish. The requirement of a separation between husband and wife after conversion suggested that conception determined maternity since the baby's religious status was contingent on the mother's religious status. If conception occurred before the couple's conversion, then, according to this Talmudic case, the baby would be considered non-Jewish. This source clearly demonstrates that *halachic* maternity is determined by the genetic mother instead of the surrogate.

Rabbi Ezra Bick took issue with Rabbi Kamelhar's reasoning that a case of human surrogacy would be linked to an agricultural case. He believed that this analogy should be completely abandoned and, instead, a better comparison would be between the human egg and the human sperm. Rabbi Bick explained that just like the sperm is the determinant of legal paternity, the egg should be the determinant of legal maternity [4]. He also explained a general rule: implantation of an embryo into another's womb cannot change the fact that the genetic mother was the actual source of the egg. According to this principle, a woman who "conceived," *i.e.* the genetic mother, and subsequently transferred the embryo into a surrogate to gestate to term, the former – *i.e.*, the egg donor – remained the mother [6]. According to Rabbi Bick, the genetic mother (the egg donor) was considered the *halachic* mother.

In addition, the Rambam, in his *Mishneh Torah*, discussed the marriage qualifications of a *Kohen* which have relevance to our surrogacy case. *Vayikra* 21:14 stated, "A widow, a divorcee, a woman who is desecrated or a prostitute he shall not marry any of these. Only a virgin of his people may he take as a wife." A child born from any of these *halachically* illegal marriages was considered a *chalal*, or, a *Kohen* with a defective status. The Rambam explained, however, that if a *Kohen* married a pregnant divorcee, the child was not considered a *chalal*. The child was considered legitimate even though born to parents whose marriage was *halachically* illegal. The Rambam clarified that the reason was that the child was not conceived in sin [1]. In this case, the child's legitimacy was completely dependent upon conception, not birth. So too, *halachic* maternity should be as well.

### III. **Determinant of *halachic* maternity is both the birth and genetic mother**

There exists a minority view that both the gestational mother and the genetic mother are considered the *halachically* legal mothers. This stringent opinion was accepted by several major 20<sup>th</sup> century rabbinic authorities such as Rabbi Bleich and Rabbi Auerbach. Rabbi Auerbach was quoted as saying that he found a source within rabbinic literature to answer every question except for one: the question of determining maternity in a surrogacy case [7]. Therefore, it must be considered as if there are two *halachic* mothers. Consequently, the Jewish status of the surrogate is of importance. If the surrogate is not Jewish, the baby must then be converted.

This minority view came into existence as a result of various sources and discussions that supported either position. Since there are conflicting opinions, this third view – that both the genetic and gestational mother should be considered the *halachic* mothers – accommodated both positions. It should be noted, however, that this minority view does not mean that the child actually had two mothers. Rather, that *halacha* followed the stringencies as if both the genetic and gestational mothers were considered the *halachic* mothers. This has major implications for the *halachic* status of the child. For example, as previously mentioned, a child born from a non-Jewish surrogate must convert to Judaism. In addition, a woman born from a non-Jewish surrogate, even though her biological parents are both Jewish, is considered a convert and, as such, is forbidden to marry a *Kohen*.

Rabbi Bleich supported this third opinion regarding maternity, thus challenging Rabbi Kamelhar's use of the agricultural analogy and the law of *Orlah*. Rabbi Bleich argued that Rabbi Kamelhar's reasoning lacked a clear understanding of genetics. The donated egg in a surrogacy case carries the genetic identity of the genetic mother and, therefore, *halachic* rights must also be granted to this egg donor. Rabbi Bleich concluded that there are two legal *halachic* mothers: the gestational carrier and the egg donor.

