

Dear Friend;

It is with pure joy that I pass on the following packet of information to you. It is my desire and goal to help all those around me become healthier, and to experience a healthy lifestyle. Pregnancy is not a problem or a disease, nor should it be treated that way. Many times these days women are coerced into thinking that it is, and therefore a “normal pregnancy” may consist of lots of tests and procedures that don’t really have to occur.

Enclosed in this packet are a lot of thought provoking clinical observations, practical knowledge and research acquired through schooling, seminars, and other doctors; as well as my own personal experiences through my wife’s four pregnancies.

It is here for you to use as a resource. Please refer to it throughout your pregnancy so that you may benefit from a beautiful experience. Life is awesome ... new life is even more awesome. You are solely responsible for taking care of the new life inside of you now, and after birth. Give your baby the right start it needs by first taking care of yourself.

Additional information can be found in our office in the form of books, pamphlets, and videos, as well as on our website at www.drbruce.com.

In better health,

Dr. Bryce

PREGNANCY CHECK LIST

FIRST TRIMESTER

- ◆ Increase my fluid intake (minimum 8-12 oz. glasses)
- ◆ Increase my frequency of meals: 6 small meals per day, rather than 3 large meals
- ◆ Focus on getting more rest: short naps, meditation, reading books
- ◆ Reduce your stress levels with deep breathing: breathing ratio 1:5:2
- ◆ Apply stretch mark oil daily to abdomen and breasts
- ◆ Get a massage
- ◆ Read to my baby daily
- ◆ Begin a journal of my thoughts to be put into a time capsule for my baby
- ◆ Buy some magazines and newspapers for the time capsule
- ◆ Get my monthly chiropractic adjustment to allow for optimal nerve health for me and my baby
- ◆ Exercises:
 - ◆ Kegels daily
 - ◆ Walk/swim weekly
 - ◆ Other exercise

SECOND TRIMESTER

- ◆ Continue to drink 8-12 oz. glasses of water
- ◆ Continue to increase frequency of meals and increase total calorie intake to accommodate your growing baby
- ◆ Continue to get extra rest and deep breathing exercises to reduce stress
- ◆ Apply stretch mark oil daily
- ◆ Schedule a pedicure
- ◆ Smile
- ◆ Read to my baby daily
- ◆ Continue to journal for my baby's time capsule
- ◆ Buy more magazines and newspapers for the time capsule
- ◆ Get my monthly chiropractic adjustment to ensure the health of my nervous system
- ◆ Exercises:
 - ◆ Birth position exercises
 - ◆ Daily stretches when I arise in the morning and retire at night
 - ◆ Continue my daily kegel exercises
 - ◆ Continue my weekly walks/swims

THIRD TRIMESTER

- ◆ Continue water intake, small frequent meals, extra rest, deep breathing, and applying stretch mark oils
- ◆ Continue to do kegels and birth position exercises
- ◆ Schedule a manicure
- ◆ Cook food to freeze for meals after the baby arrives.
- ◆ Load the camera(s)
- ◆ Make/buy music to listen to during labor and delivery
- ◆ Continue entering thoughts into my journal for the time capsule
- ◆ Buy more magazines for the time capsule
- ◆ Get my chiropractic adjustment. Expect visit frequency to increase due to your body's specific demands during pregnancy

CHIROPRACTIC CARE DURING PREGNANCY

The Biomechanics of the pelvis and how it affects the birth canal.

Pregnancy is a natural physiological function of the woman. She should feel little discomfort during the pregnancy. You often hear of the person who has little or no discomfort during pregnancy, one who has had mild labor pains and relatively easy delivery. This is the way delivery will be if there is the proper separation of the articulations (Sacro-Iliac Joints). Chiropractic care during pregnancy greatly facilitates the delivery process. Chiropractic care during this time becomes increasingly valuable when one studies Towbin. He states, “Much of the neurological damage at birth is caused by precipitous delivery techniques-i.e. unnecessary pulling forceful traction during deliver.” He further states that most of the signs of neonatal injury observed in the delivery room are neurological and that the apgar score, now widely used in appraising respiratory action, cardiac function, muscle tone, reflex irritability, and other elementary signs of the presence of absence of neurological injury. Subluxations (spinal misalignments) can also occur due to precipitous delivery techniques. In earlier studies Duncan found that it takes about 120 pounds per pull pressure to initiate spinal damage with this injury (cord subluxations) occurring most often in the cervical spine. Towbin states that he feels 120 pounds pull pressure is not uncommon in a normal delivery. The normal delivery process herein is described as the doctor pulling on the fetus. This pull now can see the need for chiropractic care during pregnancy. Chiropractic care aids in maintaining the integrity of the lumbar-pelvic area. Therefore, chiropractic care facilitates delivery, lessens intervention, lessens the need for pulling on the fetus and, according to Towbin’s Less Precipitous Deliver Technique, lessens neurological damage to the newborn child.

-Chiropractic Care During Pregnancy, Today’s Chiropractic, September/October 1991.

There are two things quite apparent for a “normal” birth—one is chiropractic care during the pregnancy for correction of subluxation to allow the pelvic outlet to be at its maximum and a proper birthing position (squatting) to allow gravity to do its job. Chiropractic is always a value during the birth process, but it is even more during or after a supine (lying on the back) delivery. **It would seem logical that chiropractic care during pregnancy, chiropractic care for the child and the squatting position for birth are all logical. Let’s be logical for a change.**

-Modern Day Birthing Techniques Can Produce Subluxations in Both the Mother and The Baby, Webster, L., D.C., International Chiropractic Pediatric Association January 1993

NATURAL REMEDIES FOR NORMAL SMPTOMS OF PREGNANCY

NAUSEA

- ◆ Eat 6 small meals
- ◆ Avoid greasy, fatty, spicy foods
- ◆ Don't let your stomach get empty
- ◆ Do not drink fluids with meals, but ½ hour prior and 1 hour after
- ◆ Add fresh ginger to foods, ginger ale (pure)
- ◆ Drink raspberry LEAF, chamomile, or mint teas at a tepid temperature
- ◆ Vitamin B6 at 100-200 mg per day helps some women (B complex is best)
- ◆ **Chiropractic adjustments, often L₁ – L₃**

