Summertime Pitfalls During Pregnancy: What to Eat and How to Stay Afloat

By Lindsey Morse, MS, CGC, MotherToBaby New York

It's officially summer! Time for pool parties, cook-outs, and beach-side picnics. Bring on the hamburgers and hotdogs, potato and pasta salads, fish fry, and barbecue chicken.

You may be wondering if it is safe to eat that food that has been sitting in the sun? Also, didn't I hear somewhere that pregnant women shouldn't eat fish or undercooked meat during pregnancy? Is it safe to swim in lake water or at the beach? How can I protect my baby during my pregnancy while still enjoying summertime fun and food with my family and friends?

Easy! There are just a few simple tips to keep in mind.

Tip 1 – Thoroughly cook all meat and seafood
Food safety is important whether you are pregnant or not. But some food-borne illnesses can be more of a concern if you are pregnant. Safe handling, preparation, and storage of foods reduces the chance that you could be exposed to little organisms that could make you feel bad in a big way.

One of the most common questions about food during pregnancy is about eating meat, especially deli sandwich meat, or undercooked meat (like that medium-rare steak). There are all these warnings about what to eat and what not to eat. So, how do you know what is a concern and what can you do about it?

Well, there are several microorganisms (bacteria and parasites) that can be found in meat before it's cooked, if it's only partially cooked, or if it has been cooked and then frozen or refrigerated to be eaten later. These include things like Escherichia coli (E. coli), Salmonella, Listeria, and Vibrio. (See MotherToBaby.org for more info in our fact sheets.) Some types, or strains, of these microorganisms are not harmful and are actually good for us, helping with digestion for example. But others can make you sick causing stomach cramps, diarrhea, vomiting, joint and muscle pain, and fever. Symptoms may last only a few hours with some infections or up to a week with others. In women who are pregnant, exposure to some microorganisms might make you sick, but are unlikely to directly affect the baby's development. Other microorganisms may increase the chance for miscarriage or other pregnancy complications, like early delivery.

You may have heard that women who are pregnant should not clean out their cat's litter box due to a risk of toxoplasmosis, but did you know that this same parasite, Toxoplasma gondii, is also found in undercooked meats? When moms are infected during pregnancy, there is a chance for congenital toxoplasmosis in their babies. This can cause liver, spleen, heart, brain, and eye problems including blindness, deafness, seizures, and cognitive delays. This is usually only a risk with a new infection during pregnancy, not if you have had toxoplasmosis in the past.

Cooking meat and seafood until the center reaches a safe minimum temperature or reheating meat destroys the bacteria or parasite, thereby preventing illness. While great chefs will tell you all sorts of tips and tricks for determining how done your steak is, invest in a meat thermometer! They are easy to find in most grocery stores and really take the guess work out of not only your next backyard party but also your weeknight dinners. Below is a table with the recommended temperatures for different meats. You can find our fact sheet on meat and seafood at https://mothertobaby.org/fact-sheets/eating-raw-undercooked-or-cold-meats-and-seafood/.

Meat/Seafood	Safe Minimum Internal Temperature
Fish and Shellfish	145 °F (63°C)

Pork	145 °F (63°C)
Beef (steaks, chops, and roasts)	145 °F (63°C)
Beef and Pork (ground)	160 °F (71°C)
Wild game	165 °F (74°C)
Poultry	165 °F (74°C)
Cold lunchmeat and deli meat	Cook until steaming

Tip 2 – Safe food preparation and handling are also important
Some of the same bacteria and parasites can also be found on fruits and vegetables, or in unpasteurized dairy products like milk, cheese, and eggs. Washing your fruits and vegetables thoroughly and eating only pasteurized dairy products are the best ways to prevent exposure. And don't forget to wash your hands, cutting boards, and utensils thoroughly after handling uncooked meat, as well as unwashed fruits and veggies to avoid contaminating other foods.

