

## Healthy Breast Milk

By: Jessica Skandunas

*Softly.... quietly..... gently we begin, "It's time to nurse, my baby," I sing. Your mouth opens wide, I soon hear you swallow, You're drifting to dreamland, I'm tempted to follow. Blissfully we sit, wrapped up in each other, Connected, in sync; baby and mother....*

Breast feeding is intended to be a joyful loving connection, a graceful welcoming and comfort of a soul into a new body. The mothers breast being located in the Anahata chakra (heart center) of the body signifies that the breast are an instrument of love, and nurturing, meant to give love outwardly through breast milk and to connect in an intimate way. It is a silent language of love. In an optimal setting breast milk is amrita, nectar, for the growing child. In Ayurveda it is known as the essence (upadhatu) of the rasa dhatu.

"In fetal life, the baby receives nourishment from the mother through the placenta. After birth, the baby continues to receive all its nutrients from the mother through breast milk." [1] The health of the mother is of huge importance in Ayurveda through all phases of bearing a child. In an optimal scenario the mother will have gone through a purification therapy (pancha karma) prior to becoming pregnant and then during pregnancy maintained herself in a healthful & harmonious way according to her dosha. Once labor has commenced the breast begin their job. The hormone prolactin is responsible for the secretion of the milk. It first flows in the form of colostrum. "This special milk is yellow to orange in color and thick and sticky. It is low in fat, and high in carbohydrates, protein, and antibodies to keep your baby healthy. Colostrum is extremely easy to digest...it is low in volume (measurable in teaspoons rather than in ounces), but high in concentrated nutrition for the newborn. Colostrum has a laxative effect on the baby, helping him pass his early stools, which aids in the excretion of excess bilirubin and helps prevent jaundice." [2] This type of pre milk substance flows for about 2-4 days before the letdown of the actual milk.

The description of healthy breast milk according to the classic Ayurvedic text Caraka Samhita is, "Milk of excellent quality should have natural color, smell, taste, and touch. When poured over a pot of

water, it gets mixed up with the water if it is endowed with natural qualities. This provides nourishment and maintains good health of the child. If the qualities of milk do not conform to the above, then it should be considered as vitiated.” [3] Another summary, “The breast milk is clean, sterile. It fully meets the requirements. It is available at the correct temperature. It does not require preparation or money. Suckling is good for the baby to develop jaws. It has a bacteriostatic effect and therefore stays for a longer time.” [4] “Breast milk is a complex living nutritional fluid that contains antibodies, enzymes, and hormones, all of which have health benefits.” [5] “Kasyapa defines pure breast milk as that which the baby thrives well and both the mother and baby remain happy, healthy, and free from any ailment...Breast milk promotes growth and development and acts as a tonic for all the tissues.” [6]

When the mother breastfeeds her child she transfers tissue making abilities. The breast milk is packed with intelligence and vitality. This is why the mothers health and well-being are of utmost importance while breastfeeding. In Ayurveda there are stated to be seven main tissues of the body. They are Rasa (plasma), Rakta (blood), Mamsa (muscle), Medas (fat), Ashti (bone), Majja (marrow), and Shukra (reproductive tissues). In order for these tissues to be healthy and create a healthy body, there are several factors involved. Firstly the Agni must be functioning properly, then the actions of absorption, circulation, metabolism, stability and structure need to be in balanced state. These are the governing actions of the doshas, namely, Vata (absorption & circulation), Pitta (metabolism), Kapha (stability and structure). Agni is, “The force residing in the body that creates digestion. Agni is fire and is responsible for the transformation of one substance into a new substance. This process is called metabolism. Metabolism has two components. One is catabolism and the other anabolism. Catabolism is the breakdown of a substance into smaller components. Anabolism is the building of new tissues from the smaller components. Agni plays a role in both aspects of metabolism. Agni is present wherever there are chemical or biochemical reactions in the body.” [7] When the mother digests anything via the sensory organs or the digestive tract it gets assimilated according to the strength of her agni and her doshic balance into the body and becomes her tissues. This then contributes to building the tissues of her baby as she breastfeeds.