In addition, Rav Naftalli Trop, in his *chiddushim* to *Ketubot* 11a, explained that conception and gestation are both contributing factors to a child's Jewish status [8]. *Shem Yisrael*, or Jewish nationality, is achieved by being born to a Jewish mother. *Kedushat Yisrael*, or Jewish sanctity, is achieved by being conceived by a Jewish mother. Every Jewish child born naturally has both of these elements, but that may not be the case in surrogacy. Both components are significant and affect the child's *halachic* status.

There is also an alternate view that the concept of *mafkir zaro* should be introduced into the equation. *Mafkir zaro* applies to a sperm donor – he waived his right to claim paternity to any offspring resulting from his sperm donation. This concept should apply to a surrogate as well. The source of the ovum, *i.e.* the genetic mother, is the sole *halachic* mother unless she is *mafkir zara*. If she waived her right to claim maternity, then the legal mother is the gestational mother [4].

### **Immunology Aspects Applicable to Surrogacy:**

Contradicting the view that the genetic mother is the legal *halachic* mother, new scientific data have emerged regarding the biological connection between the gestational mother and the fetus she is carrying. The concept of mother-fetal cell exchange has been introduced recently, demonstrating that there is a profound physical connection between the gestational mother and the fetus [9]. The new data show that stem cells from both the fetus and the gestational mother are exchanged via the placenta. During pregnancy, these stem cells are trafficked between the fetus and the gestational mother and implanted into each other's tissues, with potentially significant implications. Maternal cells implanted into the fetus may benefit the fetus by suppressing its immune system from negatively responding to maternal antigens. The child subsequently contains not only its own cells derived from its genetic mother and father but also cells from its gestational mother. This confirms the biological connection between the gestational mother and the child. Yet, this connection extends beyond the time that the fetus gestates in the surrogate's womb. The maternal cells remain and proliferate in the child's body for its entire life.

The fetal cells that traverse the placenta into the mother's body can have health benefits to the gestational mother. In general, any foreign growth in the body is rejected by the immune system. To the gestational mother, a fetus is considered a foreign growth and the presence of fetal cells in the gestational mother can allow her immune system to adapt to the fetus, instead of rejecting it [10]. Gestational mothers can have long-term benefits from the presence and establishment of fetal stem cells. One study evaluated the brains of women who had died between the ages of 32 and 101 [1]. The numbers of male fetal cells in these autopsied brains were determined and it was found that women who were diagnosed with

Alzheimer's disease had substantially fewer male fetal cells in their brains than controls. The findings suggested that fetal cells potentially protected the gestational mothers from developing Alzheimer's disease. Additionally, other studies demonstrated that fetal cells accelerated the repair of damaged organ tissue within the mother. For example, fetal cells, apparently, prevented the mothers from developing heart disease. These benefits derived from the presence of fetal cells in the gestational mother can be incredibly significant.

Although some studies have shown long-lasting benefits for the mother who received fetal stem cells, there are risks involved as well. Research has shown that the presence of fetal cells was associated with a reduced risk for the mother of developing breast cancer, but an increased risk of developing colon cancer [1]. In addition, mothers with fetal cells had an increased risk of autoimmune diseases. Aside from bioethical issues regarding surrogacy, potential health risks need to be considered.

In terms of the child carried by a surrogate, however, there could be benefits and risks involved as well. Most inheritable diseases result from a mutation in the sequence of nitrogenous bases in DNA. Changes in the usual sequence can result in terrible diseases, such as Tay Sachs, cystic fibrosis, or cancer. The rather new field of epigenetics shows that genetic diseases can be caused by modifications of gene expression, in addition to alteration of the sequence of DNA nitrogenous bases. Such epigenetic diseases can be triggered by environmental factors. This is essentially why identical twins may differ slightly in behavior or physical appearance – because of their different environmental experiences.