Oh, and that grilled chicken that has been sitting in the sun for three hours – forget it! Once cooked, meat and seafood should be eaten right away. Leftovers of all types (including those pasta and potato salads, and anything with mayo or salad dressings) should be refrigerated at or below 40o F (4oC) as soon as possible and then meats thoroughly reheated before they are eaten.

Tip 3 – It is good to eat fish during pregnancy, but some are better than others
Another frequent question is about eating fish during pregnancy. Many fish contain a substance called methylmercury. Some fish have higher levels of this type of mercury than other types of fish – this usually depends upon the size of the fish, how long it lives, and where it lives prior to making it to your table.

But fish and seafood are actually a good source of protein and other vitamins that are good not only for adults but also for developing babies. The key is to eat the right types of fish and seafood in the right amounts. See our fact sheet athttps://mothertobaby.org/fact-sheets/methylmercury-pregnancy/pdf/ for more information. The Food and Drug Administration (FDA) also has a quick guide which can be helpful to determine which are the best options for you: https://www.fda.gov/downloads/Food/ResourcesForYou/Consumers/UCM536321.pdf%20

Tip 4 – Do some research before going swimming
Some of the bacteria mentioned earlier in this blog can be found in water, like your local lake or warm coastal waters. In addition to bacteria, lakes and rivers can contain things like protozoa and worms which cause diarrhea, abdominal cramps, and fever. Besides eating contaminated food, these organisms can get into your body if you swim in infected water especially when you have an open wound, even a small scrape, if you swallow any water, or if water goes up your nose. Risks are often highest during and after a storm as this increases rain water runoff and pollution from the surrounding area.

There also can be certain types of algae in the water that may be harmful in high amounts. I recently received a call from a pregnant mom on vacation in Florida concerned about a red tide warning in her area. Red tides are caused by a high concentration of algae (an algal bloom) and happen mainly in Florida but can occur along the Gulf Coast or as far north as Delaware. Many algal blooms are not harmful, but others can cause low oxygen levels in the water harming marine animals and causing a build-up of toxins (called brevotoxins) in the water.

Pay attention to the warnings in your area because it is not a good idea to swim in areas where you know that there is an algal bloom or high bacteria counts, particularly if you have an open wound. Check out the Environmental Protection Agency's website https://www.epa.gov/beaches to find info about freshwater and saltwater beaches in your area. Also, look around the area that you plan to swim for obvious signs of pollution like a neighboring farm, trash in the water, or even dead fish floating in the water.

It is also important not to eat locally, recreationally caught shellfish during a red tide – shellfish in grocery stores and restaurants are regulated and are not caught during an algae bloom so they aren't contaminated but recreationally harvested shellfish could be. The brevetoxins which are found in red-tides are not destroyed by cooking.

Bottomline, planning is key! While often the risks associated with food-borne illnesses are bigger for you than for your baby, a few simple precautions can help you have a healthy pregnancy and still enjoy your favorite foods and summertime activities. Just remember to pick up a meat thermometer, give those veggies a good wash before you make that salad, avoid foods that have been sitting out in the sun, and know your lakes and beaches!

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About MotherToBaby

Summertime Pitfalls During Pregnancy: What to Eat and How to Stay Afloat

By Lori Wolfe, Certified Genetic Counselor at MotherToBaby North Texas

Did you know that the month of March is green tea month? Green tea has been said to have many health benefits, including: preventing memory loss, promoting bone health, decreasing risk of cancer, increasing dental health, reducing the chance of getting type 2 diabetes, and helping us lose weight. Green tea is loaded with nutrients and antioxidants, and has been said to be "the healthiest beverage on the planet." So, given all of this wonderful news, who wouldn't want to join Lucky the Leprechaun in the month of March and enjoy a cup of green tea?

As an information specialist with MotherToBaby, I recently had a pregnant mom named Lynn text me, asking: "Can you drink green tea if you take your prenatal vitamin later? How much does green tea impact folic acid absorption? I am in my first trimester and have had some green tea throughout pregnancy, and I am now worried about it impacting my folic acid absorption." Wow, I thought, that is a great question! As the MotherToBaby specialist on the other side of the text, I started researching her questions so that I could give her the most up-to-date information out there.

