



Prenatal Headache Management

*an excerpt from Ginger's upcoming book, **Fit & Fearless Birth***

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Some pregnant women also experience headaches, even if they had never experienced them pre-pregnancy. Headaches can be caused due to ever increasing blood volume, hormonal changes, or dehydration. To assuage headaches, use dim lighting during the day and at night as well as during yoga practice. Bright lights, especially when lying supine, can increase photosensitivity (light sensitivity).

Other headache management techniques include proper hydration as well as practicing relaxation breathing, good posture, and an extended corpse/relaxation pose (yoga). Using an eye bag, preferably unscented as the sense of smell can be heightened during pregnancy, can decrease nausea and sensitivity by blocking overhead and ambient light during corpse pose. Below is a review of treatment methods I use for headaches during pregnancy.

Problem? Hormonal surges. Hormonal changes - During pregnancy women are subjected to a veritable hormonal roller coaster ride. Levels of estrogen, progesterone, relaxin, and other hormones may be responsible for headaches during pregnancy. Although hormone levels are outside of your control, there are several factors you can control which can make the ride somewhat smoother and help with your headaches.

Solution? Breathe. The first line of defense is the breath. Oxygen is our vital nectar of life. Prevent and self-treat your headache by learning to breathe properly. Pregnancy makes that difficult, so sometimes the breath is best practiced while *lying down in a reclined or sidelying position in a dark, quiet room*. You may also *consider elevating the head of your bed or sitting in a reclining chair that supports your head and trunk*. Reclining instead of lying flat can help decrease headache frequency and intensity by helping you breathe and sleep easier via diminishing pressure in the head related to increased blood volume, congestion in the sinuses, and decreasing nausea. I recommend the following breath types for headaches management.

Abdominal Breath

- ✓ Practice this breath when you want to relax, fall asleep or otherwise “down tune” or diminish stress.
- ✓ This breath is most easily practiced in a reclined position or lying in bed or on your back. However, you can want to progress where you can practice it all the time, in any position.
- ✓ If you are not comfortable on your back, you may take a reclined position, as shown below.
- ✓ Practice for up to 5 minutes a day, or as often as you need it.
- ✓ Diminish fatigue, nausea, headaches, and help with insomnia.



I am demonstrating a resting position in my third trimester for sleeping , breath practice, or as an alternate to a (relaxation/corpse) finishing pose in prenatal yoga.



I am in my second trimester demonstrating an alternate position for breath practice, resting, meditation, sleeping, or finishing pose.

Action

Entry – Exhale completely. Inhale and allow the abdomen and back to expand.

Exit - Exhale and allow the navel to fall back toward the spine gently.

Repeat for several minutes or until you are comfortable with this breath or achieve the desired effect.

Body Alignment

Three Tier position as shown in the photographs, or sitting in a reclined position with the spine fully supported.

Tips

1. Equalize your inhale with your exhale, and gradually lengthen your breath out.
2. A beginner should start with a 3 or 4 count inhale, 3 or 4 count exhale; while more practiced students can lengthen their breath to 8 or 10 counts each.
3. Watch for paradoxical breathing, defined as when the chest rises on them inhale and the abdomen draws in simultaneously; while on the exhale, the chest deflates and the abdomen expands. This can lead to anxiety and tension breathing.
4. This breath is not just a “belly” rise or expansion, but also requires a “back body or rib” expansion as well.

CAUTION: Do not lie flat on your back to do this breath if you have asthma, COPD, breathing difficulties, or are pregnant. These persons should in an upright (chair) or semi-upright (recliner or reclined) position. This breath type is only for relaxation during everyday activities or yoga

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practice. Chest breathing or shallow breathing prevents good breathing habits. A chest breather would inhale and let the shoulders rise and the chest inflate on an inhale. A good breather would allow the belly to inflate and the shoulders and chest to remain very still and silent on an inhale.

Alternate nostril breath (nadi shodana)



Top Left - Demonstrating hand position for right and left fingers in alternate nostril breath.

