

Pre- and Post-Natal Nutrition Introduction to Solids Tracey Merkle Back To Health Center

Prenatal Nutrition

- **Focus on quality foods**
 - Food in it's most natural state without preservatives, additives, etc.
- **25%of your plate needs to be protein**
 - Beans, seeds, nuts, sprouts, quinoa, nut butters
 - Beef, chicken, turkey, eggs, fish
- **20% fat**
 - Avocado, seeds, nuts, coconut oil, fish
- **55% carbs**
 - Whole grains, pastas, rices, etc
 - Honey
 - Lots of fruits and veggies

Exercise

- If you have been following a regular exercise program prior to your pregnancy, you should be able to maintain that program to some degree throughout your pregnancy.
- Exercise does not increase your risk for miscarriage.
- If you are just starting an exercise program during your pregnancy, you should start very slowly and be careful not to over exert yourself.
 - Listen to your body. Your body will naturally give you signals that it is time to reduce the level of exercise you perform.
 - Never exercise to the point of exhaustion or breathlessness.
 - Wear comfortable exercise footwear that gives strong ankle and arch support.
 - Take frequent breaks and drink plenty of fluids during exercise.
 - Avoid exercise in extremely hot weather.
 - Avoid rocky terrain or unstable ground when running or cycling. Your joints are more lax in pregnancy and ankle sprains and other injuries may occur.
 - Contact sports should be avoided during pregnancy.
 - Weight training is acceptable and encouraged during pregnancy.
- During the second and third trimesters, avoid exercise that involves laying flat on your back, as this decreases blood flow to your womb.

Sedentary Lifestyle

- Being a couch potato can kill you, literally.
- More deaths are attributed to sedentary lifestyle than even smoking!
- 20% of all deaths of people 35 and older are attributed to a lack of physical activity.
- Due to lack of physical activity:
 - The risk of dying from cancer increases 45% for men and 28% for women.
 - The risk of dying from respiratory ailments is 92% higher for men and 75% higher for women.
 - The risk of dying from heart disease is 52% higher for men and 28% higher for women.

Exercise Benefits

- By moving the muscles, ligaments and limbs, you actually massage the tissues and organs of the body, bringing them oxygen and enhancing their flexibility.
- You also move lymph fluid around the body, and lymph must be moved through physical activity alone since there is no "lymph heart" to circulate lymph fluid like there is with your cardiovascular system.
 - In other words, your heart pumps your blood even if you're sitting in a chair. But there's nothing to pump your lymph fluid other than sloshing your body around through regular movement.

Exercise Benefits

- Sweating helps eliminate toxins
- Physical exercise, if done outside, also exposes you to the healing effects of natural sunlight and produces Vitamin D, an essential nutrient for the human body that is deficient in most people.
- Studies also show that it doesn't take an enormous amount of physical exercise to achieve health-enhancing results.
- A mere 30 minutes a day of walking, swimming, jogging, cycling or other cardiovascular exercise can have astounding positive health effects.

Supplements are NOT

- a crutch for not eating the healthiest foods
- A replacement for food

Supplements DO Serve To

- **ENHANCE** the quality of your food
- **CORRECT** nutritional deficiencies caused by
 - years of suboptimal eating
 - Environmental exposures

Prenatal Supplementation

- Multiple with iron [not “prenatal”]
 - Check your serum iron and ferritin levels
- EPA/DHA [2000mg/night] (fish oil)
- GLA [240mg/night] (flax oil)
- Chelated Minerals
- Antioxidants [C (2g/day), E (400IU/day)]
- B-Complex (50mg/day)
- Vitamin D [1000IU of D₃ or Cholecalciferol]
 - Do a 25-Hydroxy D blood test

Dehydration

- Dehydration increases your core temperature causing cardiovascular strain in the form of increased heart rate, increased blood pressure and lower cardiac output (the volume of blood pumped by the heart in one minute).
- Dehydration has been known to cause headaches and back pain
 - How many take an aspirin for a headache and they think it's the aspirin that got rid of their headache (when it was really the water)?!

Dehydration

- Outward signs of dehydration are obvious thirst, muscle cramps, weakness, decreased athletic performance, difficulty with focus, headache, nausea, fatigue, reduced urine output, dark urine and dizziness.
- In athletes, even 4% dehydration can result in 20-30% decrease in work performance.
- The problem with these “warning signs” is that they are not truly a “warning” at all.
 - By the time you experience these symptoms, dehydration has already occurred.
- If you are dehydrated going into a physical activity, no amount of water you drink during the activity is going to make up for not drinking enough water on a daily basis.

