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Fertility and Diet: 5 Food Choices Proven to Increase Your Chances

Dear Reader,

In this report, you will find up-to-date research findings related to foods that play an important role in your ability to conceive. By following these nutrition tips, you will be incorporating changes to your diet that not only improve the quality of your health, but also enhance the likelihood of conception, naturally.

Background

In a landmark longitudinal study entitled *The Nurses' Health Study*¹, researchers analyzed the extent to which food and diet affected couples' ability to get pregnant. Guess what? It did. In fact, more and more compelling research indicates that the food you eat *before* you conceive play a major role in how *easily* you conceive. This report synthesizes for you research findings and diet recommendations essential to improving fertility.

About Drew

Drew Nesbitt is a Practitioner of Traditional Chinese Medicine and Acupuncture as well as a Registered Orthomolecular Health Practitioner. He specializes in women's health concerns, namely gynecology and fertility. His philosophy on health care involves the education and empowerment of women who want to take charge of their own health profile by making safe, informed decisions which are grounded in natural approaches. An avid reader of up-to-date research in peer-reviewed journals, Drew aims to assist his clients by separating myth from fact and by applying evidence-based therapies to his daily practice.

Enjoy the report!

Sincerely,

Drew Nesbitt BA, TCMP, Ac., ROHP



For more information on Drew and his clinic locations, go to www.DrewNesbitt.ca

¹ For an in-depth report, please see www.nurseshealthstudy.org

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By Drew Nesbitt BA, TCMP, Ac., ROHP

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1. Don't Skimp on the Fat!

For years, we have been told to reduce our fat intake. In the 1980s, the food industry aggressively marketed products such as skim milk, fat free yogurt, low fat cottage cheese and 1% sour cream. These campaigns preached to us how these products would make us healthier and thinner. Most of us know that this "low-fat" craze hasn't exactly worked. If you have been trying to get pregnant, you may want to put the low-fat yogurt aside and start enjoying full-fat foods in your daily life. Here's why.

In the Nurses' Health Study, two conclusions were made regarding the effects of dairy on rates of conception:

- 1. Women whose diets included low fat dairy were more likely to have had trouble getting pregnant.
- 2. Women whose diets included full fat dairy were less likely to have problems getting pregnant.

How can this be? Isn't skim milk universally viewed as a "healthy" food?

We often forget that cow's milk is still a "mother's" milk, and all mammals' milk contains hormones just like human females. This milk contains a mix of both female hormones (estrogens), male hormones (testosterones) and other sex-neutral hormones.

Basically put, it is theorized that during the skimming process, fat is removed from the raw milk in different degrees to produce the milk products we buy: 3.25%, 2%, 1%, and skim milk. Here is where things can go wrong. Most of the female hormones contained in milk are connected to the fat and are thus removed during the skimming process, leaving behind an unbalanced mixture of male-to-female hormones in your milk. This imbalance can possibly affect your ability to get pregnant.

Think these findings are a bit of a stretch? A companion study to the *Nurses' Health Study* examined the diets of over 16,000 women and children, and the researchers further discovered that women who consumed more "lowfat" dairy products had significantly more acne than those who ate full-fat products. This is likely because acne is a common sign of high androgens or male sex-hormones in both males and females. Here's the bottom line: if you choose to consume milk products when you are trying to get pregnant, you are advised to eat hormone-free, whole-milk, preferably organic products.

Trans Fats

Nearly 13 years ago while I was in university, I learned that trans fats were unhealthy and dangerous, and I hoped and predicted that government policies would eventually be put in place to get rid of this un-natural food. Fortunately, most countries are now feeling the pressure from the public and a number of bans have been proposed or imposed across the world. With this in mind, you should be careful to avoid all trans-fats at all costs while trying to get pregnant (or any other time). Be sure to read your labels and stay away from any foods containing these ingredients:

- hydrogenated vegetable oils
- partially hydrogenated vegetable oils
- shortenings

Here are some foods known to contain trans fats:

- French fries
- Doughnuts
- Cakes
- Candy Bars
- Margarines
- Potato Chips
- Cream filled cookies

The Bottom Line

I encourage you to consume polyunsaturated fats and monounsaturated fats, eat saturated fats sparingly, and avoid trans-fats completely. Try to consume more foods which contain natural, healthy fats such as:

- Nuts and seeds like almonds and flax, which contain health essential fatty acids, vitamin E, calcium and magnesium
- Avocados, sunflower oil, and olive oil, also great sources of vitamin E
- Oily fish such as salmon, mackerel and herring twice a week in addition to supplementing with a high quality fish oil supplement has been linked to children with higher IQ's²

² Myers, G. Et al. 2007 "Maternal fish consumption benefits children's development", Lancet, Feb 17, 369 (9561), 537-8.

