Prenatal and Post Natal Care By Dr. Ingrid Pincott N.D. Updated Sept 2017

**Preconception care** is defined as the 3-4 months BEFORE pregnancy occurs. It is more important for second time mom's as they are more depleted of nutrients. Measuring homocysteine pre-pregnant will determine if there is a B12 or folic acid deficiency. These nutrients decrease the miscarriage rate. Detoxification programs done prior to pregnancy will reduce the nausea and vomiting of pregnancy. This handout is primarily to give you information **during and right after** pregnancy.

## Baby size at birth (Gestational Size) for optimal adult health:

Dr. Plummer Ph. D in a recent lecture outlined the increased incidence of Type 2 Diabetes, CV disease, hypertension, obesity, depression, schizophrenia and Alzheimer's with low birthrate or small gestational age (SGA) (less than 2.5kg) babies.

The Developmental Origins of Chronic Diseases by David Barker is a good resource for this research. There are over 18 chronic health conditions associated with either low or high birth weight (3.5kg). High birth weight over 3.5kg was associated with increased risk of metastatic prostate cancer and lymphoblastic leukemia. Optimal prenatal nutrition contributes to optimal gestational size.

Folic acid: Birth control pills should be discontinued six months prior to getting pregnant as they greatly reduce B6 and folic acid stores in the body and it takes 6 months to increase folic acid stores in the body. Take at least 400mcg per day before pregnancy for at least 6 months. Folic taken in the first 13 weeks during pregnancy prevents neural tube defects. It is also important to prevent small for gestational age (SGA) babies and premature delivery in 50-70% of cases. Dark leafy green vegetables such as kale and swiss chard are high in folic acid. Prenatal folic acid supplementation prevents childhood leukemias, also premature delivery from 50%-70% and brain tumors by 50%!. Even now only 25-30% of females take folic acid supplementation prior to and during pregnancy.

Essential fatty acids containing EFA are crucial for eye health and DHA for brain health. They are also important for the health of the placenta and thus increase birth weight.

Check for rhubella antibodies before you get pregnant. If you have none then get vaccinated before pregnancy.

**Maternal multivitamin supplementation:** will prevent leukemia, malignant brain tumors, spinal cord tumors and neuroblastomas. Antioxidants taken during pregnancy reduces asthma and infant allergy in general. Fish oil during pregnancy increases IQ scores in children.

Your multivitamin regime should contain iron, folic acid, B complex and calcium. My favorite is Optinatals from Eclectic Institute at 6 per day. This multivitamin helps with healthy baby weights.

Mom's calcium levels should be good as the baby gets it all so this period of a woman's life will promote osteoporosis later in life. Calcium is important for fetal bone development as well as preventing pre-ecamplsia. Zinc deficiencies cause stunted fetal growth and hypertension in women. B6 250mg is great for prevention and treatment of nausea of pregnancy but can suppress lactation so reduce dosage once nausea is gone. B6 deficiency also causes mental retardation and decreases the size of the thymus and spleen both important for the function of the immune system. Too much iodine can cause enlarged thyroids, mental retardation and over active thyroid in babies.

Protein is key to preventing pre-eclampsia, 60 grams per day for first 6 months then 100grams per day for the last 3 months. (See Protein content of foods handout) Vegans need to eat 2 cups of dark green veggies per day, lots of nuts and seeds, seaweed and soy products. If you are not feeling well on a vegan diet see your ND. To avoid or reduce exposure to toxic metals and chemicals: quit smoking and avoid alcohol; avoid use of pesticides in the home and garden; avoid exposure to solvents, paints, non water based glues, furniture strippers, gasoline fumes and nail polish; avoid dry cleaners and dry cleaned clothes; avoid fish with high mercury and PCB levels such as tuna, shark, swordfish and large halibut; eat organically as much as possible especially meat products; avoid raw meat to avoid toxoplasmosis. Your due date is normal even if it is three weeks early or two weeks late. Yoga and swimming are excellent forms of exercise during pregnancy. The rule is to maintain what you are used to. This includes horse back riders and athletes. In the case of a family history of ezema, the mother should take Lactobaccillus for four weeks before expected delivery and then continue for 6 months in the breastfeeding mother or child, the preventive effect of the Lactobacillus extends to four years.