Epigenetic studies noted that environmental factors, such as the hormonal environment of the surrogate, her dietary habits, and her lifestyle, can influence different characteristics of the fetus. For example, as a woman gains weight during her pregnancy, the birth weight of the baby may increase. In addition, the risk of the baby becoming obese and developing obesity-related diseases later on in life increases as well [11]. It has also been scientifically proven that if a mother smoked during her pregnancy, the child had an increased risk of developing asthma. All these discoveries showed that the gestational mother can truly impact the personality and health of the fetus [1]. These recent findings indicated that the surrogate did not simply serve as an incubator. Rather, biological bonds were created between the fetus and gestational mother. This new scientific information seems to support the position that the gestational mother would be considered the *halachic* mother.

In addition, the fetus' immune system is impacted in yet another way by the gestational carrier. During birth, the baby is exposed to the intestinal microflora that colonize the mother's gut. As a result, the newborn's immune system develops rapidly and in a positive manner [12]. Such exposure to maternal intestinal microbiota promotes the health of the fetus and may go so far as to provide the baby with specific microbial immunization at birth [13]. Clearly, the gestational carrier has a major lasting impact on the child.

Along the same lines, the concept of an artificial womb may support the position that the *halachic* mother is the gestational mother. Recently, scientists created an artificial womb

in which prematurely-born lambs could further develop and grow. Researchers are attempting to create the same artificial womb to facilitate growth of a human fetus. According to NICU nurse Trish Ringley, however, while it “might be helpful for a baby’s physical development, it could... take a toll on the babies themselves” [14]. Furthermore, according to neonatologist Dr. Sanjay Chawla, “a baby in an artificial womb may not benefit from the maternal influences of labor, placental influence of hormones and biochemical signals that allow the fetus to sleep, grow, and develop” [14]. According to this information, it is clear that the physical act of gestating has a significant influence on the baby. Perhaps this would show that the surrogate should in fact be considered the *halachic* mother. On the other hand, however, Rabbi Tzvi Ryzman took the opposite approach. He suggested that even if the fetus was gestated in a natural womb, that should not cause maternity to be determined by the gestational carrier. He clearly stated, “this should not establish lineage at all since it’s possible to use an artificial womb. As such, in cases of gestational surrogacy or ovum donation... the surrogate has no portion in the lineage of the child – she has no more involvement than the artificial substitute which certainly doesn’t establish anything with regards to lineage” [5]. With such conflicting views, it is difficult to choose the correct opinion and course of action to take when contemplating surrogacy.

Rabbi G. Weitzman of the Puah Institute, an organization dedicated to researching fertility in accordance with *halacha*, noted that emerging scientific information should not influence what is purely a *halachic* debate. He stated, “The debate up to now has been based on the discussion and elucidation of sources in the rabbinic literature – not on scientific evidence. Prior to [Rabbi Dr. Tandler and Dr. Loike’s] paper [1], no one claimed that

scientific evidence was the basis for the *halachic* debate. Therefore, it does not make sense to claim that new evidence can influence one or other of the sides of this debate” [7]. Rabbi Weitzman additionally claimed that the egg from the genetic mother contains significantly more genetic impact than any genetic or epigenetic influences that occur during the gestational mother’s pregnancy.

On the other hand, Rabbi Daniel Sinclair, an Israeli scholar who specializes in contemporary Jewish medical ethics, believes that there should be an overlap of science and *halacha*. He specified that “the relationship between scientific theory and *halachic* decision-making is a dynamic one and there are numerous examples from the past of scientific concepts being taken on board by *halachists* notwithstanding the initial lack of correspondence between them and traditional precedents” [3]. It is unclear, therefore, how the emerging scientific data regarding pregnancy and surrogacy will affect *halacha*.