2. Slow Carbohydrates for Faster Fertility

Diet crazes over the last 10 years have focused on one of our most important sources of energy: the carbohydrate. Some experts are claiming carbohydrates are perfectly fine, while others say we should avoid them like the plague. More importantly, do carbohydrate choices affect our ability to conceive? Recent results from the *Nurses' Health Study* indicate that they do.

Slow versus Fast

What's the difference between slow carbohydrates and fast carbohydrates? Basically, fast carbohydrates, once ingested, break down very quickly in the body and reach our blood stream in record time, spiking our insulin levels along the way. Slow carbohydrates are broken down slowly in the gut, and they require more time to reach the blood stream, raising insulin levels more gradually. The Glycemic Index (GI), a food rating system measuring how quickly or slowly certain foods raise blood sugar levels, is becoming a more familiar tool used to examine the role of carbohydrates. Foods with a high GI are considered "fast" carbs, and foods with a low GI are considered "slow" carbs. An even more accurate measurement is called the Glycemic Load (GL), which considers both the GI of foods and a typical portion size to more appropriately determine a food's effect on blood sugar. For example, carrots have a high glycemic index, but because portion sizes of carrots are usually small, the glycemic load of a carrot is quite low and therefore not likely to influence blood sugar, at least not as much as a GI would otherwise indicate.

The more carbohydrates are processed, the "faster" they become. Flours stripped of the bran, the germ, and the healthy vitamin E, fibre, B vitamins and iron along with it, are simply easier to digest and reach our bloodstream much faster. Some prime examples of heavily processed, "fast carb" foods to avoid are as follows:

- White rice
- White bread, rolls, bagels, buns etc.
- Pop/soft drinks, fruit juices
- Potato chips, popcorn
- Pizza, french fries
- Doughnuts, muffins, cakes, pastries

What is the Significance?

The *Nurses' Health Study* researchers discovered that insulin levels play a role in sex hormone regulation. After examining women who were in the highest GL category (those who ate fast carbs), researchers found that these high GL women were 92 % more likely to have ovulatory infertility than those in the lowest GL category (those who ate slow carbs). In other words, the more fast carbs you consume, the more difficulties you may experience getting pregnant. On the other hand, your chances of conceiving will increase if you consume more slow carb foods. It is interesting to note that it is not the *amount* of carbohydrates that you consume; it is the *quality* that is most important. Polycystic ovarian syndrome (PCOS) is a common cause of infertility in women and can be strongly related to insulin resistance, although not all women with insulin resistance have PCOS. If you do have PCOS, adhering to a slow carb diet is imperative for a successful pregnancy.

What to Eat

What is there left to eat, you ask? Follow the list of dietary choices below to not only feel healthier but to also increase your chances of success.

Whole Grains: Enjoy more whole grain products when choosing your breads, pastas and cereals. When eating rice, eat brown rice only. Also, watch for healthy bread imposters! Most whole grain breads are simply processed flours coloured with molasses. Use the squeeze test when buying your bread: if you can squish it, put it back! Choose heartier, heavier breads which are fantastic for freezing and toasting.

Fruits and Veggies: Eat all the veggies you like – consume potatoes sparingly and try sweet potatoes instead – and consume whole fruits only. Step out of your comfort zone and try vegetables you are not used to having like kale in your soups, and avocado on your salads. Schedule regular visits to your local farmers market to see what is in season.

Lentils and Beans: Lentils and beans are not consumed often enough. These fantastic sources of protein are loaded with fibre, do not have a significant effect on blood sugar, and best of all are cheap! Again, try a variety: keep a bean salad in the fridge for the week, with diced carrot and celery for crunch, and top it with olive oil and balsamic vinegar.

3. Proteins: Are You Eating the Right Ones?

The first food items that come to most people's mind when I ask about their favourite protein sources in their diets are beef, chicken and pork. As North Americans, 70 % of the protein in our diets comes from animal sources (this is compared to 10% for people from China). These protein sources are considered "complete," meaning they contain all the essential amino acids necessary for us to grow nearly every tissue and cell in our bodies.

But can these protein choices possibly have an influence on your ability to get pregnant? According to the *Nurses' Health Study*, the answer is yes.