Elevated **homocysteine** is linked to placental abruption, placental infarction and spontaneous abortion and is linked to folic acid, B12 and B6 metabolism.

**Ferritin** levels should be in the 50-80 range before delivery.

**Vitamin D:** Increases birth weight, decreases metabolic syndrome, schizophrenia, bipolar disorder, pre-eclampsia (if serum level is 200nmol/L, bone health later in life, obesity, asthma, type 1 DM. Recommended dosage in these studies were 400-800IU's per day or higher if starting 30 weeks gestation or later. Babies should be supplemented 400-800IU's per day if not preterm.

**First trimester** take nutrient tea: Equal parts of red clover, red raspberry, peppermint, oatstraw, and nettles steeped for four hours for maximum amount of minerals extracted from oatstraw and nettles.

2 cups per day of red raspberry tea is recommended from 16 weeks to the first few weeks postpartum. It is rich in vitamins and minerals including iron, it tonifies the uterus, reduces post partum bleeding and after pains and increases milk flow. **Rooibos tea**: is a red bush tea made from a legume from South Africa, that contains no caffeine, containing trace minerals, high in anti-oxidants especially when boiled for 10 minutes that is greater than green or black tea.

Heartburn is common in and glyconda is a simple good tasting liquid tonic that works well. Ginger, papaya, kiwi and pineapple contain natural digestive support that may help and try avoid drinking with the meal. Visceral manipulation is an easy technique you can do on yourself.

Nausea and vomiting of pregnancy: Ginger, B6 50-100mg, sea bands, B6 and B12 intramuscular injections, homeopathy including symphocarpus, milk thistle 270mg three times per day, Vitamin C, Vitamin K (get from Blaine Health Food Store)

#### **Third Trimester:**

In this trimester woman can experience more leg and abdominal cramps. These can be remedied by increasing calcium and magnesium citrate which is best taken at night. If this doesn't work try Vitamin E 800IU to be discontinued two weeks before delivery due to anti-clotting effect. Mother's cordial by Dr. Bill Mtichell is recommended 16 drops three times per week at 36 weeks until birth. If you have herpes you want to prevent an outbreak during the time of delivery so follow herpes prevention in the second and third trimester.

During this trimester it is also important for the mother to be exposed to dirt, animals and farm animals to stimulate her immune system as well as the babies. If mom is too clean then the baby will have more allergies as a child!

In the last month before delivery prepare the pelvis by getting on hands and knees 20 minutes twice per day to encourage proper positioning of baby, don't cross legs, sit on exercise ball rather than a chair, swimming is good.

**Third trimester** take nutrient tea: Equal parts of red clover, red raspberry, peppermint, oatstraw, and nettles steeped for four hours for maximum amount of minerals extracted from oatstraw and nettles. Make sure 100grams of protein per day are ingested.

### Risk of Autism:

Maternal age ie over 35 years of age increase risk of autism.

Bumetadine (a diuretic) when given to mothers before delivering prevents autism permanently. The mechanism is through oxytocin switching to GABA production during pregnancy and with ASD this switch does not happen as much. Science 2014.

**lodine and pregnancy:** permanent deafness in newborn caused by hypothyroid induced by 12.5mg iodine taken along with dessicated thyroid. 300mcg per day during pregnancy is adequate and 500mcg per day for adults. Avoid high doses of iodine during pregnancy!

**Delivery Preparation:** One month before delivering and one month after delivery I recommend taking a uterine tonic containing helonias, mitchella and viburnum. This helps with ease of dilation of the cervix at the time of delivery and helps with re-tonifying the uterus post delivery.

**Ultra flora Women's** (Metagenics) provides the very specific strain of L.rhamnosus probiotic required to prevent vaginal Group B strep and should be taken orally at bedtime for one month before delivery. This prevents the mother from having to take antibiotics to prevent it.

#### Labour:

Dehydration slows down progress. If you are low in iron sipping shepherds purse tea all the way through labour will prevent hemorrhage.