First, let's talk about folic acid: what is it and why is it important to pregnant women?
We all need folic acid every day in our bodies to help make new cells. Folic acid is a synthetic form of Vitamin B9, also known as folate. It is very important to take enough folic acid just before and during pregnancy. Many studies have shown that taking the recommended daily allowance of 400 micrograms per day during pregnancy reduces the chance that the baby will have serious birth defects of the spine and brain, called neural tube defects (NTD).

So what's the connection between drinking green tea, folic acid, and pregnancy?
Green tea contains something called catechins, which have been shown to partially prevent the cells in the intestines from absorbing folic acid. Studies have shown that when women are drinking a lot of green tea, they have lower levels of folate in their system. That means there is less folic acid that can cross the placenta and get to the baby, and the baby can thus be at a higher risk for having a NTD. This can occur when a pregnant woman is drinking more than three cups of tea per day. Green tea and some forms of black tea such as Oolong tea can be high in catechins. Taking a daily prenatal vitamin has been shown to reduce this possible risk in heavy tea drinkers.

Another concern with drinking green tea during pregnancy is the caffeine content.
The good news is that green tea contains less caffeine than coffee (about 20 to 50 mg of caffeine per cup in green tea verses an average of 100 mg of caffeine per cup in coffee). Moderate levels of caffeine (about 200 mg/day) have not been shown to increase any risks in pregnancy. See our MotherToBaby fact sheet for more information on caffeine and pregnancy at https://mothertobaby.org/fact-sheets/caffeine-pregnancy/. Women may want to limit their tea consumption during the first trimester when the baby's neural tube is developing to avoid the chance of decreasing absorption of folic acid. After this point, drinking one cup of green tea per day has not been shown to increase any risks for the baby.

I counseled Lynn that she can enjoy a cup of green tea now and then, as occasionally drinking green or black tea has not been shown to increase the risk for any problems during pregnancy. So, raise that cup of green tea along with Lucky the Leprechaun and enjoy "going green" in the month of March!

If you have questions about exposures during pregnancy or breastfeeding, contact an expert at MotherToBaby. You can reach us by phone at 866-626-6847 or by text at 855-999-3525. You can also email or live chat with us by visiting https://MotherToBaby.org.

Lori Wolfe, CGC, is a board certified Genetic Counselor and the Director of MotherToBaby's North Texas affiliate. MotherToBaby aims to educate women about medications and more during pregnancy and breastfeeding. Along with answering women's and health professionals' questions regarding exposures during pregnancy/breastfeeding via MotherToBaby's toll-free number, text line and by email, Wolfe also teaches at the University of North Texas, provides educational talks regarding pregnancy health in community clinics and high schools.

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References:
Gunners, Kris, https://www.healthline.com, 1/17/18.

"Folic Acid, Key Points," www.marchofdimes.org, 2/18.

Rongwei, Ye et al, "Tea Drinking as a Risk Factor for Neural Tube Defects in Northern China, Epidemiology, Volk 22, No 4, July 2011. Yazdy, Mahsa et al,
"Maternal Tea Consumption during Early Pregnancy and the Risk of Spina Bifida", Birth Defects Research (Part A), Clinical and Molecular Teratology 94:56-76, 2012.

"Why to go Easy on the Green Tea During Pregnancy," Neifeild, Rachel, RD. CDN, www.babymed.com, 2/23/18.

Summertime Pitfalls During Pregnancy: What to Eat and How to Stay Afloat

By Ginger Nichols, Licensed Certified Genetic Counselor at MotherToBaby Connecticut

I was pregnant in 2004 when the Food and Drug Administration (FDA) and the U.S. Environmental Protection Agency (EPA) released guidelines on limiting fish consumption in pregnancy because of methylmercury. That pregnancy was definitely the most amazing time of my life; however, it was also stressful. It was the 5th time I had been pregnant, but due to miscarriages and the death of a son who was born very prematurely, I had yet to bring a baby home from the hospital. I became hyper-vigilant about anything that might be a possible exposure of concern for a pregnancy. I freely admit that my frame of mind for that pregnancy could not be called logical. Therefore, with the new and somewhat scary information about fish and methylmercury, fish was quickly added to my list of "don't eat that." I also admit that I don't eat the recommended amount of fish anyway, so it was not that big of a leap to stop eating all fish.