It's All About the Insulin

How does protein affect fertility? Many experts believe that since protein helps to regulate blood sugar levels, insulin levels are more stable. This is important because blood sugar levels, insulin sensitivity and the production of a hormone called *insulin like growth factor* all play important roles in ovulation.

Moreover, when the *Nurses' Health Study* compared animal protein intake with those who consumed more plant protein, the following conclusions were made:

- Those who consume more animal protein had more incidence of infertility
- Those who consumed more plant protein had less incidence of infertility

Other findings from the NHS:

- Adding 25g of animal protein in place of 25g of carbohydrates was related to a greater risk of ovulatory infertility (increased by 20%)
- Adding 25g of plant protein instead of 25g of carbohydrates was related to a lower risk of ovulatory infertility (decreased by 43%)
- Adding 25g of plant protein instead of 25g of animal protein resulted in a 50% lower risk of ovulatory infertility

So therefore it isn't the amount of protein you consume; it is the type of protein consumed.

It is also interesting that the saturated fats contained in animal proteins may be contributing to inflammatory prostaglandins, which are known to increase the incidence of endometriosis, a common diagnosis in cases of infertility.

Which Protein Foods are Best?

Now that you know how certain animal products are directly related to infertility (such as red meats, pork, deli meats, and processed meats), you need to know which proteins are fertility boosters.

First, let's review some animal proteins that have no negative effects on your fertility. It was concluded in the NHS that oily fish and eggs were perfectly safe to consume when trying to conceive. Try to purchase fresh fish like salmon, mackerel, herring and sardines, as these fish are less likely to contain mercury and are more likely to contain the highest amount of fertility-enhancing omega 3 fatty acids. As far as farm eggs go, eating one egg per day, 5 days per week is generally viewed as perfectly fine. However, do your best to consume free-range eggs grown with organic feed. This is because what the chickens eat dramatically affects the quality of the eggs.

Organic chicken can be consumed up to twice per week; just remove the skin to reduce the amount of saturated fats.

The Forgotten Proteins

We often forget about the protein-packed power of the almighty bean. By eating a wide variety of beans and lentils, in combination with brown rice, you are getting all the essential amino acids you need to create healthy protein in your body. Check out your local health food store to see the tremendous variety of beans and legumes, which are not only inexpensive but incredible tasty! Other protein sources include nuts and seeds and are the perfect snack. They will keep you feeling full much longer than a sugary granola bar, which so many of us reach for first. A handful of mixed nuts and seeds is all that you'll need. Be sure to chew them well for better absorption.

4. What's Your Drink of Choice?

Every day we drink a variety of beverages to quench our thirst, with most of us not really considering the effect that these fluids have on our health, especially our fertility health. Coffee, tea, fruit juices, pop, milk, water are all possible choices in our homes, at work and for those enjoying a night out.

However, how do these drinks affect our ability to conceive? Some results may surprise; however, some may not. Let's go through the most common beverages first.

Coffee/Tea: Most people would assume that coffee and other caffeinated drinks should be avoided when trying to get pregnant, but the *Nurses' Health Study* found that caffeine in moderation did not affect rates of conception. What does "in moderation" mean? As long as you remain under 2 cups of coffee per day, this amount of caffeine should have no influence on your ability in getting pregnant. That being said, other studies indicate that caffeine should be avoided. Coffee affects people differently, and if you are affected by caffeine more compared to other people, you may want to cut it out completely. Also, it's not just the coffee; it's what you put in it that may count the most. This means cutting down on double-doubles at Tim Hortons. Ask your healthcare provider which herbal teas are safe when you are trying to conceive.

Pop: Carbonated beverages look harmless enough. After all, they are available everywhere and one can of pop surely cannot hurt. Or can it? The study concluded that if there is one drink to completely avoid, it is the common soda pop. The going theory is that the tremendous amount of sugar contained in these drinks is what causes regular consumers to have lower rates of conception (see chapter 2 on Carbs). You could switch to diet pop, but artificial sweeteners have not been tested on pregnant mothers or babies, and some of the evidence against these products is enough to persuade many to find another beverage. If you really like the fizz, mix soda water with your favourite fruit juice for a refreshing drink.

Alcohol: We all know that alcohol is best to avoid once we become pregnant, but what about while we are trying to get pregnant? Studies in the past have been all over the map, some indicating that the occasional drink is fine while others say it is best to avoid alcohol altogether. The results of the *Nurses' Health Study* indicated that one drink per day did not influence one's ability to conceive. I always tell my clients that if they want to increase their chances in any way possible, then it is best to avoid alcohol all together. However, for those who do enjoy a drink every once in a while, they can rest assured that it will have very little effect on their chances of conceiving.