Water Requirements

- To avoid dehydration, drink water before you feel thirsty.
- General recommendations for adults is 1 quart per 50lbs of body weight and don't go over 3 quarts.
- You need enough water per day to urinate every 2-4 hours. Normal urine color should be pale yellow.
 - Be aware that medications (especially diuretics), caffeine and alcohol consumption will increase your fluid needs.
- Recovery after exercise: measure yourself before and after exercise to determine your individual needs. It is recommended you drink water until your pre-workout weight is attained (generally 16oz of water per pound of body weight lost).

In The News...

- Fetal brain development may be affected by Ultrasound scans
- Women should avoid unnecessary ultrasound scans until further investigation
 - Define “unnecessary”
- “The effects of ultrasound in human brain development are not yet known”.
 - Pasko Rakic, chairman of neurobiology department at Yale U School of Med.
 - *Dayton Daily News*, Aug 8,2006
- Autism Handout

Post Partum Care

Prepare for the Nursing Relationship

Schedule a LLL consultant to come in and assess your nursing technique for when the baby is born.

Postpartum Care

- For 5 days
 - Golden Seal Powder for umbicus
 - Inflationoid [up to 15 per day]
 - High doses of vitamin C
 - B12/Folic Acid [4000/1600 ratio]
 - A little iron for a couple of days
 - LOTS OF WATER!!!!
 - Quality Protein

DO NOT

go on a low calorie diet before or after birth.

Improving Breastmilk Production

- Drink clean water
 - Reverse osmosis
 - Drink only water
- Protein quality
 - Eggs!
- Basic Supplementation
 - Multiple with iron
 - EPA/DHA [2000mg/night]
 - GLA [240mg/night]
 - Chelated Minerals
 - ACE's
- Get tested

Intro to Solids WHEN?

- At the start of the 20th century, no solids before 12 months.
- At the turn of the century, early solids were clearly associated with early weaning, and the consequences of early weaning in those days were more dire than today

WHEN?

- 30 years ago, American pediatricians recommended anywhere from 4 days to 4 months.
- In the 60s and 70s was the height of what we might call competitive parenting - it was common for babies to begin potty training as early as 18 months, and for moms to brag about what foods their infants could handle.
- Overcoming the natural tongue thrust of a baby was considered a good step in creating a baby who would enjoy many healthy foods earlier.

Direct Supplementation of the BF Baby is NOT necessary

- A babies nursing instinct (the tongue thrust) is an important indicator that baby isn't ready for solids.
- Studies have shown a clear link between Chrones disease, colitis, eczema, and other diseases with the introduction of solids.
- Studies show for formula and breastfed babies, early solids increase rates of respiratory disease and persistent coughing.

Modern obstetrical practices affect a baby's iron levels

- The modern practice of clamping the cord early (before one minute, or until it stops pulsating) can reduce a baby's red blood cells by as much as 50%
- For babies born to anemic mothers, they are more than 7 times more likely to be anemic at 3 months if their cords were clamped early.

Vitamin D guidelines

- Vitamin D deficient babies are receiving milk from Vitamin D deficient mothers and sun-phobic mothers.
- When should you be concerned about Vitamin D deficiency?
 - Those who live in colder environments
 - When mom and baby have darker skin

References

- Mercer JS. Current best evidence: a review of the literature on umbilical cord clamping. *J Midwifery Womens Health*. 2001 Nov-Dec;46(6):402-14
- Gupta R, Ramji S. Effect of delayed cord clamping on iron stores in infants born to anemic mothers: a randomized controlled trial. *Indian Pediatr*. 2002 Feb;39(2):130-5
- Forsyth JS, Ogston SA, Clark A, Florey CD, Howie PW. Relation between early introduction of solid food to infants and their weight and illnesses during the first two years of life. *BMJ* 1993 Jun 12;306(6892):1572-6
- Fergusson DM, Horwood LJ. Early solid food diet and eczema in childhood: a 10-year longitudinal study. *Pediatr Allergy Immunol*. 1994;5(6 Suppl):44-7
- Chandra RK. Food hypersensitivity and allergic disease: a selective review. *Am J Clin Nutr*. 1997 Aug;68(2):526S-529S
- Breastfeeding and the Use of Human Milk (RE9729) *Pediatrics*. 1997 Dec; 100(6):1035-1039

Introduction of Solids

- Not Encouraged Before 8-10 Months of Age:
- Solids are filling and decrease milk intake. This can cause a decrease in mother's milk supply. For a young baby, breast milk is more nutritious than solids.
- Food allergies may develop if solids are introduced before the digestive system is ready to handle them.
- Hydrochloric acid - used to digest most protein - doesn't even appear in the stomach until the end of the seventh month and doesn't reach a peak until the eighteenth month.
- Coincidentally, 18 months is approximately when rennin - used to digest the protein in breast milk - has disappeared.