### **A *Halachic* Reanalysis**

Now that the *halachic* positions of the debate were explored, other *halachic* questions must be analyzed. One such question is how surrogacy can be performed within a Jewish *halachic* framework. Once again, as with most *halachic* issues, there is not one correct answer. Rabbi Zalman Nechemiah Goldberg, a major *halachic* authority in Israel, allowed the use of a gestational carrier on two conditions: that she both was Jewish and was single [7]. This would guarantee that the baby is Jewish and ensure that the father is not producing a child with a married woman. Rabbi Dr. Moshe Tendler, however, noted problems of

recruiting a Jewish surrogate [1]. Most surrogates were married women and this posed an issue within Judaism. Artificially inseminating a married surrogate with sperm from a man other than her husband was considered by some rabbinic authorities to be prohibited because it may constitute adultery. The child would then be considered a *mamzer* in the eyes of *halacha*. It is pointed out, however, that adultery is only committed through actual sexual intercourse; in the case of surrogacy, there is no sexual act between the sperm donor and the surrogate. Nevertheless, utilizing a married Jewish surrogate was against the spirit and atmosphere of *halacha* [3].

There are three opinions on whether a surrogacy arrangement would truly constitute adultery [4]. First, Rabbi Moshe Feinstein argued that there is no illicit character of pregnancy without sexual intercourse. Therefore, a married woman who acts as a surrogate, carrying an embryo fertilized from sperm other than from her own husband's, has not committed adultery and the resulting child would not be a *mamzer*. Rabbi Soloveitchik concurred with this opinion and this is currently the position within the United States [4]. The second opinion is that of Rabbi Ovadya HaDayan who stated that this type of arrangement involved intent to cause pregnancy using sperm other than the surrogate's husband's. Since intention was present, it is as if sexual intercourse occurred, making this a case of adultery and the resulting child would be a *mamzer*. The last opinion is that of Rabbi Waldenberg who took the middle ground and claimed that this case was not considered to be definite adultery. The child would then be a *safek mamzer*, meaning that there is doubt regarding whether the child is truly a *mamzer*. Because of the variety of opinions, the Israeli Surrogacy Law came

into effect in 1996, stating that surrogates should be unmarried women, thus ensuring that there is absolutely no risk of committing adultery.

Another issue that Rabbi Dr. Tendler mentioned was self-injury, which according to the Rambam is prohibited by the Torah. It is interesting to note that *halacha* views pregnancy as a medical health risk to women – natural pregnancy is therefore an exception to the prohibition of self-injury. Yet, there are added risks to a surrogate that make the pregnancy different from a natural one. For example, the surrogate may require hormonal treatments or invasive procedures to properly implant the embryo into her uterus. These treatments have both short-term and long-term health risks, such as ectopic pregnancies, increased risks of miscarriage, premature delivery of the baby, and increased risk of breast, ovarian, and endometrial cancers [1]. These health risks are more frequently observed in surrogacy pregnancies than in natural pregnancies. As such, a surrogacy pregnancy may fall under the prohibition of self-injury and therefore disqualify a Jewish woman from becoming a surrogate.

Yet another issue is the prohibition of incestuous relationships. According to the opinion that maternity is determined by gestation, the surrogate would be considered the legal *halachic* mother. If the surrogate is Jewish, the child would be prohibited from marrying any of her other children because they are considered the natural siblings. This poses a problem for surrogacy arrangements in which the surrogate mother's identity is kept anonymous after birth. The child could then unintentionally have an incestuous relationship

with a sibling. Consequently, contemporary authorities, such as Rabbi Auerbach, Rabbi Elyashiv, and Rabbi Waldenberg, prohibited all surrogacy arrangements [2]. Yet, in his article on surrogate motherhood, Rabbi Eli Clark explained that to get around the prohibition of incest, the surrogate should be a non-Jewish woman. The child would then be considered non-Jewish and would need to be converted to Judaism. The conversion removes any familial links: the child's natural siblings (the surrogate's other children) would not be considered its siblings any longer. No unintended incest, therefore, can occur. On the other hand, according to the view that the *halachic* mother is the genetic mother, the identity and religious status of the surrogate has no effect whatsoever on the child. Since the surrogate would not be considered the legal mother in this case, her other children are not considered natural siblings to the child. Thus, no incest can occur.