Top Right – Demonstrating hand placement for right hand during alternate nostril breath. I am in my third trimester.

- ✓ Balance activity in each hemispheres of the brain
- ✓ Equalize and deepen inhalation and exhalation
- ✓ Manage stress and promote calm

Action

Begin and end on the left nostril. Left *nadi shodana* can be used between contractions to calm and cool the nervous system and help to preserve strength for the actual delivery. Right sided *nadi shodana* can be used between contractions to heighten concentration, keep mom’s focus, and prevent panic or hyperventilation.

1. Sit in a comfortable position, completely supported by blankets and/or the wall.
2. Place the left palm face up on your left knee and bring the thumb and index finger to touch. For the right hand posture (*mudra*), fold the first two fingers, the index and middle fingers, down into your palm. Stretch the remaining fingers up. You may have to use your left hand to help the right hand hold the posture in the beginning.
3. Bring the thumb to the skin of your right nostril and the ring finger to the skin of your left nostril. Do not occlude either nostril yet.
4. Exhale completely.

5. On the inhale, block the right nostril and inhale through the left with an even breath.
6. Block both nostrils when the inhale is complete and lift the thumb and exhale evenly through the right side.
7. Inhale through the right nostril.
8. Block both nostrils at the top of the inhale. Lift the ring finger and exhale through the left.
9. Repeat 5-10 cycles.

CAUTION: Do not let the chest cave in. Bring the head down and the chest up, which silences the frontal brain and activates the contemplative back brain. Do not perform if you do not have sensitivity in your fingertips to digital palpation and dexterity/coordination to hold the right hand *mudra*.

Problem? Metabolism. Headaches can be caused as a result of hypoglycemia, or low blood sugar, and/or dehydration. As your metabolism increases during pregnancy, you will need an additional 150-300 calories daily. Women are also tempted to limit their fluid intake, especially as urinary frequency and swelling (edema) increases; however, you need as much or more fluid intake in order to properly manage edema and prevent bladder infections and headaches.

Solution? Prevent Hypoglycemia & Dehydration.

Avoiding hypoglycemia (low blood sugar) and preventing headaches during pregnancy

What you can do:

- ♥ Meet with an Ayurvedic practitioner, a holistic nutritionist or registered dietician or your physician to safely guide you in improving dietary habits.
- ♥ Eliminate alcohol, caffeine, and tobacco from your diet altogether.
- ♥ Eliminate trigger foods such as alcohol, caffeine, sugar, white flour, nitrate/nitrate processed meats, chocolate, nuts, sour cream, or aged cheeses.
- ♥ Eat whole, organic or local fresh foods and produce as close to their natural state as possible. If you

are not a vegan or vegetarian, choose lean, organic or free range poultry and meat and choose fish which are not farmed or high in mercury.

♥ Eat smaller more frequent meals during the day with snacks as needed. Don't overeat or under eat.

♥ Have a backup plan. Keep food with you at all times, especially when traveling or away from home.

When you are pregnant, you never know when hunger will strike! I learned the hard way during my pregnancies, having to make emergency pit stops for food during road travel. One time my husband even showed up with his own sack of emergency food for me during a road trip. I got the hint.

♥ Avoid excessive fruit, dried fruit, and fruit juice consumption if your physician or nutritionist has warned you of possible complications from hypoglycemia or gestational diabetes. A nutritionist or dietician can specifically direct you toward healthy alternative choices and help you devise a complete nutritional plan.

♥ Get enough protein. Recommended daily intake of protein is 60-65 grams.

♥ Get enough water/fluid intake. Standard recommended intake is approximately 8-8 oz. glasses of non-caffeinated beverages daily.

Problem? Soft tissue or myofascial restriction. Your tissue and fascia is a living network – part of you that is affected by your growth, body changes, and even your breath. As your body changes, postural changes occur which can cause headaches – due to heavy breasts, a growing belly, and poor postural habits. As a result, your soft tissue can respond by hardening and going into protective spasm.