CONSTIPATION

- ◆ Eat fresh high-fiber foods (fruits and veggies)
- ◆ Drink 8-10 glasses of water each day
- ◆ Exercise daily
- ◆ Senna tea
- ◆ Psyllium seed
- ◆ **Chiropractic adjustments, often T₁₂ – L₅**

FATIGUE

- ◆ REST!!
- ◆ Be sure to eat adequate protein, often a soy source
- ◆ Eat high-iron foods to accommodate your expanding blood volume
- ◆ Take short, frequent naps
- ◆ Sleep on your side with one leg crossed over a pillow between your legs
- ◆ Regular mild exercise
- ◆ **Chiropractic adjustments, often C₁ – C₂ or L₁ – L₃ or sacrum**

DIZZINESS

- ◆ When rising from a bed or a chair, rise slowly and rest for a few minutes before standing
- ◆ Avoid low blood sugar by eating five or six small meals
- ◆ Take deep, cleansing breaths
- ◆ **Chiropractic adjustments, often or C₅ – T₁**

FREQUENT URINATION

- ◆ Drink six to eight glasses of water per day
- ◆ View this as practice for getting up for night feedings!
- ◆ **Chiropractic adjustments, often L₃ – sacrum**

SWELLING/EDEMA

- ◆ Eat a high protein/low carbohydrate diet; avoid processed foods
- ◆ Wear loose, comfortable clothing and properly fitted shoes
- ◆ Exercise, walking especiall
- ◆ **Chiropractic adjustments, often C₁ or sacrum**

VARICOSE VEINS

- ◆ Do NOT wear restrictive stockings or high-heeled shoes
- ◆ Elevate your legs frequently and sleep with a pillow under your legs/feet
- ◆ Wear support hose if recommended by your health care provider
- ◆ Exercise, especially walking; also light heel-toe bouncing on a trampoline
- ◆ **Chiropractic adjustments, often L₃-pelvis**

HEARTBURN

- ◆ No fluid with meals
- ◆ Papaya fruit, supplements, enzymes
- ◆ Smaller meals
- ◆ **Chiropractic adjustments, often T₄ to T₉**

HEMORRHOIDS

- ◆ Drink lots of water, fruit fiber (prunes, apples—not applesauce or applejuice)
- ◆ Herbals such as Senna, or castor oil to soften bowels
- ◆ Ice pack or ice cubes directly on the hemorrhoid as well as the sacrum/tailbone area
- ◆ **Chiropractic adjustments, often L₃ to Pelvis**

NUTRITION

The greatest gift you can give your baby before he/she is born is keeping yourself healthy. With proper nutrition, exercise, adequate rest, and avoidance of drugs and alcohol your baby will be off to a good start. Just as the good gets to your baby, so does the bad. If you smoke, drink alcohol or take drugs, your baby may suffer. Limit the use of coffee, tea, and cola drinks.

While you are pregnant, the only food your baby gets is from the food you eat. Plan to space your meals over 5-6 small meals each day. Every diet should include proteins, carbohydrates, fats, vitamins and minerals. Your body uses all of these nutrients, you need to know which foods are good sources. The food source groups and required daily amounts are described below.

Supplements (vitamin and mineral supplements) are vital as well. It's always best to start with whole foods, but supplementing your diet is essential in this day and age. There are many good brands out there. Many are much better than prescription pre-natal vitamins. Do the research and find one that's the best for you. We have nutritional supplements in our office for this very reason. Quality matters. What I use for myself and family are quality. Don't rely on the junk vitamins to get you the nutrition you need.

FRUITS AND VEGETABLES

Purpose:	Fight off infections; promote healthy skin and good eyesight.
Source:	Many important vitamins and minerals (especially Vit. A & C, Potassium)
Servings:	4 or more of fruits and vegetables
Remember:	Choose one serving rich in Vitamin A (dark yellow or green leafy vegetables such as broccoli, spinach, greens, carrots, winter squash) Choose one serving rich in Vitamin C (citrus fruits, tomatoes, cantaloupe, strawberries) Choose fruit juices instead of fruit drinks and fruit beverages.
Amounts for	1 cup raw vegetables
1 Serving:	½ cup cooked vegetables or fruit 1 medium fruit (orange, apple, tangerine, peach, or banana or ½ grapefruit) ½ cup fruit juice

WHOLE-GRAINS OR ENRICHED BREADS

Purpose:	Provide energy; fiber helps prevent constipation. Good iron source if selecting whole grains.
Source:	Vitamins (esp. B-complex), carbohydrates, Iron (if fortified), etc.
Servings:	4 or more
Remember:	Choose whole grains, enriched breads, and unsweetened cereals. Look at labels for those fortified with iron. Cream of wheat and Total cereal are good sources of iron.
Amount for:	1 slice whole grain or enriched bread, tortilla, biscuit
1 serving:	½ cup cooked cereal, rice, oatmeal, corn meal, or grits ½ cup pasta (macaroni, noodles, or spaghetti) ½ bagel, hamburger bun, English muffin, roll 4 crackers

MILK, YOGURT, CHEESE

Purpose: Builds bones and teeth; aids growth of new tissue and repair of body cells
Source: Calcium, Vitamin D (fortified), other vitamins, protein, Iron, etc.
Servings: 4
Remember: If you don't like milk, choose items made from milk such as yogurt, cottage cheese, sliced cheese, or custard. Choose low-fat items whenever possible.
Amount for: 18 oz. Glass milk, buttermilk, or low fat milk
1 Serving: 1 1/3 cups cottage cheese
1 1/2 slices processed cheese or 1 oz hard cheese
8 oz yogurt, pudding, or custard or 1 1/2 cups ice cream