It turns out that I wasn't the only 'fish out of water.' According to a FDA study of the dietary habits of over 1,000 pregnant women in the U.S., around 21% of the women said that within the past month they had eaten zero fish. For the women who said that they did eat fish, most were eating less than the recommended dietary guidelines. However, fish is healthy for you! You don't want to stop eating fish altogether, so instead of avoiding fish, let's learn the facts.

By now, you may be asking: *"What is methylmercury and why is it in fish?"* As a Genetic Counselor and MotherToBaby specialist, I often talk to women about eating fish during pregnancy, so let me explain…. Methylmercury is an organic form of mercury. Mercury occurs naturally in the environment and it is also released into the air as a by-product of some industrial processes. When mercury gets into the soil and the water (including lakes, rivers, and the ocean), bacteria and fungi found in soil and water change mercury into methylmercury. Since methylmercury is in our water, it is found in different levels in pretty much all fish and shellfish. In general, larger fish with long life spans that eat other fish are typically going to have higher levels of methylmercury than smaller, younger fish. If you are interested, there are lists of average mercury levels in fish available online, such as this FDA web site: https://www.fda.gov/food/foodborneillnesscontaminants/metals/ucm115644.htm

Methylmercury is found in all tissues of the fish, so cleaning or cooking the fish will not reduce the levels of mercury. People who eat a lot of fish with high levels of methylmercury can also accumulate methylmercury in their bodies. Our bodies easily absorb methylmercury from our gastrointestinal (GI) tract and it takes a long time for our bodies to get rid of it.

"So why should I be concerned about eating too much seafood with high levels of methylmercury?" We know that even if you are not pregnant, methylmercury is toxic to our nervous system and organs. The effects of methylmercury poisoning have been known since the 1950s. People who became sick from methylmercury poisoning had many symptoms that included numbness in the hands and the feet, muscle weakness, tremors (shaking), and personality changes (irritable, shy, nervous). Now before you panic, be aware that these people had been exposed to fish with levels of methylmercury far higher than even the most contaminated fish in your grocery store!

We know that methylmercury can cross the placenta in pregnancy. With very high exposures, babies have been born with small head size and brain damage that can lead to seizures, developmental delay, blindness, and muscle

weakness. Since methylmercury can affect the baby's developing brain, high exposure is a concern at any stage of pregnancy. For more info, visit the MotherToBaby fact sheet on methylmercury in pregnancy and breastfeeding at https://mothertobaby.org/fact-sheets/methylmercury-pregnancy/.

By now you may feel like you just need to stay away from eating fish in pregnancy, when in fact studies are showing that women who eat fish during pregnancy have better pregnancy outcomes than women who do not eat fish. Recent studies have also looked at how nutrients in fish, including Omega-3 fatty acids, might have positive effects for baby's development and actually may help to protect against any possible harm that might occur from prenatal methylmercury exposure. And what's more, women in the U.S. generally do not depend upon fish as their only protein intake, so are unlikely to eat enough fish to cause harmful effects in a pregnancy. So, to reap the full health benefits of fish consumption for you and baby, the key is to eat a variety of fish that are low in methylmercury. This is where the FDA's updated 2017 guidelines can provide some assistance.

"What are the current FDA guidelines?" The FDA's recently revised advice is designed to encourage women who are pregnant and/or breastfeeding to consume up to 12 ounces of fish that are low in methylmercury each week, and provides guidance on which fish are the best options by breaking the fish into categories of Best Choices, Good Choices, and Choices to Avoid. The easy-to-read guide can be found here: https://www.fda.gov/downloads/Food/ResourcesForYou/Consumers/UCM536321.pdf. You'll notice that on the FDA's guide, different types (species) of tuna and tilefish are listed under different categories – so take note of which type you are buying so you know which list it is on.