#### Post Natal

To prevent uterine prolapse it is ideal to lie in bed a lot the first month after delivery. The gorilla's do! Getting support for first 30 days will lessen chance of postpartum depression and problems with breast feeding. Kegel exercises will help with urinary incontinence and uterine prolapse post partum. Imagine a tampon falling out, and preventing it. Do this ten times three different times per day.

To maintain nutrition and help in the making of milk drink nutrient tea regularly. Take fluoravit to increase iron levels and energy. Be aware that iron supplementation of the mom can cause colic in babies if they are breast fed. Take essential fats in a vitamin shake. For fatigue and post-partum depression use Siberian ginseng, B5 and B100 for adrenal support and the multivitamin Optinatal is crucial. Keep taking the helonias uterine tonic for one month after delivery to reduce the incidence of prolapse later in life and you won't bleed as much after the delivery. When taking supplements keep in mind they will show up in the breast milk about 4 hours later and 10% comes through. Baby's are rarely treated with herbs. The herbs are given to the mother and the baby gets 10%!

Breast feeding may be a form of birth control for the first six months but this is not totally reliable.

# **Breast Feeding Tips:**

Half of Canadian women quit breast feeding at 3 months, due to interference with their work schedule. It is best to breast feed at least six months and hold off introducing solids until six months if possible.

The first month is the most critical in setting the production of milk. Milk is made supply and demand. Wet nurses were limited to feeding 7 babies at a time! so it is very rare that women do not have enough milk. It can take first time mom's milk to come in after the colostrums so often mom's are convinced to give formula in those first few days. When this takes place the baby gets nipple confusion and latching becomes more difficult. There are some breast feeding friendly hospitals that don't stock formula for this reason. If you think you might be wanting formula for your newborn, take in your own hypoallergenic formula to at least avoid the dairy allergies that result when giving newborns cows milk formula.

If the baby does not have a bowel movement in the first few days the baby develops jaundice and then becomes sluggish making latching even more difficult. The more

you breastfeed in those first few days the sooner your milk will come and the baby will have a BM.

Breast engorgement is best treated by emptying them. Pump them out once, then feed two feeds on one breast to empty them.

If you want to go back to work and keep feeding your baby, pump your breasts to keep up the schedule your baby has set, if not the baby will feed at night to make adequate supply! Part time mom's are more successful at nursing.

Note about Nestle: Nestle gives out free formula samples to women in third world countries while they are in the hospital, so that by the time these women leave the hospital they no longer breast feed. They then use the formula diluted with polluted water and a lot of these babies die from gastroenteritis.

Note about soy formula: There has been a lot of negative research about soy formula causing an estrogen effect in babies. Remember that cows milk is loaded with hormones as well. I think what we need is soy formula made from organic soy to avoid GM soy, which may be part of the problem with soy.

The fore milk has a lot of sugar in it. If you find that the baby fills easily and goes to sleep and then wakes up one hour later to feed, the baby is getting used to the sweet fore milk which is like pop, it doesn't stick with them long. Pump off the first ounce and throw it away. This hind milk will stick with them longer and will increase time between feeds. If you have a fast let down this creates gas in the babe. Lie down while breast feeding to slow this process down and also to prevent the baby from becoming lazy in latching.

#### **Neonatal Nutrition:**

Keep baby healthy first 6 months of life. If they get sick in this period they get sick very fast! Treat quickly!

Early introduction of cow's milk causes anemia and fortified rice cereals constipate babies! If babies are anemic the best iron supplement for the mother to take is Fluoravit which yeast and juice free! (See handout on Introducing Foods).

**Vitamin D:** Increases birth weight, decreases metabolic syndrome, schizophrenia, bipolar disorder, pre-eclampsia (if serum level is 200nmol/L, bone health later in life, obesity, asthma, type 1 DM. Vitamin D will also prevent carotid intima thickness and cardiac failure in adulthood. Recommended dosage in these studies were 400-800IU's per day or higher if starting 30 weeks gestation or later. Babies should

be supplemented 400-800IU's per day if not preterm. Some authorities recommend 2000IU of vitamin D per day for the first year of life.