Solution? Massage, myofascial release, physical therapy, and other prenatal soft tissue work. These treatments can be of benefit. Massage or myofascial release would have to be repeated throughout your pregnancy, since its effects are not usually long lasting and your body is rapidly changing each day. Physical therapy can teach you how to improve your posture and can also provide massage and myofascial release in order to treat your headaches.

Problem? Core weakness or poor posture. In the third trimester, weight gain, postural changes, & swelling (which can contribute to sinus congestion) can contribute to headaches. The increasing frontal/anterior weight during pregnancy causes postural changes which increase tension on nerves and tissue. This increased tension can create tension, migraine headaches, and long term spine and musculoskeletal pain if not reduced. Muscles also must be strengthened to support good posture, especially the transversus abdominis (the deepest layer of the abdominals most important for stabilizing the trunk, pelvis, and low back).

Solution? Physical therapy or medical yoga therapy. A physical therapist or therapist trained in medical yoga therapy can teach you how to move through guided meditation, postural exercises, core stability exercises that are appropriate during pregnancy, and other exercises and techniques which will help you self manage your headaches. The plus is you can also prevent and treat back pain, pubic symphysis pain (frontal pelvic pain), pelvic pain, incontinence (urinary leakage), round ligament pain, breathing – and a host of other musculoskeletal issues at the same time. A medical yoga therapist (a medically licensed rehabilitation expert trained in professional therapeutic yoga – see www.professionalyogatherapy.org for more information and to find a therapist) can also help with the following plus teach you meditation, yogic breathing techniques, yoga postures, aromatherapy, color therapy, and other types of techniques for treating your entire being – not just your headaches.

Here are 4 postures I use with success to treat headaches during pregnancy

1. Downward Dog Prep



I am pictured here in my early third trimester, demonstrating a technique she created called “**Downward Dog Prep.**” This yoga based pose combines physical therapy and yoga to safely create gentle core strength. However, I use many different techniques, based on the individual’s needs and level of fitness and experience in yoga and body awareness.

This pose should not be performed without supervision and instruction, and is only meant to be an example or

demonstration of core strength. Core strength must be carefully addressed during pregnancy. It is important during the pushing phase of labor and also in preventing low back pain, pubic pain, pelvic pain, and incontinence. However, only work with a licensed medical expert in prenatal yoga and therapy to address core strength during pregnancy. A prenatal yoga teacher, therapist or instructor is not medically licensed or qualified (legally or technically) to evaluate, treat, or manage pregnancy. Prenatal yoga classes can still be of benefit, but finding a qualified teacher can

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be difficult secondary to lack of regulation in yoga and yoga therapy. Find a medically licensed therapist in your area at www.professionalyogatherapy.org/Find+A+Therapist

2. *Ball Assisted Backbend/Squat Combination*



I am demonstrating a mini backbend on the ball during my early third trimester. This pose can help with back pain, postural strain from heavy breasts and growing belly, readying the pelvis for birth, assisting baby engage with head down, and relieving headaches. It assists with relieving headaches by diminishing the tension on the greater occipital nerves in the head – which can be put under tension during pregnancy and/or with poor posture or forward head. Take care not to drop the head back too far in this pose, which can cause undue stress on blood vessels in the head. Only perform this pose with supervision or after you have had instruction of a physical therapist that specializes in pregnancy.