MEAT, POULTRY, FISH, EGGS, NUTS, AND BEANS

Purpose: Helps to build new body tissue; prevents anemia
Source: Protein, Calcium, vitamins, and minerals, etc.
Servings: 3-4
Remember: Egg yolks and organ meats are very high in cholesterol; however, organ meats are also very good sources of protein. Be sure to add a little cheese, milk, or lean meat to meals with main dishes made from dry beans, peas, nuts, lentils, or other legumes to get enough protein.
Avoid eating raw meats
Amount for: 3 oz cooked meat, fish, or poultry
1 Serving: 1/2 cup cooked dry beans, peas or lentils
2 tbsp peanut butter
1 egg

WATER AND FLUIDS

Purpose: Helps to prevent urinary tract infections
Helps to build new tissue, carry nutrients and waste products
Aids in digestion and prevents constipation
Helps prevent premature labor and dehydration
Servings: 8-10 large glasses
Remember: A slice of lemon in a glass of water is refreshing
Squeeze an orange over crushed ice for a treat
Caffeine interferes with iron absorption
Avoid high caloric juices and drinks

FATS, OILS, SWEETS

Purpose: No useful purpose (other than essential fatty acids)-
Servings: Small amounts
Remember: Avoid fried, fatty foods; decrease fat intake by eating "fat free" foods
Read food labels!
Foods high in sugar have: white or brown sugar, honey, molasses, candy, cake, cupcake, pastry, cookie, brownies, doughnuts, pie, jam, jelly and pickles, maple flavored syrup, or corn syrup.
Foods with high fat or oil contents have: cream, half & half, sour cream, cream cheese, salad dressing, margarine, butter, cooking oils, mayonnaise, sausage, fries, potato chips, hot dogs, bacon. Always choose olive oil for

cooking. Fish oils, Omega-6 fatty acids and flax seed oil are important supplements.

Don't sweeten with aspartame (Equal/Nutrasweet) use natural stevia instead.

*Use the chart Daily food log to record your foods.

Weight gain in pregnancy has been a highly debated subject for many years. The most important thing for you to remember is that the amount of weight gained and how you gain it may be the distinguishing factor between a normal, term baby and one that is small and, possibly, premature. The most important thing for you to remember is the quality of the diet which helps ensure a healthy pregnancy and a healthy baby.

The optimal weight gain in pregnancy is around 25 to 35 pounds with 2-4 pounds added in the first three months and approximately ½ to 1 pound per week added in the last six months. This is considered to be average and may differ from woman to woman. Women who are underweight before pregnancy, pregnant teens, and women carrying twins should gain more weight. Women who are overweight at the beginning of pregnancy should gain less. **Your focus should not be on the amount of weight gained, but on the quality of the food you eat everyday!!** As long as your dietary choices are good, any weight gained will be different than that gained by eating junk food and empty calories. Empty calories (those found in sweets, fats, candy, chips, sodas, etc.) create more fat than nutrient-rich foods.

****You should never try to lose weight or keep from gaining in pregnancy!! This will jeopardize the health of your baby and you!!**

Gaining weight in pregnancy is desirable!! If it is from a healthy diet, it means the baby is growing nicely and will more likely to be healthy when born. It is perfectly normal for a woman to have spurts and lags of weight gain based on how the baby is growing.

Pregnancy weight gain goes to much more than the baby. Please remember that your entire body supports the growing child and weight gain supports all these changes. The figure below shows where weight goes during pregnancy (these are approximate figures).

WEIGHT DISTRIBUTION

The average baby weight	7½ pounds
The placenta	1½ pounds
Increased fluid volume	4 pounds
Increased weight of uterus	2 pounds
Increased weight of breast tissue	2 pounds
Increased blood volume	4 pounds
Maternal stores of nutrients	7 pounds
<u>Amniotic fluids</u>	<u>2 pounds</u>
Total	30 pounds

INCREASED PROTEIN DIET

Increased dietary protein is necessary in pregnancy to support expansion of the woman's blood volume, uterus, and breasts and encourage the continued growth and development of the baby. Healthy development of the placenta and each new cell in your baby is dependent upon the intake of adequate protein and high-quality calories throughout your entire pregnancy. Studies support the fact that a highly nutritious diet containing sufficient protein will actually help reduce the incidence of complications such as toxemia (preeclampsia) of pregnancy. It definitely promotes the health and well being of you and your baby!

Protein in foods is not considered equal. Protein that is high-quality and easily utilized by the body will contain all essential amino acids in proper balance. Examples of such proteins include milk, meat, poultry, eggs, and fish. Foods that do not contain all essential amino acids in exact proportions must be combined (eaten the same day) to be most useful as protein sources (examples include: beans, butts, fruits, vegetables, etc.). The suggested amount of protein to be taken per day by the pregnant woman is 80 to 100 grams. Underweight women, teens, women with histories of toxemia, women carrying twins, and women under extreme stress should ensure the intake of at least 100 grams a day.

Another thing to consider in pregnancy is the intake of high-quality calories (not "empty" calories as from sweets, chips, colas, etc.) to support the use of protein. Increased calorie intake makes protein available for the growth of your baby because it is not being used to meet your own energy needs. A pregnant woman requires approximately 500 extra calories per day above their normal, pre-pregnant needs.

When using the tables to determine what foods to eat to take in protein, please note the serving sizes. For meats, poultry, and fish, three ounces will consist of a portion of food approximately the size of a deck of cards. This is a usual portion size and will contribute about 21 grams of protein to your diet! Therefore, it really isn't that difficult to meet the recommended daily protein when you pay attention to serving size and consume a wide-variety of high protein foods!