The first tissue that is formed after digestion in our bodies is the Rasa (plasma). It relates to breast feeding in the following way, "Rasa circulates all over the body and is brought to the breast by blood vessels. The tissue enzymes in the breast convert rasa into milk. Hence milk is termed as associate or upadhatu of rasa." [8] Since the Rasa is the first tissue formed in the body, it is dependent upon what's called the ahara rasa. When food is initially digested the agni responsible for that digestion is the jatharagni. It is located in the stomach. It is this agni that converts the food into the substance called ahara rasa. This ahara rasa gets transformed into a finer quality ahara rasa through the bhutuagnis, (elemental agnis, one for each element of earth, fire, water, air, ether) of the liver, where it is now ready to begin making the tissues of the body. "Ahara rasa, once digested by the bhutuagnis, travels through a srota or channel. This channel is called the rasavaha srota. This channel guides the ahara rasa to the rasa agni. The rasa agni is contained within a kala or membrane. As it passes through the rasa agni, the ahara rasa is converted into a stable portion (posya dhatu) and an unstable portion (posaka dhatu) of the rasa dhatu. In addition, secondary tissues called upadhatu are formed, as well as a waste product of transformative or digestive process. The upadhatu of the rasa dhatu are breast milk and menstrual fluids. The waste product or mala is kapha or mucous." [9]

"Un-impeded (development of) strength, body parts and longevity, growth and development in the disease free state along with trouble free state of child and wet nurse are the features of pure milk. Due to consumption of impure milk, serious diseases develop. Their subsidence also occurs by use of pure milk." [10] In India, a high importance was and is placed on breastfeeding the child. If it is found that the mother is unable to nurse her child, then a 'wet-nurse' traditionally takes her place. Such instances are quoted, "The woman who is hungry, grief stricken, angry, has psychological abnormalities and vitiation of dhatus, is pregnant, emaciated, febrile, obese, has consumed diet likely to produce indigestion or edibles of opposite character should not give breast feeding." [11] There are very specific descriptions of the qualities of a wet nurse in the ancient texts. In the Kasyapa Samhita, "...the wet nurse having regular menstruation, and with a predominance of vata and pitta, possesses strong digestive fire." [12] Caraka Samhita, "...youthful...free from disease...not given to luxurious living...not given to hateful disposition...not mean minded...having affection for children...free from illness...having living children...having plenty of milk...careful...skillful in service...observing cleanliness...having excellence of

breast and milk.” [13] In the Caraka Samhita it also describes ‘excellence of breast’ this is for the mother or wet nurse. “1- They should not be situated at a very high level in the chest; 2- They should not hang very loose; 3- They should neither be very lean nor very plump; 4- They should be attached with nipples of proportionate size; 5- The child should find it easy to suckle them.” [14] In the US there are ‘breast milk banks’ where mothers who are unable to breast feed can purchase breast milk from donors, this needs to be done with extreme caution and research. “If you are considering feeding your infant milk from a milk bank, you should be aware of the possible health and safety risks to your infant. If a donating mother has not been properly screened, risks to an infant receiving the milk include exposure to infectious diseases, including HIV, and chemical contaminants such as illegal and prescription drugs. Discuss your choices with your infant's health care provider. The Food and Drug Administration (FDA) recommends against feeding your infant breast milk acquired directly from another person or through the Internet. The FDA recommends that if you decide to feed an infant with human milk from a source other than the mother, such as from a milk bank, you ensure that the source has screened its milk donors and taken safety precautions, such as proper handling to prevent contamination.” [15] According to the Ayurvedic texts changing ‘wet-nurses’ too often can cause severe diseases. It was highly recommended to not switch the source once it has been established.