- Ptyalin, the digestive juice for carbohydrates, doesn't appear until the end of the baby's first year.
- The earliest books on baby care always recommended that mothers pre-chew any solid food.

Intro to Solids

- Watch the baby, not the calendar.
- Keep in mind adding solid food to babies diet is to provide the baby experience with textures and tastes.
 - If they are reaching for food at 5 months, it's merely their way of trying to socialize with or mimic the "clan".

Just Say, "NO!".

"NO" Cereal

- The worst thing you could do is to start an infant on grains.
- That will just perpetuate the central problem with nutrition in this country which is an over reliance on the grain carbohydrates in exclusion of the far healthier vegetables.
- It's not necessary to give cereal, even at 10 months.

"NO" Dairy

- *Increased risk of Type I Diabetes*
- Children fed cow's milk during the first 8 days of life are twice as likely to develop insulin-dependent diabetes mellitus [IDDM] as children who are not fed cow's milk during the first week of life. This study suggests a causal link between early introduction to cow's milk and IDDM may exist, and that exclusive breast-feeding may play a protective role against this disease.
 - *Diabetes Care August 1997;20:1256-1259*

Dairy Culprit

- *Increased risk of ear infections*
- *Chronic Constipation*
- *Mucous Forming*
- *Hormones and Antibiotics*
- *Pasteurization and Homogenization kill the enzymes and render the calcium virtually useless.*

“NO” FRUIT JUICE AND SUGARY BEVERAGES:

- Kids who drink sweet beverages:
 - Have a high overall calorie intake
 - Are 60% less likely to eat fruit
 - Are at a higher risk for obesity
 - American Journal of Public Health August 2002; 92

Fruit juices that contain sorbitol or high fructose

- Cause restlessness, gas and stomach distress in infants. The sweeteners may cause problems in babies because young children often have difficulty breaking down carbohydrates, including these sugars. But the study authors note that a juice manufacturer’s survey found that 90% of infants drink some type of fruit juice by 1 year of age.
 - *Archives of Pediatric and Adolescent Medicine 1999;153:1098-1102. Y*

“NO” Soy

- allergens
- mineral blockers
- enzyme inhibitors
- hormone modifiers
- iodine blockers that interfere with normal thyroid function
- potential for nitrosamine or nitrates (cancer causing agents) in isolated soy proteins and TVP (Texturized Vegetable Protein)
- potential cancer-causing agents

Can Soy Be Hazardous?

- When extracting soy proteins from the whole bean, it requires dangerous chemicals and hazardous substances can find their way into factory-produced soy products.
- About 86% of the United States soybean crop is genetically modified.
- By definition, most soy is a **PROCESSED FOOD.**

Soy Formula

- It is estimated that an infant exclusively fed soy formula receives the estrogenic equivalent (based on body weight) of at least five birth control pills per day. Scientists have known for years that soy-based formula can cause thyroid problems in babies.
 - Irvine, C. et al., "The Potential Adverse Effects of Soybean Phytoestrogens in Infant Feeding", *New Zealand Medical Journal* May 24, 1995, p. 318.

Soy Formula is Known to be Associated with:

- A three- to four-fold risk of middle ear infection
 - (Acta Paediatrica Scandinavica, 1982)
- A similar risk of diarrheal disease
 - (Am. J. of Public Health, 1986)
- A five- to eight-fold risk of childhood lymphoma up to age 15
 - (Lancet, 1988)
- Increased risk of pulmonary hemorrhage
 - (Pediatrics, 1997)

Soy Formula is Known to be Associated with:

- Soy formula has ELEVEN times as much as aluminum as regular formula. [acid wash in aluminum vats]
 - (J. Parenteral of Enteral Nutrition, 1988)
- Children with autoimmune thyroid disease were 3 times more likely to have been fed soy formula in infancy.
 - Lancet, Am. J of Disabled Children, Proceedings of the Society of Exp. and Biological Medicine

The promotion of soy as a miracle food is right in line with the doctrine of the food industry-that imitation foods are as good as natural foods.

Steps to Introducing Infants to Solids

10 Months of Age First 2 weeks

- Foods that are naturally soft with no cooking.
- Avocado
- Banana
 - ripe with some dark spots
 - no green bananas

10 ½ mos – 12 mos

- Progress into soft and semi-soft fruits and vegetables with or without cooking
- Banana, Avocado, Applesauce,
- Slightly mashed cooked carrots, broccoli, sweet potato, etc
- Introduce 1 new food every 4-6 days

12+ mos

- Implement chunks...grapes, blueberries, cooked carrots, cooked broccoli, egg, beans, peas, whole grain bread
- Meat such as fish and chicken can be used if the baby will tolerate them.
- Red meat is very hard to digest and should be minimally used.