Complete Protein Foods	Protein in grams
(Per 3 oz. serving unless specified)	
Beef, roast	28
Beef, ground	22
Turkey	27
Chicken Breast	26
Fish	25
Tuna, canned/drained	24
Pork	27
Lentils, 1 cup cooked	16

Complete Protein Foods	Protein in Grams
Cottage Cheese	15
Ham	15
Eggs, 2 large	12
Shrimp	11
Yogurt, 1 cup	8
Milk, any type, 1 cup	8
Cheddar Cheese, 1 oz.	7
Hot dog, 1	6
Quinoa (high-quality grain), ½ cup	4

Incomplete Protein Foods	Protein in grams
Vegetarian Chili, 2/3 cup	11
Tofu, ½ cup	1
Turkey Slices, 2 slices	9
Split Pea Soup, 1 cup	9
Green Peas, 1 cup	9
Bulgur, 1 cup, cooked	8
Peanut Butter, 2 TBSP	8
Egg Noodles, 1 c. cooked	7
Soy Milk, 1 cup	7
Brown Rice, 1 c. cooked	5
White Rice, 1 c. cooked	4
Bread, 1 slice, whole wheat	3

Examples Daily Menu with Increased Protein for Pregnancy

Breakfast: 2 large eggs, scrambled with ¼ cup skim milk = 14 grams protein
 1 piece of whole wheat bread, toasted with 2 TB peanut butter = 11 grams
 1 8 oz. glass of skim milk = 8 grams
Total protein at breakfast is 33 grams.
 (Add fruit/juice for vitamins/minerals-be sure to get in a high vitamin C source)

Mid-morning snack: 1 cup of yogurt or 1 cup skim milk = 8 grams protein
 (Add fruit/vegetable to balance this snack)

Lunch: Turkey sandwich made with 3 oz. turkey and 2 whole wheat slices of bread = 33 grams of protein (combining the two slices of bread increases the quality of that source of protein.)
 1 8 oz. glass of skim milk = 8 grams protein
 Dark green vegetable (your choice – ½ cup cooked or 1 cup raw)
Total protein at lunch is 41 grams.

Mid-afternoon snack: Fruit (your choice)
 Water or other low calorie fluid (without caffeine)

Supper: Tuna casserole made with egg noodles (1 cup), milk (1/2 cup), tuna (3 oz.), and cheddar cheese, and green peas: one cup serving of casserole = ~25 grams protein
 1 8 oz. glass of skim milk = 8 grams protein
Total protein for supper is ~33 grams.

Snack: Add fruits/vegetables as needed to get in your recommended daily amount.

Total for day = ~115 grams of protein

(Note: Don't forget to drink plenty of fluids throughout the day –about 8-10 large glasses a day!)

FITNESS DURING PREGNANCY

KEYS:

- ◆ Be relaxed
- ◆ Remember slow and sustained
- ◆ Control

AVOID:

- ◆ Sitting and stretching
- ◆ Shoulder stretches forward
- ◆ Exercises on your back in your later months
- ◆ Dropping your head below your heart after your 3rd trimester (may cause dizziness)
- ◆ Twisting movements of any kind

MUSTS:

- ◆ Kegels
- ◆ Pelvic tilts

EXERCISE ROUTINE:

- ◆ Head side to side to stretch neck
- ◆ Head look side to side
- ◆ Shoulder rolls back and clasp
- ◆ Side stretch with arms
- ◆ Pelvic tilts
- ◆ Stretch leg: calf, hamstring, hip flexor

LYING DOWN:

- ◆ Leg work; inner and outer
- ◆ Pelvic tilt
- ◆ Lower stomach
- ◆ Crunches (Should blades ½” off floor only)
- ◆ Bridge (breathe into baby—stomach out)
- ◆ Stretch (legs in toward chest; wide if baby there)

PARTNER WORK:

- ◆ Leg work—resistance on inner and outer
- ◆ Side stretch with arms

STANDING:

- ◆ Leg work: lunges and squats
- ◆ Kegels
- ◆ Pelvic tilts on a wall
- ◆ Arm stretches, circles

REMEMBER: Increase range-of-motion will increase heart rate. You should be able to talk easily while you are working out. If you cannot, decrease your range-of-motion (bring everything in).

Labor is perhaps the most physically challenging thing you will ever do.

PRENATAL EXERCISES

Regular exercise during pregnancy will maintain and improve muscle tone, promote general physical comfort and improve your mobility.

Walking or swimming at least 3 times a week for 30 minutes are the best exercises for you. If you enjoy biking or skating, you may need to switch to stationary biking, walking, or swimming because of the potential for falling.

All exercises should be done slowly, rhythmically, to point of fatigue, but without strain. Increased repetitions gradually.

Avoid exaggerated movements and discontinue exercises that cause pain.

Use specific breathing with exercises.

Shorter, more frequent exercise periods are best.

Tailor Reach



Inhale-reach up
Exhale-pull down

Repeat 3 times with each arm, then both arms together.

- *Improve posture
- *Reduce tension in upper back
- *Stretch back muscles
- *Increase rib and chest expansion to help relieve shortness or breath.

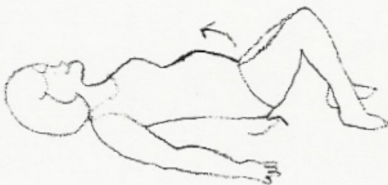
Tailor Stretch



Inhale – hands on knees
Exhale – stretch slowly toward feet (bend from hips).
Breathe and hold to count to 10.
Relax

- *Stretches inner thighs, backs of legs and lower back.
- *Relieves hip tension
- *Relieves lower back ache

Pelvic Tilt



Can be done in any position (supine, standing, side-lying, all fours.)
Inhale-at rest
Exhale-contract abdomen and buttocks and press small of back outward.

- *Improves posture
- *Strengthens abdomen
- *Relieves backache
- *Strengthens and stretches back muscles.

EXERCISE

Curl-Up (straight)



Lie with knees flexed.
Do pelvic tilt.
Inhale
Exhale-curl forward
slowly reaching toward
knees with hands so
shoulders barely come
off the floor.
Inhale-as you release
slowly back down.

PURPOSE

To tone and strengthen
Abdominal muscles.

1. To avoid back strain
2. To support uterus
3. Prepare for pushing.

Curl-Up (diagonal)



Same as above except
when coming forward
reach for the right knee
with left hand, leave
bottom shoulder on floor.
Repeat with right hand
toward left knee.

Same as above
Tones oblique muscles
of abdomen.

CAUTION: DO NOT DO FULL SITUPS

BODY POSTURE AND MECHANICS

Good posture helps you look and feel more graceful during pregnancy, decreases backache, and minimizes joint strains.