Play it Safe

Obviously the drink of choice for everyone, including those trying to get pregnant, is water. Add a slice of organic lemon or lime to improve the taste. Staying well hydrated is extremely important for both males and females. For males, it is also advised for them to consume coffee and alcohol moderately to ensure proper sperm production. Too much of either can be problematic.

5. Supplements: Which Ones are Right for You?

It is always best to receive your nutrients from whole foods. A diet rich in a variety of vegetables, fruits, nuts, seeds, beans, lean meats and fish should provide all the nutrients you need. However, there are certainly cases where supplementation is recommended. For example, every mother-to-be knows about folate, and every prenatal formula supplies at least 400mcg of folic acid to minimize the chances of your baby suffering from neural tube defects (i.e. spina bifida). Are there other supplements that are advised which will increase your chances? You bet.

Multi Vitamin/Mineral: Most women take a prenatal vitamin once they find out they are pregnant, but research is showing that it is just as important to start that regimen before conception takes place. Obviously, if you are not planning on getting pregnant, you not likely be taking a multi, but for most of you reading this report, you have no doubt already started to try. If this is the case, talk to you healthcare provider about which multi is right for you and be sure to take it every day.

Folate: This B vitamin plays a vital role in fetal health. The *Nurses' Health Study* observed that for those who took supplemental folic acid, there were no reported neural tube defects in babies born. For those studied who did *not* take supplemental folic acid, there were cases of neural tube defects. It is quite clear that folate should be taken daily. Recent research is even saying that we should be taking even more folic acid than the average 400mcg in most pre-natal formulas; up to 5000mcg is being suggested. Be sure to talk to your healthcare provider to see how much is right for you. Folate is also great for a man; however, he should not be taking female pre-natals because the iron levels may be too high for his needs. Pick up a single folate supplement for him to take on his own.

Iron: Iron levels and fertility rates were researched in the *Nurses' Health Study* and a very interesting conclusion was made: the source of the iron recommended was not what you might think! When most people think of iron sources they immediately think of meat products. However, the study discovered that the most favourable type of iron to improve conception is from *non-heme iron*. *Non-heme iron* sources are all from vegetarian sources, and also from egg and some fish. Iron from meat sources actually decreased fertility. These findings support the conclusions discussed in chapter 3, for which proteins are recommended. Talk to your healthcare provider to find out how much *non-heme iron* is right for you.

B6 (**pyridoxine**): This important B vitamin is a must for those who have trouble with fertility, especially those with a luteal phase defect (a short or inadequate phase between ovulation and your period). The luteal phase occurs when a fertilized egg implants itself in the endometrium to grow. A short or inadequate luteal phase will make this step difficult, and B6 has been shown to help. B6 has also been proven to balance sex hormones and elevated prolactin levels, both which play a significant role in fertility. Strong PMS has also been attributed to a B6 deficiency and may be an indication of hormonal imbalance. It is interesting to note that the birth control pill can contribute to a B6 deficiency.

The following supplements may also be recommended. Ask an experienced healthcare provider about dosages that are right for you.

Zinc: Most famous for its role in sperm production, zinc also plays a role in female reproductive health.

Vitamin E/Selenium: Often prescribed together, these powerful antioxidants can benefit males and females in a number of ways.

Vitamin C: Something I prescribe more often for males, this common antioxidant is ideal to reduce sperm clumping and has been shown to play a role in healthy DNA. High doses of vitamin C in females may actually hamper fertility, as it can dry up fertile cervical mucous during ovulation.

Essential Fatty Acids: I recommend this product for everyone, whether they are trying to conceive or not. EFAs play a role in hormone production as well as improving sperm quality in addition to many other health benefits.

L-Arganine and L-Carnitine: Two very important amino acids for sperm health.

CoQ10: This fertility boosting supplement deserves an article all on its own, click here to read it!

*Important Note** If you or your partner suffer from a digestive related disorder like Celiac disease or an inflammatory bowel disorder, you may not be getting all the nutrients you need. Be sure to see an experienced practitioner to ensure you nutritional needs are being met.

Reference

Jorge E. Chavarro, MD, ScD, Walter C Willett, MD, DrPH.	The Fertility Diet. McGraw Hill Books, 2008.
'The Nurses' Health Study', Harvard University	