### **Interview with a Surrogate: Carrie Bornstein**

The best way of getting a true understanding of a surrogate's experience is to ask someone who has been through it before. I was lucky enough to have the opportunity to interview a Jewish woman from my hometown of Sharon, MA, who was a gestational surrogate relatively recently (for the full transcript of the interview, see Appendix A). Carrie Bornstein carried a baby for a Jewish couple in London who could not conceive on their own. As she went through the experience, she chronicled her journey in a blog entitled "There's No I in Uterus." She was very open about her experience and gave me a deeper insight into surrogacy as a whole.

Carrie originally thought about becoming a surrogate as a joke. She enjoyed the entire pregnancy process and, although both she and her husband did not want more children, she was not ready to say goodbye to the opportunity to become pregnant once more. Being the director of *Mayyim Hayyim*, a *mikvah* in Newton, MA, was a truly eye-opening experience. She saw many women who were dealing with fertility-related issues coming to the *mikvah*. This experience caused Carrie to seriously consider becoming a surrogate to help other women who could not have children of their own.

One of the first things she did after deciding that she wanted to be a surrogate was to inquire if she could do it within an Orthodox Jewish framework. Her Orthodox rabbi replied that with regard to surrogacy, there is absolutely no forbidden sexual act taking place, since there is no sexual act whatsoever. It is interesting to note that this rabbi informed Carrie that she, as the surrogate, would be considered the *halachic* mother. He was clearly holding by the majority opinion that maternity was determined by the birth mother. As a result, Carrie was dead-set on becoming a surrogate for a Jewish couple, so that the child, who is *halachically* Jewish, would be raised in a Jewish family. She therefore worked with an agency that connected her with *A Jewish Blessing*, an organization that works to specifically match Jewish individuals or couples who are looking to have a baby with Jewish egg donors or surrogates.

When asked about the birth, Carrie said that it felt completely natural to have the intended parents in the hospital birthing room and for the baby to go to them first. Her way of

thinking was that “they loaned me this embryo which wasn’t mine to begin with, and then I gave it back to them when it was ready.” She went on to say that being in the room at the moment at which this couple became parents was a tremendous honor and it was gratifying to know that it was a result of something that she had done.

In a legal sense, however, she was not considered the mother. She, along with the intended parents, signed a pre-birth order so that only the latter’s names would be listed on the birth certificate as the parents. While the hospital has Carrie on record as delivering the baby, she was not legally considered the baby’s mother.

The biggest challenge, Carrie explained, was a medical issue that arose during her pregnancy. While giving birth to one of her own children, some of her son’s antibodies crossed over into her bloodstream. Potentially, this could have caused a major problem in the next pregnancy, if the fetus had those same antibodies. Carrie’s blood cells would then attack the fetus’ blood cells. As a result, Carrie informed her agency that she had to be matched with someone who did not have these antibodies. When she brought up the issue later, the clinic informed her that the necessary test was performed and the results were negative. Only after she was already pregnant did she find out that the clinic read the results wrong – it was in fact positive. She was matched with someone who had those same antibodies. Consequently, she had to go through invasive procedures, have more ultrasounds and blood tests, but it all turned out alright.



Overall, while the process did present challenges and stress, Carrie remarked that it was the most extraordinary thing she had ever done. It was so incredibly gratifying to her. In her day-to-day work life, she did not necessarily see the influence she had on other people but this was a tangible and meaningful way to note her profound impact.

### **Conclusion:**

Establishing maternity in the case of surrogacy is an incredibly complex issue within *halacha*. There is no clear-cut, black-and-white answer. While there are opinions that *halacha* should not change in response to scientific advancements, many modern rabbinic authorities understand that within *halacha*, science and Torah are completely intertwined. It is now understood that the surrogate plays a significant role in fetal development and in the long-term health of the child. For this reason, although there is no consensus on the *halachic* maternity of the child born from a surrogate, the majority of *halachic* opinions is that the birth mother, *i.e.* the surrogate, is considered the legal *halachic* mother. Future scientific research will provide a better understanding of the physiological connection between the mother and fetus during gestation; such new data may impact the *halachic* debate concerning maternal identity, *i.e.* the egg donor or the gestational carrier.