STANDING & WALKING

- *Weight should be centered and evenly distributed.
- *Knees slightly flexed.
- *Pelvis slightly tilted.
- *Abdomen toned.

Imagine the head pulled up by a string.



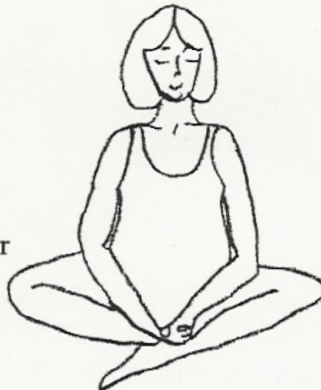
STOOPING OR LIFTING

- *Squat, rather than bend at the waist.
- *Keep back straight.
- For lifting, pull load close to body.
- *Use leg muscles to rise. (to prevent back strain)



TAILOR SITTING

- *Back should be slightly rounded (pelvis tilt).
- *Shoulders relaxed.
- *Stretches inner thigh muscles in preparation for birthing position.



LYING DOWN AND ARISING

- *Roll to side and use hands to walk self up and down (to prevent abdominal back strain.)

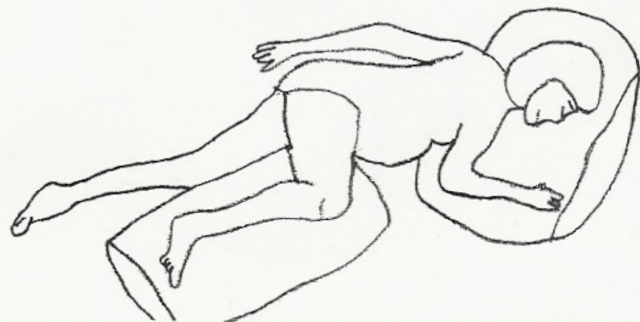


SIDE-LYING POSITION

- *Should be well-supported with pillows for relaxation and sleep.



¾ POSITION



BIRTH POSITIONS

What is the most advantageous birth position? Why?

Years ago, anthropologist Margaret Mead and behavioral scientist Niles Newton wrote: “Considerable research on the problem of position in labor in relation to ease of deliver (of babies) suggests that the flat, supine position for delivery may make spontaneous delivery more difficult.” Way back in 1933, Mengert and Murphy, in an extensive experimental study, recorded intra-abdominal pressure at the height of maximum straining effort in more than a thousand observations of women placed in seven postures. **They found the greatest intra-abdominal pressure was exerted in the sitting position.** This was due not only to measured visceral weight but also to increased muscular efficiency. Then, in 1937, Vaughan presented x-rays and measurements, which indicated that squatting alters the pelvic shape in a way that makes it advantageous for delivery. I know of no study that has ever negated these classical findings. **Yet with few exceptions, in this country, women in labor are still placed flat on their back with their feet in stirrups.** Birthing centers or midwives often encourage changing positions to accommodate the birthing mother.

-The People's Doctor, "Interference with Childbirth", Robert Mendelsohn, MD, Vol. 3, NO. 3, p. 1.

DRUGS DURING PREGNANCY

QUESTION:

In your remarks about obstetrical use of spinal anesthesia, you indicated you favor no anesthesia for the woman in childbirth. Why do you wish to impose such pain on women? Do you believe pain in childbirth to be “natural,” but pain from an unanesthetized operation to be unnatural? Why are you discriminating against women? You say we should replace drugs with the “Safe and effective support of close relatives.” What makes you think every woman wants her relatives with her at such a pain-filled frightening time? My parents and my husband were the last persons on earth I would have wanted to witness me in labor and childbirth! What do you recommend (besides suffering) for women who cannot count on any moral or emotional support from anyone during labor and childbirth? If your goal is to lower the birth rate by making the process so horrible for women that they will never again get pregnant, you have made your point. I am very saddened and frightened by your willingness to openly advocate pain for women in childbirth. We MUST continue to have a choice, and no doctor, especially a male who never has been through childbirth himself, should dare to be so audacious as to try to take that away from us. The hostility you hold toward women is thinly disguised by the supposed veil of concern for the newborn. Your hostility is chilling, Dr. Mendelsohn. Please reconsider what you are really communicating.

---R.C.C.

ANSWER:

Your letter doubtless will gladden the hearts of those anesthesiologists and obstetricians who believe in lots of anesthesia, a strong coalition to array against defenseless newborns who face the possibility of sedation and subsequent brain damage from spinal and other forms of anesthesia. **A brand-new federal study of 3,528 babies delivered at 12 medical centers between 1959 and 1966 shows that babies born to mothers who were give anesthetics during delivery are much more apt to suffer physical and mental impairment.** The drugs studied included Demerol and Seconal (used to induce drowsiness and relaxation at the beginning of labor), anesthetics which are inhaled (such as nitrous oxide) , and injected anesthetics of the procaine chemical family. Your final paragraph diagnosing me in psychiatric terms brings to mind a classic story illustrating the power of psychiatrists: If I were to make an appointment with a psychiatrist and arrive late, I would be accused of being hostile. If I were to arrive early, I would obviously be anxious. And should I be exactly on time, I would of course be labeled as compulsive. Only the continuing accumulation of scientific evidence and the accumulated experience of mothers themselves will answer the question as to whether I am discriminating against women or whether you are discriminating against babies.

-The People's Doctor, "Interference with Childbirth", Dr. Robert Mendelsohn, MD, Vol. 3, NO 3, pg. 2

QUESTION:

I am a 27-year-old mother of two preschool children. When I gave birth to each of them, I was given no choice between natural childbirth and the use of drugs, and I was given a spinal each time. I still feel a weakness in my back where the spinal needle was inserted, a condition that becomes more noticeable when I am tired. I have had my back x-rayed, but nothing appears on the film. Can you tell me whether there have been any documented side effects of spinals, other than the well-known headaches? I know for certain that my next delivery will be at home. Thank you again for your common sense answers and for helping us laymen to think for ourselves.