Following current recommendations, if you are planning to become pregnant, currently pregnant, or currently breastfeeding:

- A typical serving of fish is 4 to 6 ounces, measured before cooking.
- Each week, you may eat up to 2-3 servings of a variety of fish from the Best Choices list; there are over 35 different types of fish on this list!
- If choosing a fish from the Good Choices list, limit yourself to just the one serving of that fish for the week.
- Avoid the following fish, as they are highest in methylmercury: shark, swordfish, mackerel, marlin, orange roughy, bigeye tuna, and tilefish from the Gulf of Mexico.
- If you are eating fish caught by family or friends, check for local fish advisories. The EPA has a search option to check for fish/shellfish advisories based on where you live: https://fishadvisoryonline.epa.gov/General.aspx. You can also check in with your state Department of Public Health. If there isn't an advisory, limit yourself to just one serving of that fish and do not eat any other fish that week.

So now that we've got you on the hook and reeled you in, what's the takeaway? With around 60 fish listed as Best and Good Choices on the FDA's 2017 fish guidelines, 'there are plenty of fish in the sea' for pregnant and breastfeeding moms!

Ginger Nichols is a licensed certified genetic counselor based in Farmington, Connecticut. She currently works for MotherToBaby CT, which is housed at UCONN Health in the division of Human Genetics, Department of Genetics and Genome Sciences. She obtained her Bachelor of Science degree in Biology and Sociology from Juniata College and her Master's Degree in Medical Genetics from the University of

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Summertime Pitfalls During Pregnancy: What to Eat and How to Stay Afloat

By Bethany Kotlar, MPH, Teratogen Information Specialist, MotherToBaby Georgia

Being a new mom is overwhelming. Trying to figure out this brand new role can seem like climbing Mount Everest! Many new moms have questions about breastfeeding, and of those questions, how to increase or maintain supply is one of the most common. Luckily for all those new moms out there, MotherToBaby has teamed up with a lactation consultant to answer all of your burning supply questions.

First, a quick introduction to the experts: Katherine Gama is an International Board Certified Lactation Consultant (IBCLC) who has worked with WIC (Women, Infants, and Children) for 10 years in Atlanta, Georgia. She loves to facilitate breastfeeding discussions. She thrives on supporting breastfeeding mothers in their journey to success. Katherine enjoys traveling with her two boys.

Bethany Kotlar is a Teratogen Information Specialist for MotherToBaby Georgia. She loves answering questions about

exposures during pregnancy and breastfeeding and has a wonderful husband of five years and two fur babies.

I've been breastfeeding for a couple of weeks and I feel like my baby always wants to nurse. Is this normal?

Katherine: Yes, in the first weeks you are establishing your milk supply. Your body is figuring out how much your baby needs. It does this through supply and demand. The amount of milk the baby takes out or demands and the amount of times your baby nurses will determine your milk supply. Avoiding pacifiers and formula will help your body capture more accurately how much milk it needs to make. Putting your baby to breast every time your baby shows early feeding cues (rooting, sucking hands) will build your milk supply and meet your baby's needs.

If you worry about baby getting enough you should always take into consideration how much your baby feeds in 24 hours; is baby latching easily; is baby swallowing frequently; does baby have an adequate number of voids and stools; is baby calm and satisfied during the feeding and after feeding. Any time you are concerned about your baby's wellbeing, the best thing is to inform your pediatrician. In addition, you can contact a lactation consultant and ask her to assess your infant's feeding.

My new baby nurses frequently, but I'm not sure how much milk she's getting. My friend's formula-fed baby seems to eat so much more! Am I starving my baby?

Katherine: Your newborn's stomach is small and your baby only needs small amounts of breast milk at each feeding. Remember breast milk is digested naturally and faster so you will feed your baby frequently, at least 8 to 10 times in 24 hours. Your baby and its belly grow quickly while your supply is establishing.