There are two main things to observe in the mother or wet nurse in determining whether the breast milk is suitable and will not cause harm to the child. As stated earlier, first is the state of the agni, “Normal digestive fire is the root of health and longevity of the children and irregular digestive fire is the root of all the diseases and decline of health...to the one with strong digestive fire, use of anabolics; to the one with weak digestive power, use of appetizing articles and to that with irregular digestive power, daily use of congenial diet brings pleasure.” [16] Second is the doshic balance, vitiation of doshas will disturb the purity of the breast milk, it could happen for either the mother or wet nurse. General causes of vitiated breast milk are described as, “Due to indigestion, consumption of non-congenial, incompatible food, overeating, use of over salty, sour, hot, alkaline, humid, or putrefied articles, diseases of body or mind, day sleeping, use of wine, lack of exercise, trauma, anger, over use of cleansing measures etc, various causes, the doshas get aggravated, then moving through the milk carrying channels vitiate the milk.” [17] Each dosha when vitiated will affect the milk in various specific ways.

Vata dosha is made up of the air and ether elements. Vata governs motion. Its qualities are dry, light, cold, subtle, flowing, mobile, sharp, hard, rough & clear. It manifests in the body as movement, such as in the movement of nerve impulses, blood, food, waste, and thoughts. There are 5 subdoshas and they represent the movement of this quality in a specific way, whether it is on the gross or cellular level. Prana vayu is the inward movement of Prana into the body. Samana Vayu is the absorption action, allowing Prana to absorb from the periphery of the body inwards towards the core. Vyana vayu is circulation; it moves energy from the center towards the periphery. Udana vayu is the upward movement of energy in the body, and apana vayu is the downward movement of energy in the body. If Vata dosha becomes vitiated in the body its symptoms can be dryness, nervousness, anxiety, sleeplessness, tremors, constipation, gas, pain, dizziness, insomnia. Vata vitiated breast milk is stated to be, "Vata-Blackish or reddish in color, astringent in anurasa (after taste), clear, absence of any conspicuous smell, unctuous, liquid, frothy, light, not satisfying, and causing emaciation vatika diseases." [18] The child receiving this type of milk will begin to mirror the mother's symptoms, if the mother continues to nurse without treating her vitiation more serious disease will begin to manifest in the child. "When mother's milk is vitiated with Vata, the baby is likely to suffer from breathlessness, convulsions, epilepsy, headache, paralysis, diarrhea, and emaciation." [19]

Pitta dosha governs digestion and metabolism. It is made up of the fire and water elements. Its qualities are hot, moist, light, subtle, flowing, mobile, sharp, hard, rough, & clear. Pitta is the force in the body that digests and metabolizes all that is taken in through the sensory organs and the digestive tract. Pitta's five subdosha's are: Pachaka Pitta is responsible for the digestion of food in the stomach, Sadhaka Pitta digests the sensory impressions brought into the mind, Alochaka Pitta is the digestion of the visual impressions, Bhrajaka Pitta is the pitta of the skin and what it digests via sunlight & touch, & Ranjaka Pitta forms the blood and provides color of bile and blood via the liver. The symptoms found when Pitta has been vitiated are: hunger, thirst, fever, yellowing of the skin & eyes, burning sensations, excess sweating or urination, bleeding. When breast milk is vitiated by Pitta it is found to be "Blackish, bluish, yellowish, or coppery in colour; bitter, sour, or pungent in after taste; having a smell like that of a dead body or blood; excessively hot and causing paittika diseases." [20] The child will also mirror those symptoms felt by the mother, but if continued on in this manner more serious diseases will manifest.

“When mother’s milk is vitiated with Pitta, the baby is likely to suffer from indigestion, acidity, vomiting, loose stools, perianal excoriation, fever, hot body, excessive sweating, anemia, jaundice, palpitation, tachycardia, forceful heart beats and conjunctivitis.” [21]