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## **Appendix A:**

Interview with a Surrogate: Carrie Bornstein (full transcript)

**Q: What made you want to be a surrogate? How did you choose to do that?**

**A:** It really started out as a joke. I have three kids of my own, and pregnancy was always very easy for me. I had some morning sickness and that part wasn't great but it went away. I always enjoyed being pregnant; I did childbirth well – it was an intense experience, but I feel like overall it worked with my body. Once I knew that I was done having my own kids, I missed the idea of being pregnant and it made me sad to think about not having that opportunity again. I liked it so much but I was very sure that I did not want any more kids. I would joke around that I should just have somebody else's baby. I'm good at pregnancy and good at childbirth, I'm even good at the newborn stuff, I should just give the baby back when I'm done with my part. I joked around a little bit and, at the same time, since I'm the director

of *Mayyim Hayyim* (the *mikvah* in Newton, MA), I've seen a lot of women coming through dealing with fertility-related issues. These issues could be miscarriages, or stillborn, or just trying and trying and trying and never getting pregnant; there are all different kinds of scenarios. What I saw was a lot of pain, a lot of emotion, a lot of longing, and I feel like I was able to interact with it in a more intense kind of a way because I would hear from people directly at that moment. The moment when people come to the *mikvah* is the moment when they're turning towards hope. It's a time when they're looking towards what might be and putting behind what happened, not that it ever goes away, but it's a transition state from healing into hope. I've heard a lot of people share their words of what that experience meant to them. On the flipside of that, I would see a lot of people coming to immerse in the *mikvah* in their ninth month of pregnancy and after they gave birth, or when they adopted a baby, or maybe had a baby through surrogacy. I would see the immense joy at that stage and how wonderful it was to finally get their baby. It got to the point where I started taking it seriously and thought, "Maybe I can actually do this." I saw myself as a link between those two extremes, just seeing all of the pain and then seeing the joy and having it be very clear to me that I can do something here. I started looking into it seriously and as I learned more about it, I found that I could do this: I wasn't too old, and I began checking things off of my list to figure out if it was possible. It really got to the point where I felt like I couldn't reason why I wouldn't do it. It didn't make sense not to.

**Q: How did Judaism impact your decision to become a surrogate?**

**A:** I spoke with an Orthodox rabbi who was of the mind that there's no forbidden sexual act going on with regard to surrogacy because there's no sexual act going on whatsoever.

Therefore, of course Jews can be surrogates but he said that I would be considered the halachic mother. I should consequently do this for a Jewish family so that the halachically Jewish baby is raised Jewish. That became very important to me – I wanted to carry for a Jewish family. I wanted to do this for somebody that I didn't know because I was aware that it could be complicated in terms of the relationship and everything, and I didn't want anything to go sour with someone that I knew. I wanted them to be strangers but I liked the idea that it would be a Jewish couple – I felt like there was a connection there and that there was an aspect of family already. This specific couple who I matched with was ready to give up; they said if they couldn't find a Jewish surrogate – and they specifically wanted a Jewish surrogate because they had concerns about conversion – they just wouldn't have a baby at all. It was clearly very important for them, too.

**Q: Once you decided that you wanted to do it, how did you move to the next part? Did you use an agency to get matched with a couple? How did that work?**

**A:** There were two main things that went into my decision-making. The first thing I did was I called my doctor to make sure that medically it was an okay idea. She didn't think I was putting myself in any danger but that was a big hurdle – I wanted to make sure it was safe for me to do. The second question was: how does this work in Judaism? Do we do this? Do we not do this? That part I was able to check off the list as well and say that I was comfortable doing this as a Jewish woman. The rabbi that I spoke with made a number of suggestions as to how I would want to go about doing it. I ultimately worked with an agency and they didn't connect me directly with the couple. They connected me to *A Jewish Blessing*, which is an organization that works to specifically match Jewish individuals or couples who are looking

to have a baby with Jewish egg donors or surrogates. *A Jewish Blessing* was the one that knew about this couple and suggested that we were a good match.