--Mr. B.O'B

ANSWER:

To my knowledge, there are no long-range follow-up studies of the effects of spinal anesthesia in obstetrics, a procedure that has always **struck me as fraught with dangers**. Common sense militates against the idea of taking a large needle, jabbing it through all the layers of tissue designed to protect the precious nerves inside the spinal canal, then aiming for those nerves and the fluid in which they are bathed, and injecting chemicals about which little is known except their abilities to deaden the nerves and kill pain. While headache is easily the most noticeable effect of needles inserted into the spine, it certainly is not the only one. For example, in the case of spinal x-rays involving the injection of dye, a serious complication technically known as arachnoiditis may occur. I would predict that if a proper 10 or 20 year follow-up were done on all pregnant women given spinal anesthesia, a significant number would be found to have serious back problems, including such weakness as you describe, as well as other complications.

-The People's Doctor, "Interference with Childbirth", Dr. Robert Mendelsohn, Vol. 3. NO. 3, pg. 2-3.

***** ***Epidural injections often lead to increased spinal problems in the mother at a later date. This has been observed in many chiropractic offices over the years. Years later spinal problems show up long after the mother has been released from care from the obstetricians office. Sometimes these problems can be helped by a chiropractor, and sometimes the trauma and damage is permanent.***

SWELLING

By the eighth month of pregnancy, you'll probably have experienced some fluid retention and swelling. This is a normal and healthy response. Even women who show no obvious signs of swelling carry about fifteen extra pounds of liquid in their bodies during pregnancy. But, even though a certain amount of fluid retention is necessary, too much can be uncomfortable and may result in high blood pressure and other problems.

Each woman retains fluid according to her individual needs. An overweight woman will add more liquid weight during pregnancy and a thin woman will add more fat. Fluid retention increases in pregnancy for a number of reasons. For example, hormonal changes cause fluid to be retained in the space between the body's cells. This is why your face seems rounder and your features softer. Fluid retention also helps you produce a continual supply of amniotic fluid for your baby. This liquid, which fills the bag of waters, protects your baby from bumps and jolts and temperature changes. Your baby also drinks the liquid and urinates into it. Your body has to filter and replace the amniotic fluid on a continuous basis, and this requires a ready supply of fluid in your own body.

The fluid volume in your bloodstream increases by 42% by the thirty-fourth week. You need a greater volume of circulating blood to help meet the demands of nourishing your baby and getting rid of waste products. This extra blood volume slows down your circulation and that, along with the extra fluid in the body's tissues, is what causes swelling.

In late pregnancy, the pressure of your growing baby, combined with the increased blood volume, makes it even more difficult for blood to return from your arms and legs to your heart. The problem is greatest in your legs, where both gravity and the weight of your uterus on the veins slow down the return flow. This is why the most common sites for swelling are the ankles and feet.

HOW MUCH SWELLING IS TOO MUCH?

Health professionals usually refer to two kinds of swelling, or edema. Dependent edema is caused by the position of the affected body part. When you sit or stand for a long time, your feet are in a dependent position; that is they're lower than the rest of your body. As a result, gravity works against your veins as they attempt to move the blood from your legs back up to your heart. The swelling that results is temporary. If you elevate your legs for a few minutes, it will disappear.

Pitting edema is more serious because it usually indicates that your body is retaining too much fluid. It's identified by puffiness, especially in the face, around the eyes, or in the hands. Unlike dependent edema, this type of swelling doesn't disappear when you elevate the affected part. One way to tell the difference between puffiness and normal swelling is to do the "cake test." If you indent the top of a freshly baked cake with your finger and it does not spring back, the cake is not quite done. Try the same test on yourself. If you indent the swollen area on our ankles or feet and instead of springing back quickly it leaves a dent, that area is puffy or too swollen. (The term "pitting edema" refers to this temporary dent, or pit, left in your skin.)

Report to your doctor or midwife any sudden increase in swelling, as well as any puffiness in your face, around your eyes, or in your hands. Report pitting edema that occurs anywhere in your body. These changes may signal the onset of preeclampsia, a pregnancy-related condition in which the blood pressure is abnormally high.

WHAT TO DO

1. Lay on your side and elevate your legs and hips on pillows several times a day and rest in this position for about fifteen or twenty minutes to let gravity work for you.
2. When sleeping or resting, lie on your side. This is the best position to take the weight of the uterus off the vena cava, the large blood vessel that returns blood from the legs to the heart.
3. Lay on your side and have your partner massage in a circular and upward motion starting at your toes and directed toward your head. This stimulates the fluid to flow through the circulatory system. Place ice packs on the swollen areas after the massage.
4. Walk, swim, or ride a stationary bike four or five times a week to stimulate circulation and help move blood from your legs to your heart.
5. Sit in a rocking chair when reading, knitting, watching television, etc. As you rock, the muscles in your feet, ankles, and leg contract and relax, helping to squeeze blood back up toward your heart.
6. Drink at least eight glasses of liquid daily. You need this much to help your kidneys and bladder work efficiently.
7. Eliminate excess salt from your diet. Besides eliminating the more obvious sources of salt, such as salted nuts and chips, look for hidden sources of salt such as preserved meats, pickles, and soft drinks. *Do not put yourself on a low-salt diet.* With the extra fluid your system is handling, you need salt. Just use enough to flavor your food and avoid any excess salt.

WHAT TO AVOID

1. Avoid sleeping or resting on your back after the fourth month. This places the entire weight of the uterus and baby directly on the vena cava, hampering the blood flow.
2. Do not reduce the amount of fluid you drink.
3. Avoid a low-salt diet.
4. Avoid taking diuretics (water pills).

ULTRASOUND

What is ultrasound?

Ultrasound makes use of high-energy sound waves, just as ultraviolet emissions and x-rays make use of high-energy light waves. When ultrasound is used in pregnancy and labor, the high-frequency sound waves pass through the uterus, rebound, and are converted into electrical signals. These signals then produce a visual or audible display of the fetus in the womb, allowing healthcare practitioners and parents to see the baby in utero or to hear the fetal heart tones.

What are the ramifications of ultrasound?