Kapha dosha governs the structure and stability of the body. It is made up of the earth and water elements. Its qualities are cold, moist, heavy, gross, dense, static, dull, soft, smooth, & cloudy. Kapha is responsible for lubrication and protection of the body. Kapha’s subdoshas are: Kledaka Kapha, it lubricates and protects the lining of the stomach; Avalambaka Kapha, protects the lungs and respiratory tract, mucous is stored here and balanced; Tarpaka Kapha, brings stability and protection to the brain, mind and nerves; Bodhaka Kapha, protects the mouth; Sleshaka Kapha, supports and brings stability and protection to the joints. When there is Kapha vitiation the symptoms will be nausea, heaviness, lethargy, pale complexion, & sleepiness. When the milk is vitiated by Kapha it is “Exceedingly white in color; excessively sweet in taste and having saline after taste; having the smell of ghee or oil, vasa (muscle fat), and bone marrow; slimy; thread; settling down at the bottom when poured into a vessel containing water and causing slaishmika type of disease.” [22] “When mother’s milk is vitiated with Kapha, the baby is likely to suffer from excessive salivation, vomiting, distention of abdomen, anorexia, cold, cough, breathlessness, pleural effusion, puffiness of face and eyes, oedema, slow and forceful heart beats, heart disease, itching, ulcers, heaviness, excessive sleeping, laziness, docile vacant look, drowsiness, giddiness, fainting, and eye disease.” [23]

The following table below compares what is ideal breast milk to that of milk vitiated with Vata, Pitta, or Kapha.

<b>Properties of Milk</b>	<b>VATA</b>	<b>PITTA</b>	<b>KAPHA</b>	<b>IDEAL</b>
<b>COLOR</b>	Darkish or reddish	Bluish, yellowish, or reddish tinge	Dense and white	White
<b>TASTE</b>	Sweet w/slightly astringent or bitter taste or tasteless	Sweet with slightly bitter, sour or pungent taste	More sweet with slightly salty taste	Natural and sweet
<b>SMELL</b>	No smell	Foul smell, smelling like blood	Smell of ghee, oil, animal fat	Natural
<b>TEMPERATURE</b>	Normal, slightly cool	Warm	Cool	Warm

<b>CONSISTANCY</b>	Thin	Intermediate	Thick, sticky, fibrous	Mixes easily with water
<b>FOAM</b>	Present	Absent	Absent	Absent
<b>VISCIDITY (AT CONTENT)</b>	Less	Intermediate	High	Viscid
<b>LIGHT OR HEAVY</b>	Light	Intermediate	Heavy	Medium
<b>HEAVY SATIETY</b>	Absent	Absent	Present	Present

<b>PHYSICAL TEST</b>	<b>VATA</b>	<b>PITTA</b>	<b>KAPHA</b>	<b>IDEAL</b>
<b>Drops of milk put slowly over surface of water in a glass by a dropper</b>	Floats	remains at any level, produces yellow streaks in water	Sinks	Mixes easily
<b>EFFECTS ON BABY</b>	<b>VATA</b>	<b>PITTA</b>	<b>KAPHA</b>	<b>IDEAL</b>
<b>Effect on the body</b>	Slightly cooling	Heating	Cooling	Soothing, cooling
<b>Effect on constitution and types of diseases</b>	Likely to get vataja diseases	Likely to get pittaja diseases	Likely to get kaphaja diseases	Well balanced constitution, ideal growth and development happy and contented. Absence of diseases
<b>General health</b>	thin, lean	Thin	Heavy, stout with distended belly	Ideal
<b>Voice</b>	Weak, horse	-	-	Natural
<b>Stools</b>	Constipation, or hunger, diarrhea	Not well mixed, diarrhea	Constipation	Normal
<b>Urine</b>	Dysuria, retention of urine	-	Retention of urine	Normal
<b>Gases in abdomen</b>	Does not pass freely, distention	-	Gases	use

Table [24]

In the Caraka Samhita it states, “When breast milk gets vitiated, the specific nature of the vitiation should be ascertained, and depending upon the doshas and the quantum of their vitiation, the mother should be given vamana (emetic therapy), virecana (purgation therapy), asthapana (corrective enema), and anuvasana (unctuous enema) whichever is found suitable, for the cure of the ailment.” [25] Similarly said in the Kasapya Samhita, “The milk gets purified by oral use of decoctions, emetics, purgatives, congenial diet and the oleaginous substances treated with aphrodisiac drugs.” [26]