Green Pudding: mash $\frac{1}{2}$ avocado and $\frac{1}{2}$ banana or 2T apple sauce.

Snack cereals for children over 1 year
Put in blender's jar
Oatios (similar to Cheerios but no sugar and organic).

After weaning from breastmilk

Recommend nursing for at least 2 years.

3 Square Meals?

- Do your children eat all day?
- If they are snacking on fruits and vegetables, it's OK that they don't eat everything during meal time
 - If this is occurring, try focusing on more protein at mealtime
 - Take a broad look at what they are eating
- Don't limit snacking during the day because they aren't eating their meals.
 - What are they snacking on?

Snacking

- Snacks don't have to be ice cream, potato chips, yogurt, etc.
- They need to be fruits, veggies, peanut butter sandwich, bread & honey, etc.
- Betty Lou's Smackers and Blissbars found at most health food stores
- My kids love frozen vegetables and fruits! Sweet peas, corn, grapes...it's so easy!
 - Just don't tell them some people cook these things!

Processed Meats

- Hot dogs, luncheon meats (Nitrates, Sulfites, etc)
 - Don't replace these with "meatless" products
- Children who eat more than 11 hot dogs a month have a nine times the normal risk of developing childhood leukemia.
- Other reports in the Journal of Clinical Nutrition suggested children born to mothers who eat at least one hot dog a week during pregnancy have double the risk of developing brain tumors, as do children whose fathers ate hot dogs before conception. The trigger for the cancers is thought to be the nitrates used in the process to preserve hot dogs and other meats.

Hot Dogs

- **Poor Choice...**
 - Oscar Meyer
 - Ingredients: Mechanically Separated Turkey, Pork, Water, Corn Syrup, Dextrose, Flavor, Sodium Phosphate, Sodium Erythorbate, Sodium Nitrate.
- **Healthier Choice...**
 - Applegate Farms Chicken Hot Dogs
 - Ingredients: Chicken Water, Salt, Honey, Natural Spices, French Onion, Fresh Garlic, Onion Powder.

Artificial Sweeteners

- There is little evidence that artificial sweeteners have helped people lose weight.
- Indeed, since 1980, consumption of artificial sweeteners and rates of obesity have both soared.
- If something as easy as taking in low calorie drinks was going to work...it would have worked by now.

Children's Multiple Vitamin Comparison

- **Poor Choice:**
 - Flinstone Complete
 - \$6.59 / 60 tabs
 - Partial List of Ingredients: Hydrogenated Vegetable Oil, Sweetened with Xylitol and Aspartame (artificial), FD&C Blue #2 Lake, FD&C Red #40 Lake, FD&C Yellow #6 Lake
- **Healthier Choices:**
 - Nature's Plus: \$9.25 / 90 tabs (10 cents / tab)
 - Partial List of Ingredients: Sweetened with maple crystals, honey and fruit sugar. No artificial dyes, colors, etc.

Artificial Colors

- Food colorings are easily recognized by the use of a number. (i.e. FD&C #4)
- There were 80 colors and dyes used in the early 1900s. One by one they have slowly been banned because of adverse reactions. Today, there are only nine colors approved by the Food and Drug Administration.
- Lakes: dyes which have been mixed with alumina hydrate (a natural or synthetic oxide of aluminum) to make them soluble.

Artificial Colors

- These are all coal tar derivatives. A report in USA Today (Jan 00) said that studies suggest that coal tar may cause leukemia, non-Hodgkin's lymphoma, and multiple myeloma.
- High content of mercury, arsenic, fluoride and lead which are found in coal

Final Thoughts

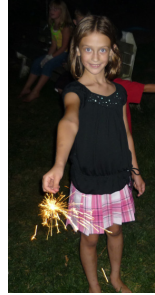
- Eat REAL food...stay away from all of the artificial and preservative laden foods.
 - Ask yourself... "Is this something God put on this Earth for me to eat?"
- If it has a shelf life...don't eat it! A longer life for the product may mean a shorter life for you!
- Try to eat something raw with every meal
 - Exception: you have specific digestive situation which does not permit you to do so or if the doctor has specified to avoid such foods

Final Thoughts

- Don't buy things that you will "cheat" on to keep in the house. Keep the temptation out of your home.
- Work on variety. Don't eat the same things all of the time. EXPERIMENT!!!
- Eat to LIVE...Don't LIVE TO EAT
- NEVER GO THE GROCERY STORY HUNGRY!!
- Pray for an opportunity instead of a miracle

Thank You!!

Kira



Chloe & Precious



Email our office to find out about future classes.

- To subscribe to our newsletter, email me at tracey@Bk2Health.com
- To set up an appointment for a Nutritional Consultation with one of our doctors, call 937-433-3241