**Essential Fatty Acids:** omega 3 EFA's prevents Type 1 Diabetes. DHA and EPA in equal dosages given in first year of life improves cognition for life. If mom is supplemented then this comes through the breast milk. Fish oils also prevent the risk of asthma. If you are not breast feeding then 2 tsp of organic flaxoil can be added to the baby's formula feeds over a 24 hour period.

**Homeopathic Medicine:** Antibiotic usage in first 6 months of life is associated with increased risk of overweight among children of normal weight mothers. The use of homeopathic remedies in children can prevent the over medicalization of children. Use them for colic, ear infections and teething. Parents love to use them!

**Probiotics** can reduce the Atopic march (exzema and asthma) by 57% at 6 months and 24 months from birth. Non-dairy bifidus is best for babies and children for the first few years of life for optimal digestive and immune health. Formula fed babies have abnormal cholesterol metabolism and will gain weight the same as breast fed babies until four months. After that breast fed babies are leaner and they need to evaluated with breast feeding growth charts.

### Food introduction:

This is a very critical time in the overall health of your child. If foods are introduced too early this may develop into allergy problems later including asthma and eczema. See charts. Age 6-12 months is really food tasting. When trying new foods give only one tablespoon and wait 24 hours for reaction. Give iron rich foods at 6 months, food high in oils at 9 months such as avacado and flax, and bananas at age 9 months. Latex allergies may start with bananas. Breast feed first then offer tablespoon size tastes of foods at the same time the rest of the family is eating to educate the baby about meal times. (See Introducing Foods Handout)

**Peanut Allergy:** There is new small research trial where children aged 9-13 years with severe peanut allergy can re-establish immune tolerance by oral administration of increasingly daily small doses of peanut and then to maintain tolerance by eating 5 peanuts per day. (Clin Exp Allergy 2011,41) Peanut allergy prevention can start as early at 4-11 months. (LEAP study NEJM 2015).

## **Interval Between Pregnancies:**

A woman who conceives again within six months of giving birth runs a far higher risk of a pre-term baby or a stillbirth, researchers have confirmed.

A study involving 90,000 women who were on a second pregnancy found that the interval between birth and a further conception was a vital determinant of the health of the baby.

Although obstetricians were aware of the risks of a quick second pregnancy, they did not know if socio-economic factors also had a part to play. Many mothers who became pregnant again within six months of a first birth were from deprived areas and were more likely to be smokers.

The study, carried out by Cambridge University, has discovered that the risks apply to a woman from any background, and even if she was a non-smoker.

Complications during the first pregnancy were also thought to indicate problems the second time, but again, the Cambridge researchers found women who had a trouble-free pregnancy and birth were just as likely to suffer complications the second time if they conceived too soon.

After adjusting for demographic factors, the researchers found that a woman who conceived within six months of giving birth had a 60 per cent greater risk of a 'moderately' pre-term birth, double the risk of an 'extremely' pre-term birth, and almost four times the risk of a neonatal death.

(Source: British Medical Journal, 2003; 327: 313-6).

# **Diabetes Type 1 and Cod Liver Oil**

In a study of 545 cases of childhood-onset Type 1 diabetes compared with 1,668 population controls, the use of cod liver oil in the first year of life was associated with a significantly lower risk of type 1 diabetes. The use of other vitamin D supplements during the first year of life and the maternal use of cod liver oil or other vitamin D supplements during pregnancy were not associated with type 1 diabetes. "Use of Cod Liver Oil During the First Year of Life Is Associated With Lower Risk of

Childhood-Onset Type 1 Diabetes: A Large, Population-Based, Case-Control Study," Stene LC, Joner G, et al, <u>Am J Clin Nutr</u>, 2003;78:1128-1134.

# **Recommended Reading:**

Pregnancy and Birth, The Best Evidence by Joyce Barrett, MD and Teresa Pitman Breastfeeding Your Baby by Sheila Kitzinger

What Your Doctor May Not Tell You About Vaccinations. by Stephanie Cave

Dr. Cathy Carlson Rink N.D. lectures on which herbs are safe during pregnancy and breast feeding. Clarify first with your treating naturopathic physician before taking any herbs during these periods.