3. *Demonstration of Maintaining Good Postural Alignment during Trimesters **

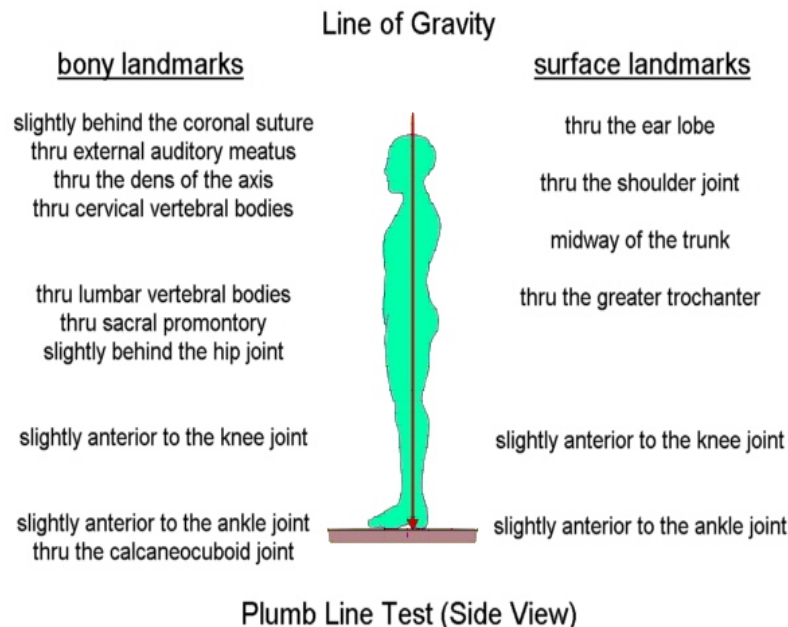


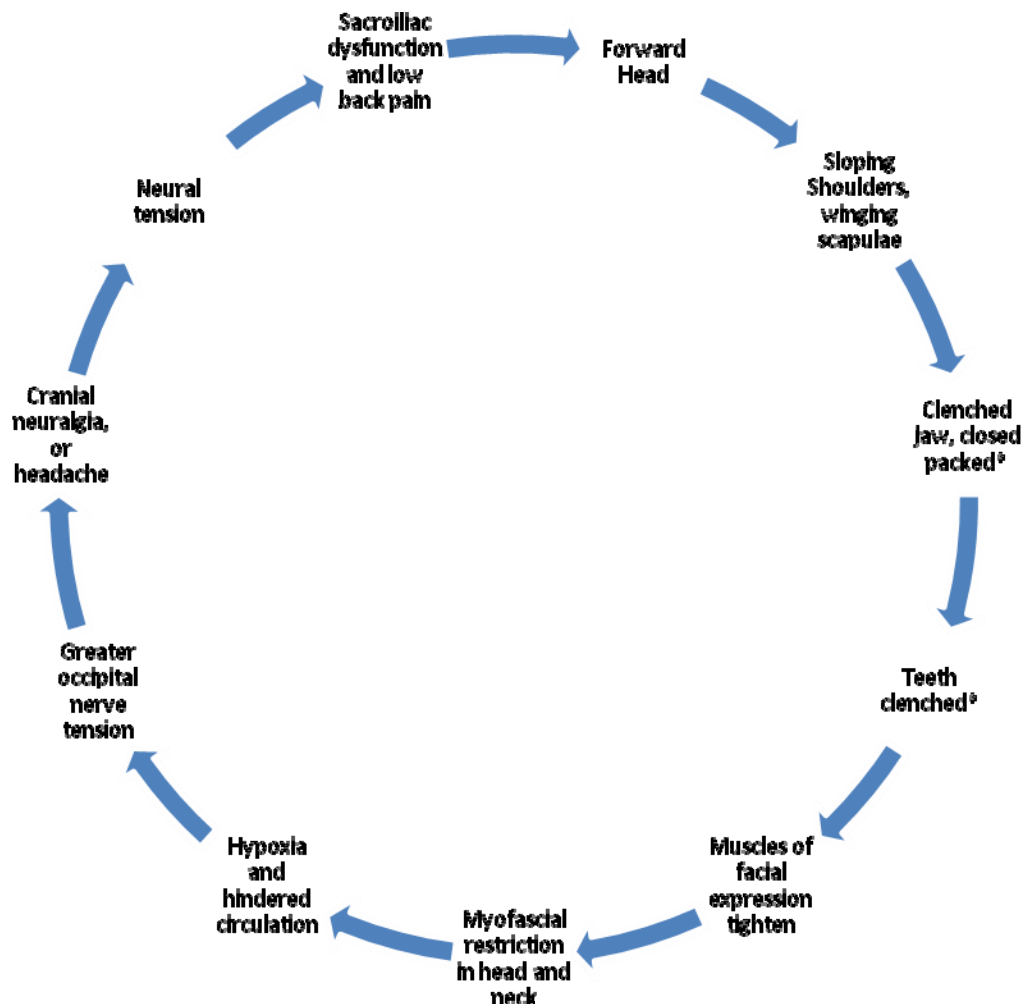
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Maintenance of good postural alignment is a key ingredient in preventing and treating headaches. Restorative yoga postures can be most helpful in creating body awareness, which will help you recognize poor postural alignment and self correct it before it causes a headache.