**Q: How did the matching process work? Did you meet with them and talk about it?**

**A:** We met over Skype. The way the agency operates is that they get to know the surrogate and they get to know the couple and really learn about each person's interests and desires. They want to know what each person is looking for out of the relationship and they won't set you up to talk to somebody unless they think it would be a good match from the start. Once they check everything out – and that has to do with things like your views on termination and what kind of relationship you want to have together, just a host of things like that really to make sure that everyone's on the same page – then they suggested that we might be a good match. The couple sent a “Dear Surrogate” letter so I could get a sense of who they were and then we set up a Skype meeting from there.

**Q: Overall, were you happy with how the process played out?**

**A:** Yes. It was definitely a rollercoaster and there were rough spots and real challenges and stress, but at the end of the day, it was the most extraordinary thing that I've ever done in my life. It was incredibly gratifying and I'm very glad that I did it.

**Q: During the whole experience, what was your communication like with the intended parents?**

**A:** We were in touch mostly by email. I would say we were mostly in touch anywhere from once a week to every other day. Every doctor's appointment that I had, they Skyped into so that they could be involved in each part of the process.

**Q: How was your own family, community, or friends involved in your journey?**

**A:** I created a blog as I began this experience. The biggest way that people were involved was through reading this blog. I ended up posting on average about once a month, sometimes more often. There were a number of reasons why I wanted to blog about it – one of the reasons was that I wanted to share the experience but I didn't want to talk about it 7,000 times. I could put the story out there and let people read it. So that was how I shared a lot of it. Everybody that I encountered was extremely supportive and excited about it. They cheered me on and I felt like I had a team with me.

**Q: If the fetus was found to have a gross defect and the biological parents wanted it aborted, what would your options have been?**

**A:** We outlined many of these "what ifs" in our contract together. In my particular case, I was open to whatever the parents wanted in terms of termination. This is a little tricky because legally, the decision is mine, though in the case of surrogacy, we all may (and in this case, did) agree internally on a different plan. Some surrogates are opposed to termination for any reason, however, and would want to match with intended parents who share their views.

**Q: What was the birth like? How did it feel to hand over the baby? Was it strange or just completely natural?**

**A:** Any birth is an incredible, memorable experience. The way I think about handing over the baby may be way too concrete, but the baby never came from me. I held her later, but the baby went immediately to her parents. There was never a moment of “I’ve got this baby and now I’m giving it to you.” It was very much how I thought about it the whole way – they loaned me this embryo which wasn’t mine to begin with, and then I gave it back to them when it was ready. There’s nothing even remotely close to feeling a sense of loss; it was really the exact opposite. This couple tried unsuccessfully to have a baby for seven years. They were going through year-long treatments in different countries; they went through an extraordinary process to try to become parents. It was an incredible honor to be there in the room at the moment at which they became parents and know that it was because of what I did. It was the complete opposite of feeling a sense of loss.

**Q: Whose name in the hospital was recorded as the mother of the baby – yours or the biological mother's?**

**A:** We signed a pre-birth order so that their names would be listed on the birth certificate, not mine. The hospital itself does track information for statistical purposes so they do have me on record as having delivered the baby, but legally the baby was on record as being theirs from the outset.



**Q: What updates, if any, do they share with you now? Would you like to have future contact with the family?**

**A:** I went into this feeling like I wanted to do this for somebody and if we end up developing a relationship, that's really nice but I don't need that. I wasn't expecting anything. We did, however, develop a relationship. We're very different people. I imagined that it would be some other couple just like me and we'd become friends, but they are quite different. Yet, they feel like family now and I think these people are in our lives forever. We're in touch by email less often now for sure, but around every three weeks or so. They'll send pictures every once in a while. I hear a bit, but not a ton, which is fine.