In the first six days of life and beyond if your baby has approximately 6 wet diapers in 24 hours and 3 or more stools you are providing the nutrition that your baby needs.

I want to boost my supply and my friend recommended fenugreek, milk thistle, and red raspberry leaf. Are these safe to take while breastfeeding?
Bethany: These herbs are often marketed to moms to increase milk supply. Unfortunately, research suggests they are unlikely to make much of a difference in supply. In addition, they also haven't been proven safe to use regularly during nursing. If you're thinking about taking any herb or supplement, speak with your doctor first.

Fenugreek has caused allergic reactions in people sensitive to chickpeas and peanuts, and can cause hypoglycemia in diabetic women and potentially babies. Milk thistle and red raspberry leaf supplements haven't been studied well enough for us to say whether they are safe to use regularly. Complicating the picture even more, the Food and Drug Administration doesn't regulate the supplement industry, so there have been reports of supplements being contaminated with dangerous substances like lead and arsenic.

I heard someone say that drinking beer can increase supply, but I don't want my baby to be exposed to alcohol. Help!

Bethany: There's no conclusive evidence that suggests beer increases milk supply, but that doesn't mean you can't enjoy a drink containing alcohol now and then with while breastfeeding. The rule of thumb is to avoid breastfeeding while alcohol is in your system. For the average woman it takes between 2 to 2.5 hours per drink for alcohol to work its way out of the body. If you feel uncomfortable while you are waiting, you can definitely "pump and dump," but contrary to popular belief this doesn't remove alcohol faster from your milk. Drinking heavily (more than one or two drinks in a sitting where a drink is 12 ounces of beer, 5 ounces of wine, or 1.5 ounces of hard liquor) can decrease your milk supply, so consume in moderation!

If there aren't any herbs or foods that are proven to increase my supply, what can I do to produce more milk?

Katherine: The first thing is to address whether your baby is getting enough food or if he needs to be supplemented; to answer this question, talk to your child's pediatrician. If baby does in fact need more milk, then we need to find out why mom's milk supply is low in order to correct the problem. Is mom supplementing with formula or previously expressed breastmilk on a regular basis? Are there any medical reasons causing low milk production (breast surgery, PCOS or polycystic ovarian syndrome, thyroid issues, diabetes, premature infant, poorly breastfeeding, etc.) If you suspect you might be having any problems related to these conditions, talk to your healthcare provider and a lactation consultant. The best way to improve milk production is to frequently breastfeed, hand-express breastmilk and pump with preferably a hospital grade pump.

Why is breast milk better?

Katherine: Your breast milk is uniquely designed for your baby. It contains the antibodies to build your baby's immune system, the hormones to regulate normal body function and the nutrients for brain development. You are equipped with everything your baby needs!

What do I do if I am having supply issues?

Katherine: Work with a lactation consultant in your area. You can find a lactation consultant here or contact your state's local WIC office.

Bethany: Remember, before you take anything (herb, medication, etc.) while breastfeeding, talk to your doctor, your child's pediatrician, and contact MotherToBaby for up to date information on whether the product could affect your baby's health. It's always better to be safe than sorry!

Helpful Tips to Remember:

- Place baby skin to skin immediately following birth for at least 1 hour
- Breastfeed your baby within an hour of birth
- Keeping the baby in your room helps you learn when your baby is ready to feed
- Learn your baby- watch for early feeding cues and initiate breast feeding on demand
- Give **NO** artificial pacifiers
- Give newborns **NO** food or drink other than breast milk unless medically indicated
- Use hand expression to maximize milk removal when nursing
- Surround yourself with support to help you reach you goals
- If you are having trouble breastfeeding, contact a lactation consultant

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Summertime Pitfalls During Pregnancy: What to Eat and How to Stay Afloat

By Elizabeth Salas, MPH, Teratology Information Specialist, MotherToBaby California

"Do women really eat their placenta after delivery?" I was asked many years ago when a coworker mentioned a famous celebrity had talked about it during an interview. I had never heard of the practice before. As I await the birth of my first child, I got to thinking about this question again. I mean, the placenta-eating crowd has really created some demand over the last couple of years! Today, you can easily find services that will encapsulate your placenta, countless articles on the web, and even websites that offer placenta recipes. What's next? Seeing it on a menu? Imagine hearing at your favorite dine, "I'd like a burger, fries and a placenta pop, please!" Bottom line, women are talking about it, asking about it, and yes, eating their placenta.[1]

The human placenta is an amazing organ, but what exactly does it do?