In general a women breastfeeding will be naturally stimulated to secrete milk by just holding her baby and giving her baby lots love and affection. The more contact with her baby the more connected and in tune they become with each other. The mother should eat simple nutritious foods such as basmati rice, mung dal, lentil soup, milk, ghee, vegetable or meat soups, steamed vegetables and plenty of water and fluids. She should take warm baths after doing self abhyanga. A happy peaceful state of mind and plenty of sleep and rest will benefit the mother. Having someone who helps the mother out with household chores and meal preparations is very helpful to help ease the stress the new mother may feel. When there is doshic vitiation, once determined, then the mother can undergo treatment. The type of treatment will vary according to the dosha(s) involved. When Vata is vitiated, the mother will need to tonify. Pitta and Kapha will need to purify. The following charts below will explain how each dosha’s vitiation is generally treated.

**VATA**

<b>DIET</b>	<b>HERBS</b>	<b>LIFESTYLE</b>	<b>THERAPIES</b>
Sweet & salty, sour tastes	Medicated ghee (shatavari or triphala)	Relieve stress and anxiety, have help with household chores etc.	-Oleation (with warm sesame oil) self abhyanga or abhyanga from practitioner.
Vata food guidelines; warm cooked foods with ghees and oils, dark meats, stay away from all alcohol,	Stanya janna (herbs that increase milk) also called lactagogues	Take walks in nature, sunbath 10 minutes a day, avoid wind and cold weather, avoid over stimulus with media and	-Shirodhara with sesame oil -Fomentation

<p>caffeine, cold beverages and foods.</p> <p>Avoid purifying foods.</p>	<p>Shatavari, fennel, fenugreek, caraway, dill, wild yam [27]</p> <p>Herbal teas for digestion with fennel, cumin, coriander, &amp; ginger</p>	<p>environment.</p> <p>Gentle and restorative yoga asanas</p> <p>A time for silence and meditation every day.</p>	<p>(svedana)</p> <p>–if patient is strong than an oil purgative with castor oil</p> <p>-retention enema (anuvasana basti) [28]</p> <p>Vata spiced Kitcheree can be taken for an allotted time during therapies</p>
<p>Plenty of warm fluids, veggie or meat broths</p> <p>Fresh almond milk</p>	<p>Herbal formula: kukti 2parts shilajit 2 parts shatavari 3 parts</p> <p>Take ¼ tsp with honey 2-3 times a day, can be taken entire time nursing [29]</p>	<p>Get adequate rest and sleep. Take naps with baby.</p> <p>Have Faith that all is well</p>	<p>Aromatherapy with lavender or sandalwood</p> <p>Warm color therapy like orange, yellow, green, gold, brown, purple</p>

## PITTA

DIET	HERBS	LIFESTYLE	THERAPIES
<p>Sweet, bitter and astringent tastes</p>	<p>Stanya shodana (cleanses milk)</p>	<p>Relieve stress, have help with household chores and meal preparations</p>	<p>Some oleation with coconut oil, self abhyanga, cooler shower/bath following</p>
<p>Follow Pitta food guidelines;</p> <p>Cool grains, unsalted cheeses and milk, ghee, cool sugars, sunflower seeds, legumes, green vegetables, juices, sweet fruits, no nuts or heavy oils, no hot peppers, no alcohol or caffeine</p>	<p>Dandelion root, wild yam, shatavari, chrysanthemum, bitterroot, borage, turmeric, fennel, vervain, asparagus root, caltrop [30][31]</p> <p>Drink herbal teas with fennel, cumin, coriander</p> <p>Herbal formula: kukti 2parts shilajit 2 parts shatavari 3 parts</p> <p>Take ¼ tsp with honey 2-3 times a day, can be taken entire time</p>	<p>No intense exercise, restorative yoga asanas is best, make a time for meditation and silence every day.</p> <p>Take a nature walk in the morning or at dusk, avoid sunbathing or being in the sun for long periods.</p> <p>Practice surrendering rather than controlling</p> <p>Avoid being overly intense in your work, environment, and relationships</p>	<p>If patient is strong, then virechana (purgation) can be done.</p> <p>Color therapy choices are blue, gold, white, brown, violet</p> <p>Aromatherapy: rose, sandalwood, lavender</p> <p>Pitta spiced kitcheree can be taken with steamed veggies for an allotted time to rebuild</p> <p>Blue chamomile essential oil compress for infection in breast</p>