*Make sure that any postures you perform past your first trimester use the **THREE TIER APPROACH**, which puts you in a reclined (not on your back) posture.

TIP: Assess your own posture by looking in a mirror while standing sideways (not facing the mirror). With your peripheral vision, check the landmarks shown in the *Plumb Line Test* below, which correspond to my standing posture demonstrated in the photos above during my late first, early second, late second, and third trimesters.





Posture Wheel*

*Technical Explanation on preventing headaches with Postural Biofeedback

Posture is instrumental in preventing or resolving headaches. If the head is forward, then the ears are in front of the shoulders and the jaw is placed into a closed packed position. Closed packed position is also called the synarthrodial position and is characterized by two joint surfaces precisely fitting together in a congruent manner.⁴ No movement is possible in a closed packed position because the joints are tightly compressed. With the jaw closed, the teeth clench down, which consequently tightens the jaw muscles (masseter, temporalis, and the medial pterygoid muscles). With those muscles tonically (constantly) contracted, the muscles of facial expression tighten, along with the fascia of the area. This action in turn tightens the muscle and fascia of the scalp, which then hinders blood flow and can create or worsen the headache. In addition, a simple forward head, very commonly seen in today's forward flexed oriented society, places tensile forces over the greater occipital nerves in the back of the head, which traverse the scalp from back to front.⁶ This type of headache, a type of cranial neuralgia, leaves the sufferer with pressure in the frontal lobe and eye area. A simple correction of posture through postures such as mountain or tree pose, can help alleviate the symptoms. See the *Plumb Line Test* for good postural alignment and the *Posture Wheel* for a description of how pain can persist and cause other problems if posture is not corrected.⁷

4. Reclined supported cobbler's with THREE TIER APPROACH



This pose puts you in a resting position where you can also find and maintain perfect posture. The blanket fold pictured here uses 2 blocks (one under each knee), a bolster (a sofa cushion or large folded blanket can substitute), and a second folded blanket under the low back and head. I am demonstrating this pose in

my second trimester, when lying on your back is no longer appropriate. This pose can help create openness through the pelvic and hip area, good posture, myofascial release and flexibility, and promote relaxation. It can help treat headaches, low back pain, pelvic pain, muscle tightness, stress, insomnia, and digestive ills. You can rest here as long as is comfortable, but remember to roll onto your side FIRST in order to lie down or sit up.

TIP: You can also add blankets over the blocks to lift the knees higher (and stress the back and hips less) and/or provide more cushion for the thighs.

EXTRA RESOURCES FOR HEADACHES DURING PREGNANCY

Solutions

1. For lack of sleep, [read my blog on sleep positioning at http://gingergarner.blogspot.com/2009/11/choosing-right-mattress-for-you.html](http://gingergarner.blogspot.com/2009/11/choosing-right-mattress-for-you.html). Avoiding neck flexion or bending the head forward during sleep, which stresses nerves in the head, can prevent headaches. Read my past blog on sleep positioning, and/or use the postures pictured above which show me lying down in order to help you find ideal positioning for sleep.
2. **Avoid abrupt positional changes** like sitting or standing straight up from lying down or poses like forward standing bends or downward facing dog (which put the head below the heart).
3. **Reduce Stress through restorative yoga and biofeedback** - Worry, anxiety, relationship stress, and keeping an overcrowded work or daily schedule (type A behavior, anyone?) all negatively affect the health of both mom and baby. [Studies \(http://www.guardian.co.uk/science/2007/may/31/childrenservices.medicineandhealth\)](http://www.guardian.co.uk/science/2007/may/31/childrenservices.medicineandhealth) show that distress in mothers during pregnancy can result in lowered academic performance and increased