The sound waves that do not rebound are absorbed by the tissue of mother and fetus causing localized heating and cavitation (the formation of microscope gas bubbles).

Health risks: The short- and long-term effects of ultrasound radiation are not known.

Preliminary animal studies suggest that ultrasound exposure may be linked with low birth weights as well as its influence on future generations have not been assessed. Whether any effects are cumulative and whether irreversible tissue damage occurs at certain levels have also not been determined. The American College of Obstetricians and Gynecologists, International Childbirth Education Association (ICEA), and the Food and Drug Administration have all stated that while health risks appear to be low, *it is advisable to use the ultrasound only when medically indicated and not as a routine procedure in pregnancy.*

The **three primary forms of ultrasound** equipment used in pregnancy are scanning or imaging devices, the Doppler, and electronic fetal monitoring.

Static B scans and **real time scans**, both of which produce a picture of the tissues and organs of the fetus, expose the mother and fetus to rapidly pulsed sound waves.

The **Doppler** is a hand-held stethoscope used during prenatal office visits to hear the baby's heartbeat. This instrument emits a continuous wave of ultrasound, resulting in higher doses of radiation than those produced by scanning devices. The Doppler enables the health practitioner to hear the heartbeat much earlier in pregnancy than was previously possible, although the value of this information is questionable.

Electronic fetal monitorin (EFM), which uses ultrasound to detect the baby's heartbeat in labor, exposes mother and fetus to constant ultrasound waves. Originally designed to monitor the baby's response to contractions or medications in "high-risk" labors, EFM is now used by many hospitals on most, if not all, laboring women. Exposure to constant ultrasound radiation is one problem with EFM; the machinery itself is another. Fastened around the abdomen of the laboring woman, the transducer forces her to lie immobile and often flat on her back, which can cause the fetal distress it is designed to record.

Alternatively, fetal heart tones can be monitored with a **stethoscope** or a **fetoscope**. This option requires the frequent presence of the birth attendant-something that laboring women often find helpful and reassuring, but not all practitioners are inclined to "schedule in".

We should be concerned about the use of "High-frequency sound"...this makes "ultrasound" sound trivial. It is NOT 'sound', i.e. mechanical vibration in the audible range. The dictionary specifies that sound is between 20 and 20,000 cycles of hertz. "Ultrasound" is so far above the audible range that it could be called ULTRA-RADIO. Note that AM radio stations transmit between 530 and 1630 kilohertz (million cycles per second)...even higher than the AM radio band-a long way above sound. Perhaps the choice of this name is a conscious effort to confuse or deceive the public (wouldn't be the first time.) Some "ultrasound" proponents have correct

terminology. “Ultrasound” is not ionizing radiation, but it is radiation. Studies of “ultrasound,” often done in animals and occasionally using larger doses of “ultrasound” have already shown some ill effects, which may occur:

1. Chromosome damage (sister chromatid exchanges)
2. Gross cranial and facial malformations.
3. Smaller offspring.
4. Breakdown of DNA molecules.
5. Blood stasis.
6. Liver cell changes.
7. Jaundice
8. Brain enzyme changes.
9. Changes in EEG.
10. Delayed post-natal grasp reflex.
11. Increased emotional activity
12. Delay in neuromuscular development.
13. Reduction of immunoglobulin antibodies (relates to immune system function).

Recently during telephone conversation with David Stewart, Ph.D., he related to me several other studies, correlated dyslexia with “ultrasound” and retarded growth five to eight years later after use of “ultrasound.” Doris Haire, president of the American Foundation for Maternal and Child Health, asked the question, “Will ultrasound be the DES of the next generation?” My question is also this about “ultrasound,” what about the type of “ultrasound” that is used by some Chiropractors and many other health professionals in the treating of joint problems.

- *“Ultrasound or Radiation”, International Chiropractic Pediatric Association, Webster, Larry, D.C., January, 1987.*

Social Implications of Ultrasound:

Birth is not only a physiological, emotional, and spiritual event; it is also a social, culturally defined experience. Every culture has its set of birthing tools to assist in a safe, healthy passage. Some societies surround the birthing woman with amulets and incense. Others, such as our own only generation ago, prefer chiroform (a general chloroform anesthetic). Whether the tools consist of prayers and massage oils, or birthing stools and ropes, or ultrasound, hospital forceps, stirrups, and cesareans, they play an important role in childbirth: they enhance the security, comfort, and joy of the birthing woman and her family. The tools used to assist in pregnancy and birth also reflect the dominant social attitudes toward these events. *What does the extensive use of ultrasound tell us about our society’s attitudes toward pregnancy and birth?* One thing it tells us is that we continue to view these events not as healthy, normal processes, but as painful, frightening disturbances, full of dangerous unknowns from which only medical professionals and consumers alike, *perpetuates* the belief that birth is fraught with hazard and risk.

According to a government report, the most significant reason for the dramatic increase in the number of cesareans performed in the United States is the threat of a malpractice suit. How many other medically unnecessary procedures are prescribed because physicians are afraid of being sued? How many ultrasounds are prescribed for the same reason? This lack of trust, so much a part of the social reality of birth in the United States, has been culturally created. With continued efforts by consumers and practitioners, it can be dissolved as well.

- *“The Trouble With Ultrasound”, Naomi Bromberg Bar-Yam Mothering Magazine, Fall, 1990.*

CHILDREN AND CHIROPRACTIC

When it is reported that, in one particular study, **47.5% of children fell** from a high place such as a bed, crib, or changing table during their first year of life, it was extrapolated by the National Safety Council that in one year, 1.75 million babies will fall at least once during their first year of life! This must lead to the internal dialogue that questions what percentage of these children will ever see a chiropractor for the obvious sequelae of the major trauma incurred by these falls.

In a study in the United States conducted by Kravitz, Driessen, Comberg, and Karach for the National Safety Council, it was stated: “Unfortunately, babies seem to fall head first. Of the 536 infants involved in the study, 255, or 47.5%, fell from a high place such as an adult bed, a crib or an infant dressing table during their first year of life. If all infants in the country follow the same pattern as those in our study, we can assume that 1.75 million babies will fall head first during their first year of life.”

