Tips for Healthy Babies

Bringing a healthy baby to term is the goal of every pregnant woman. Many factors should be addressed when considering lifestyle changes before, during and after pregnancy. Many environmental variables may affect an unborn child whether they are consumed, inhaled or absorbed through the skin.

Although overwhelming and possibly discouraging, it is possible to help stack the deck to improve the chances of giving birth to a healthy baby. This information should act as a guide when making informed decisions about how to best prepare to bring a child into the world. Although a healthy child can never be guaranteed, this guide should make it easier to take a step in the right direction.

Do Consider:	Consider Avoiding:	Why?
Prenatal Vitamins		Contains nutrients and minerals necessary during pregnancy to reduce incidence of birth defects
	Smoking/Second Hand Smoke	Risk of low birth weight, asthma and SIDS[1]
	Alcohol	Known to cause fetal alcohol syndrome and birth defects[1,2]
Vitamin D • Mothers: 4,000-8,000 IU/day • Infants age 0-12 months: should not exceed 1,000 IU/day[4] • Babies older than 1 year old should not exceed 2,000 IU/day[4]		• Decreased risk of C-section delivery[3] and chronic diseases[5]. Vitamin D maintains calcium levels that are important in building bones and teeth. • Vitamin D levels can be checked by the 25-hydroxy vitamin D test. • Normal values range from 40-60 ng/mL.
Checking hormone levels, including progesterone		Hormone levels support the pregnancy and affect the health of the child
Canned light chunk tuna in moderation, as it has less mercury content	Mercury exposure from fish[6] and dental fillings	Heavy metal exposure build up has been associated with auto-immune disorders
Food sensitivity testing		Sensitivity to food may aggravate the immune system and auto-immune disorders
Washing fresh produce	Deli Meat	May contain listeria and other bacteria[6]
Taking high cell count probiotics that have at least 15 billion cultures/dose		Probiotics support a healthy GI tract and vaginal environment. Babies receive their immune function from the mother during the normal birthing process and breastfeeding[7]
Consuming beef raised without hormones or antibiotics in moderation	Non-organic beef, unfermented soy and soy based infant formulas	The items to avoid can cause elevated estrogen levels in the mother leading to decreased sperm count[8] and growth impairment of male infants and early puberty in female infants[9]. Soy based infant formula feedings alone supply an infant with the equivalent of five birth control pills worth of estrogen on a dose per weight basis[9].
	Phthalate, a plasticizer found in food packaging, detergents, shower curtains, toys and more	Exposure to phthalate has been shown to cause birth one week sooner in women who were exposed. Additionally, male infants had lower testosterone levels[10].
	Artificial sweeteners	Exposure to toxins from metabolites of aspartame should be avoided[11]. Changes to the GI tract by sucralose affect the health of the gut[11].
Sleep in a totally dark room		Helps create stronger immune function[12]

Prenatal vitamins contain vitamins and minerals that are essential

- Look for prenatal vitamins that contain: DHA, calcium, iron, vitamin C, vitamin D, and at least 400 mcg of folic acid.
- Women should start taking at least 400 mcg of folic acid at least one month before trying to become pregnant.
- Obtaining an adequate amount of folic acid can help prevent neural tube birth defects as such as spina bifida.
- Folic acid food sources: green leafy vegetables, beans, fortified bread, and citrus fruit
- DHA (docosahexaenoic acid) is important in the baby's visual, brain and nervous system development. DHA can be found in salmon, canned light tuna and certain prenatal vitamins with 200-300 mg/day.

Smoking/Drinking[1,2,13]

- Smoking while pregnant may cause the baby to have a low birth weight, heart defects, asthma, and an increased risk of SIDS. Sudden infant death syndrome (SIDS) is the leading cause of death in babies between the ages of 1 month to 11 months of age. The exact cause of SIDS is unknown but women that smoke and consume alcohol while pregnant are risk factors.
- Smoking cessation assistance includes: counseling, yoga, stress management.
- Drinking *any* amount of alcohol during pregnancy may be harmful to the baby because any amount of alcohol that the pregnant mother consumes gets passed on to the fetus through the placenta. This may lead to fetal alcohol syndrome (FAS), which can cause growth and intellectual difficulties.

Vitamin D deficiency has been associated with nearsightedness, rickets, behavioral disorders, autism[5], and diabetes.

- Approximately 15 minutes of sunlight twice per week to the arms, legs, and face provides an ample amount of vitamin D. Washing with soap can remove vitamin D from skin, therefore one should wait at least 48 hours after sun exposure before washing skin.
- Food sources include: salmon, canned tuna fish and vitamin D fortified milk.

Estrogen/Progesterone[9]

- Estrogen helps maintain a healthy environment for the development of the baby.
- Naturally increases amounts of estriol (E_3) during pregnancy protect toxins from getting through the placenta.
- Progesterone helps to maintain a pregnancy until birth because it causes the uterus not to contract prematurely.
- Hormone levels can be checked to ensure needs are being met. Saliva testing for hormone levels is available.

Heavy metals such as lead or mercury may be absorbed and stored in both a mother and child's body. They are difficult to remove and may contribute to auto-immune disorders including multiple sclerosis (MS), thyroid disorders and autism[7]. One way to help lessen these risk factors through a pregnancy is probiotic therapy and good nutrition. A study looking at maternal diet patterns found that pregnant women who consumed a western diet (high fat, salt, oil and meat) compared to a healthy or Japanese diet had children with significant increases in wheezing at 16-24 months[14].

- Probiotics support the GI tract so that good bacteria are prevailing and counterbalance the bad bacteria. This helps with the processing of nutrients as well as the handling of heavy metals and toxins[7].
- Using probiotics one month before delivery and adding probiotics for children into pumped breast milk two months after delivery, the child may have a healthier gut and reduce the risk of developing allergies, asthma and eczema[15].
- Some believe that up to 80% of brain chemistry originates in the gut. Setting the child up with a healthy gut may lead to better health and development.
- Probiotics can be given to the child before and after vaccine administration to promote the clearance of potential toxins. This may be helpful as there has been concern regarding toxins vaccines and potential links to autism.

Artificial sweeteners bring a host of issues when used regardless of pregnancy. One issue with their use is that they cause the brain to think that a high sugar food was just consumed which causes insulin levels to rise. However, these non-nutritive sweeteners do not provide sugar. This causes the brain to send us signals to consume food with sugar so that the insulin can work. Insulin is a hormone that promotes the storage of energy, commonly fat. The metabolism of aspartame causes the production of formaldehyde and methyl alcohol, two known toxins[11]. Sucralose, commonly known as Splenda®, is known to cause changes to the gut which cause nutrients to become poorly absorbed[11].

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