The placenta is a temporary organ that develops during pregnancy to connect mom and her developing baby. The placenta provides oxygen and nutrients, removes substances or waste that could be harmful, and protects the baby from mom's immune system.[2] The placenta also produces hormones that play an important role in pregnancy and the baby's development.[3] When there are problems with the placenta, this can cause serious complications for mom and baby. Furthermore, as our knowledge of the placenta continues to grow, research suggests that problems with the placenta may give us clues or even cause future disease in mom or baby.[4]

What do we know about placentophagy?

The term placentophagy refers to the consumption of the placenta. Among mammal species, animals commonly eat raw placenta immediately after the delivery of their offspring. It has been theorized that animals instinctively consume the placenta for its nutritional benefit to the mother animal, or to prevent predators from being attracted to the location of their newly born offspring.[5] Human placentophagy however, does not consist of eating the raw placenta immediately after delivery. Typically the placenta is processed and consumed in small quantities in the weeks or months after delivery. Some cultures practice consumption of the placenta, but according to studies of cultures around the world this is a rare practice.[6]

Are there benefits to consuming the placenta after delivery?

Supporters of placenta consumption point to several possible benefits for mom. Iron is an essential element needed by our bodies for blood production.[7] When a woman delivers, it is normal to expect some blood loss. Since the placenta is rich in iron, consuming placenta may replace some of the iron lost during birth. The placenta also produces a substance called placental opioid-enhancing factor (POEF) which may aid in pain relief after delivery. Placenta consumption has also been suggested to improve milk production and decrease the chance of postpartum depression. The placenta contains a hormone called placental lactogen which can stimulate milk production. It also contains the hormones progesterone and corticotropin-releasing hormone (CRH). Women with low levels of these hormones may be more likely to develop postpartum depression. Therefore, it is thought that consuming placenta containing these hormones could possibly decrease the risk of depression.[8]

While the practice of consuming placenta has gained popularity and the possible benefits may be worth investigating, the practice is mainly supported by individual cases or personal stories. Well controlled studies have not been conducted to investigate the safety of placentophagy or its efficacy in aiding with pain management, milk production, or reducing postpartum depression.[9] Most of the studies published on placentophagy have focused on surveying both men and women regarding the practice and their attitudes towards it.

Have any concerns been raised regarding placenta consumption?

There is currently no regulation of the processing or consumption of human placenta. If the placenta is prepared by an outside party, how can a new mom be assured of sanitary practices and handling? How does she know she has received her own placenta back? Since the placenta is a blood product and tissue, there are concerns that consumption can transmit infectious diseases. There is also a possibility of contamination that may occur in the hospital or during the process of storage, preservation, or preparation.[8]

Some commentators suggest that due to the processing of the placenta which may include preservation, cooking, drying, or freezing of the tissue, there would be little or no nutritional health benefits. Individuals or companies that process the placenta may add herbal products which consumers should be aware of in case there is a sensitivity or allergy to these products. Some have also suggested that because the placenta acts as a filter of some environmental toxins, eating the placenta could expose mom to higher levels of harmful substances. Finally healthcare providers have also expressed concerns that women experiencing postpartum depression may not seek help or may refuse treatment with medications proven to be effective because they are self-treating at home with placenta.[9]

What can I do if I'm concerned about postpartum depression or milk production?