risk of depression in the child and increased rates of postpartum depression in mothers. Restorative prenatal yoga combined with a good breathing and/or meditation practice can address both reducing stress, mom/baby bonding, improving posture, and reducing headache symptoms. Well instructed yoga can also provide biofeedback, which helps you learn how to consciously relax specific muscles and correct posture which will reduce headache frequency and intensity.

4. Aromatherapy – I have put this at the end of the list because usually moms are “super smellers,” which means that you have a heightened sensitivity toward all smells. While lavender and other mild oils can be beneficial in treating headaches and reducing stress, pregnant women can often find any smells to be overwhelming and sometimes even nauseating. Nonetheless, if you find that you can tolerate scents, lavender, peppermint, frankincense, gentle baby (Young Living blend at www.youngliving.com), or chamomile can be beneficial.³

5. Marma Point Massage - Marma point massage can also be used to decrease headache frequency and intensity, focusing on the points of the head and face specially around the sinuses (above and below the brow and across the cheekbones) and scalp (assuring that the scalp moves over the skull and is not tightly adhered to it through fingertip soft tissue mobilization). *Marma* massage, or *abhyanga*, is an *Ayurvedic* technique for self massage to help balance the mind and body. There are 107 *marma* points in the body.⁸ The points located about the head and face can be massaged to relieve headache symptoms. Use light to medium pressured brush strokes using the cooling index fingers of each hand to brush over the face in the direction of midline outward. For example, starting at the hairline, brush the fingers from the middle outward. Move to the middle of the forehead, to just above the brow of the eye, then below the eye, from the middle of the chin up the jaw line, from just in front of the ear around and over it and from the back of the ear to the back of the head at the suboccipital lobe.

Other areas include massage the masseter muscles at the jaw and scalp massage. For masseter massage, place the index and middle fingers over the mass of muscle that you feel when you clench the teeth. Relax the jaw and massage in circular strokes, five in one direction and five in the opposite direction. There may be exquisite tenderness here, especially if there is tension in the jaw or there is tendency to clinch the jaw during the day or during sleep. For scalp massage, stretch the fingers apart and place them on the head covering each temporal lobe region. For massage, the fingertips do not move, rather they remain in one place while the scalp is moved in all directions including rotational. Tender points found during *marma* massage can be given extra attention.

Marma Point Self Massage Overview Chart

Points to emphasize

Head and face

Areas of the sinuses above and below the center of the brow

Across the brow

Down the sides of the nostril without blocking air flow

Across the cheekbones

At the temple

Over the masseter muscle at the jaw

At the TMJ joint

Under the mastoid process (the bony point just behind the ear)

Middle muscle belly of the upper trapezius (between end of shoulder and neck)

Posterior shoulder over the posterior rotator cuff (between the scapula and shoulder)

Scalp, assuring that the scalp moves over the skull and is not rigid or immovable – over the temporal, occipital, and frontal lobes (massage the scalp by leaving the fingers in place and moving the skin, rather than moving the fingers)

Occipital lobe flicks (start at the base of the neck and use brush strokes of your finger tips to brush and “flick” up toward where the hairline begins.

Technique

Use the fingertips to find the tender points

Use light to medium pressured brush strokes using the cooling index fingers of each hand to brush over the face from medial to lateral.

Scalp, stretch the fingers apart and place them on the head covering each temporal lobe region.

For *Marma* point massage, the fingertips do not move except on the face points (cheeks, eyebrows, nose, skin under eyes). Instead, they stay in one place while the point or scalp is moved in all directions including rotational.

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