**Q: Did the whole experience go as you thought it would? Was there anything unexpected?**

**A:** The biggest unexpected part had to do with medical issues. Early on in the process – I was probably around 12-14 weeks pregnant at the time – I found out that there was an incompatibility between my blood type and the embryo's. Before even beginning the implantation process, I had notified both the agency and the clinic about an issue that took place during my second delivery. Some of my son's antibodies crossed over into my blood. I was exposed to those antibodies and if my next baby also ended up with those antibodies, the blood cells in my body could attack the baby's blood cells. This was something that was fine for me to be a surrogate from a medical perspective but I needed to not be matched with someone who had these antibodies. I gave them this information but no one paid any attention to it. I brought it up again eventually and the clinic said they did the testing but it

was negative – everything was fine. I didn't find out until after I was pregnant that the clinic did the wrong test and even read the results wrong. It was only when my doctor asked for the paperwork to be forwarded to her from the clinic that I found out. Right on the paper, it says I'm positive for these specific antibodies. It ended up being a tremendous scare with lots of scary implications – not for my health, thank God, but for the baby's health. There were a number of invasive procedures that had to happen during the pregnancy. We had to monitor my blood levels pretty often throughout the pregnancy and have more ultrasounds, but at the end of the day, it didn't end up being a problem. It could've gone very wrong, though.

**Q: What did you enjoy most about being a surrogate and what did you find the most challenging?**

**A:** The most challenging was probably related to that medical piece I just shared. It wasn't just the stress of going through that, but really just tons of extra doctor's appointments. I work a lot of hours at *Mayyim Hayyim* and my day is always packed. Just taking time out to go to the doctor and go to Beth Israel to see the doctors there was a significant inconvenience and made work more stressful for a time. I had to get everything done in a shorter amount of time. That was the hardest part for me. The best part was that this was such a wonderful thing to do for someone. In my role as Executive Director of the organization [*Mayyim Hayyim*], I do important work and it's extraordinarily meaningful. Yet, my particular role is very behind-the-scenes. I'm not a volunteer *mikvah* guide, I'm not working directly with them for the most part – my role is pretty removed. It's hard, therefore, to get a concrete sense of my impact in a tangible way. Being a surrogate, on the other hand, was very tangible and very concrete for me to be able to know that I made an impact. Also, writing the blog was very

meaningful for me to know that I was sharing the experience. Surrogacy is not talked about much at all, certainly not in the Jewish community. It just didn't make sense to me that as Jews, we place so much value on having Jewish babies. There's so much focus on that – why shouldn't we help each other in this way? I felt that it was crazy that it's not more common and that it's not talked about. So, I really felt good that I was getting it out there. People could understand what it is and how it works.

**Q: What would you want to say to women who are interested in becoming surrogates?**

**A:** I would say a couple of things: it's an incredibly wonderful thing to do, not only for the people you're having a baby for but also for the surrogates themselves. I got out of it just as much as what the intended parents got out of it. It's a really wonderful, exciting, positive thing. I would say to do a lot of research and learn a ton about the process. There are a ton of things that require physical energy and mental energy and a person has to be really knowledgeable about what they're getting into so they can have their eyes open through the process. As wonderful as it is, it's hard and is a lot of work. There's a lot of intensity and emotion to it. It's complex. I would encourage people to have a sense of what they're getting into so they can have more strength to go through the process.

**Q: Would you consider being a surrogate again? Why/why not?**

**A:** Part of me would love nothing more. It's a very tempting thing to think about. The other side of that is that it was stressful not only for me but for my family. There are risks. There are things that can happen. I feel good knowing that I did it once. I can go out on a high note.

The fact that I'm not going to do it again doesn't mean that I have any regrets about having done it the first time.