If you are concerned about developing postpartum depression or think you may be experiencing symptoms, contact your doctor right away. Postpartum depression has serious consequences for both mom and baby, but help is available and symptoms should never be ignored. To learn more about Depression During and After Pregnancy, check out the following fact sheet: http://www.womenshealth.gov/publications/our-publications/fact-sheet/depression-pregnancy.pdf

You can also learn more by visiting the following links:

http://www.postpartum.net/learn-more/pregnancy-postpartum-mental-health/

https://www.womenshealth.gov/mental-health/illnesses/postpartum-depression.html#pubs

If you have recently delivered or are getting close to delivery, and have concerns about producing enough milk, talk to your pediatrician, a lactation consultant, or attend a breastfeeding support group. Making small modifications during breastfeeding can make a big difference. To learn more about solutions to common challenges that come up when breastfeeding visit the following womenshealth.gov page:
http://www.womenshealth.gov/breastfeeding/common-breastfeeding-challenges.html

For more information on breastfeeding support, information, and resources visit the following links:
http://www.womenshealth.gov/breastfeeding/finding-breastfeeding-support.html

http://www.womenshealth.gov/breastfeeding/breastfeeding-resources.html

Is it safe to breast feed while consuming placenta?

No studies have been published to accurately evaluate safety of consuming placenta during breastfeeding. Among the things a mom consumes in her diet or the medications she takes, some substances pass more easily into breast milk and can reach the breastfed infant. Because every woman's placenta is slightly different, some placentas may contain substances that others do not or they may contain very different levels of a particular substance compared to another placenta. Without testing individual placentas, it would be difficult to evaluate how they differ and how safe mom's consumption might be for babies who are breastfed.

Where can I get more information about the safety of exposures during breastfeeding?

MotherToBaby experts are ready to answer all of your questions on exposures during breastfeeding. We also answer questions about exposures in pregnancy for women who are currently pregnant or planning a pregnancy, as well as their healthcare providers. You can speak with a MotherToBaby counselor through our free and confidential service. Call us toll free at (866) 626-6847.

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MotherToBaby is a service of the international Organization of Teratology Information Specialists (OTIS), a suggested resource by many agencies including the Centers for Disease Control and Prevention (CDC).

If you have questions about medications, vaccines, diseases, or other exposures, call MotherToBaby toll-FREE at 866-626-6847 or call the Pregnancy Studies team directly at 877-311-8972. You can also visit MotherToBaby.org to browse a library of fact sheets, as well as pregnancy studies.

References:

- Storrs, C. (2015, June 5). Eating Placenta: Trendy, but benefits are fuzzy. CNN.com. Retrieved from http://www.cnn.com/2015/06/04/health/eating-placenta/
- Donnelly L, Campling G. Functions of the placenta. Anesthesia and Intensive Care Medicine. 2011 March; 12 (3):111-5.
- Hsiao EY, Patterson PH. Placental regulation of maternal-fetal interactions and brain development. Developmental Neurobiology. 2012 Oct; 72(10):1317-26.
- Barker DJ, Thornburg KL. Placental programming of chronic diseases, cancer and lifespan: a review. Placenta. 2013 Oct; 34(10):841-5.
- Odent, M. Placentophagy. Midwifery Today With International Midwife. 2014 Spring; (109):17-8.
- Cremers GE, Low KG. Attitudes toward placentophagy: a brief report. Health Care Women Int. 2014 Feb; 35(2):113-9.
- Regents of the University of California. (2002-2015). Hemoglobin and Functions of Iron. UCSF Medical Center, Conditions and Treatments, Patient Education. Retrieved from http://www.ucsfhealth.org/education/hemoglobin_and_functions_of_iron/
- Schwartz S. Maternal placentophagy as an alternative medicinal practice in the postpartum period. Midwifery Today With International Midwife. 2014 Summer; (110):28-9.
- Coyle CW, Hulse KE, Wisner KL, Driscoll KE, Clark CT. Placentopagy: therapeutic miracle or myth? Archives of Women's Mental Health. 2015 Jun 4. [Epub ahead of print] PubMed PMID: 26043976.