“As the twig is bent, so grows the tree.” *The chiropractic profession is vitally concerned with the state of the human organism from birth, rather than from the time the patient presents with some biomechanical derangement of the spine with its associated pathophysiological ramification.* Children are generally extremely active and their bodies absorb stress during movement. A child may fall, be pushed or jolted, twist or turn, outside the normal ranges of motion. There, forceful activities can produce vertebral subluxations, and it is assumed that many of these subluxations disturb the normal nerve reflex pathways, causing what is termed traditionally in chiropractic as “nerve interference”.

Wiles stated recently, “thus, any persistent afferent influence on the central nervous system may tend to excite pools of motor neurons and produce a state of proneness to overt motor responses”. He went further to say, “In our concern for child care, however, we are not so concerned with these overt motor responses, but rather the chronic effect of low-grade sympathicotonia induced by any persistent abnormal afferent influence” (or a subluxation).

The potential changes in the vertebral areas due to the stresses brought to bear on the cartilaginous elements of the spine by trauma is highlighted in the article by Hedig on ‘Osteopathic Pediatric Care in Prevention of Structural Abnormalities’. Too little attention is paid to traumatic incidences, which fixate or decrease normal movement of spinal segments causing the typical hypomobile (lack of motion) subluxation or creating excessive spinal joint play with the resulting hypermobile (too much motion) subluxation.

Janse quotes for the writings of F.B. Talbot, M.D. who asserted the following: “In the child the extra strain of faulty posture may be merely loss of sleep, too severe exercise in play, chilling and fever, unusual excitement, or even the extra energy required to keep warm in the winter. Some trivial factor may be the last straw which breaks the camel’s back.”

According to Goldthwait, “Faulty body mechanics is an almost universal finding among children and untrained individuals. The chief reason advanced for this is that man in the distant past had a plantigrade type of progression. In the evolution of the orthograde manner of walking, no neuromuscular reflex mechanism has developed to maintain the upright carriage instinctively. In children, standing and walking are complex acts, which are learned through long trial and error. If the learning to stand and walk is not guided properly, the result will be an imperfect one of resistance against the forces of gravity. With proper guidance, efficient use of the body can be

learned in infancy. Good body mechanics is not a part of the neuro-muscular inheritance of the individual, it is the result of conditioned reflex training. Training in the acquisition of these can be started at birth. In this way no bad habits and deformities will develop which must later be corrected.”

The **causes** of vertebral subluxation have been summarized by Reikman and Flesia:

- ◆ An unnatural lifestyle
- ◆ Air, water, food pollution
- ◆ Anger, irritation, conflict
- ◆ Improper physical postures
- ◆ Body, blood pollution
- ◆ Falls, accidents, jars
- ◆ Contact sports
- ◆ Slips, jerks, jolts
- ◆ Exertion, fatigue
- ◆ Hereditary factors
- ◆ Birth process

-Children and Chiropractic: A Summary of Subluxation and Its Ramifications, Journal of the Australian Chiropractors Associate, Hinwood, John and Judith, D.C.

Crawling is encouraged as long as possible. Lack of crawling time allows for an incomplete development of cross-brain neuron development, which can lead to learning disorders. Walking too soon (earlier than twelve months) often allows for incomplete cervical (neck) and lumbar (lower back) curvature, which may lead to spinal biomechanical problems and early degenerative changes later in life.

The typical chiropractic examination depends upon any specific problems or findings the doctor may discover. This is a proposed exam schedule if the baby seems to be “normal/healthy”. Adjustments to the spine are soft and gentle, and like anyone else, only when necessary. Important landmarks in a baby’s life mark approximate times to be examined. (i.e. learn to sit, crawl, walk-falls)

Typical chiropractic care schedule for newborns and children:

1. Immediately after birth; then if no problems requiring additional follow-up care the child should at least be checked for spinal subluxations when
 2. 1 month old
 3. 3 months old
 4. 6 months old
 5. 9 months old
 6. 12 months old
- Car seats should be reinforced with high density foam and prolonged sitting in the car seats should be followed up by infant massage and stretching, and a chiropractic exam.
 - Head support in car seats should always be used to keep the head from tipping to the side while the baby sleeps.
 - Canvas seat swings and jumpers should be avoided as they often allow for incomplete or malformation of lumbar vertebrae.

Suggested Reading List

Most of these books are available for checkout in our office:

General Children's health books:

Baby Wise Series Dr. Izzo
Focus on the Family's Child's Health Reference Dr. Dobson/ Focus on the Family
How to Raise a Healthy Child in Spite of your Medical Doctor Dr. Robert Mendelson
Beyond Antibiotics Schmidt, Smith, and Sehnert
Healing Childhood Ear Infections Schmidt
Chiropractic First Dr. Terry A. Rondberg
Chiropractic Works Timothy J. Feuling
Kids-First: Health with No Interference Dr. Ogi Ressel
Confessions of a Medical Heretic Dr. Robert Mendelsohn

Vaccine related books:

Making an Informed Choice: Immunization-The Other Side... Dr. Patricia Gayman
Vaccination: The Medical Assault on the Immune System Dr. Viera Scheibner
Vaccines: Are They Really Safe and Effective? – A Parents Guide to Childhood Shots
Neil Miller
The Sanctity of Human Blood Tim O'Shea
What Ever Parent Should Know about Childhood Immunization Jamie Murphy
Immunization Theory vs. Reality: Expose on Vaccinations Neil Miller

NOTE: VACCINES ARE **NOT MANDATORY** FOR CHILDREN AND FOR YOUR CHILD'S ENTRY INTO SCHOOL. **You must decide**, because if anything happens to your child as a result of vaccine injury, your doctor and pharmaceutical manufacturer are not at fault (you sign a waiver when the shots are administered.) **THEREFORE YOU MUST be educated** as to the risks of vaccines. **Exemption forms are available from your school office, state health agency, or in our office if you choose not to vaccinate your child.** I highly recommend the books in the list above, available in our office. Many others are available as well. Check our website www.drbruce.com for the latest links to vaccine information.