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## KAPHA

DIET	HERBS	LIFESTYLE	THERAPIES
Pungent, bitter, and astringent tastes	Stanya shodana (cleansing herbs)	Avoid over sleeping, have help with household chores but make time to get up, move around & exercise.	Svedena therapy Nasya for Kapha Emetic therapy (vamana)
Follow the Kapha food guidelines;  Warm grains, lighter milks, no cheeses or heavy dairy, honey only, use oil sparingly, dried fruits, avoid sweet fruits, vegetables, seeds no nuts, limit meat consumption, most legumes, avoid too much salt, veggie juices, some caffeine ok	Dandelion root, fenugreek, chrysanthemum, bitterroot, turmeric, fennel, vervain, caraway, manjistha, Echinacea. [34][35]  Herbal formula: kukti 2parts shilajit 2 parts shatavari 3 parts  Take ¼ tsp with honey 2-3 times a day, can be taken entire time nursing [36]	Take long walks in nature, practice yoga asanas that create some heat, and do chest openers.  Get sunlight daily.  Practice non attachment	Color therapy: red, orange, yellow, green, blue, white, gold, purple, violet  Aromatherapy: mint, ylang ylang, basil, orange  Engorgement: 2 drops geranium 2 drops peppermint apply to breast as a compress [37]  Kapha spiced kitcheree can be taken for an allotted time during therapies

Breastfeeding is a golden opportunity to expand oneself in selfless service. It is just the beginning of the fulfillment in the mother's dharma with her child. It gives the heart the ability to cultivate and give unconditional love. When the mother's breasts are functioning in a healthy state the rewards are endless. It is well worth the effort to correct doshic imbalances so that not only the health of the baby will be optimal but the mother will have the proper energy to nurture and support the child from the start.

## **BIBLIOGRAPHY**

- [1] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 123
- [2] La Leche League International, Staff, "What is Colostrum?" La Leche League International website resource page (October 13, 2006) <http://www.llli.org/faq/colostrum.html>
- [3] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Chapter 8 vs. 54 <http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>
- [4] Prof. Dr. P.H. Kulkarni, *Ayurveda for Child Health Care* (Delhi: Sri Satguru publications, Indological & Ayurvedic Publishers, Indian books Centre, 2002), Ch. 7 page 68
- [5] Pat Hoddinott, David Tappin, Charlotte Wright, "Breastfeeding", NCBI web article <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2323059/>
- [6] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 123
- [7] Dr. Marc Halpern, *Principles of Ayurvedic Medicine* (California College of Ayurveda 10<sup>th</sup> edition, 2010), pg. 89
- [8] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 123
- [9] Dr. Marc Halpern, *Principles of Ayurvedic Medicine* (California College of Ayurveda 10<sup>th</sup> edition, 2010), pg. 94
- [10] P.V. Tewari, *Kasyapa-Samhita (Vrddhajivakiya Tantra)*, (Varanasi, Chaukhambha Visvabharati Oriental Publishers & Distributors, 2008), Chapter 19 verse 26-27

[11] Prof. P.V. Tewari, *Kaumarabhrtya in Ayurveda (Obstetrics, Gynecology, and Pediatrics)* (Varanasi, Chaukhambha Visvabharati Oriental Publishers & Distributors, second edition 2006), pg.89

[12] P.V. Tewari, *Kasyapa-Samhita (Vrddhajivakiya Tantra)*, (Varanasi, Chaukhambha Visvabharati Oriental Publishers & Distributors, 2008), Ch. 18 verse 5

[13] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Ch. 8 verse 52

<http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>

[14] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Ch. 8 verse 53

<http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>

[15] Medline online article, What are Breast milk bank and when are they used?

<http://www.nichd.nih.gov/health/topics/breastfeeding/conditioninfo/pages/milk-banks.aspx>

[16] P.V. Tewari, *Kasyapa-Samhita (Vrddhajivakiya Tantra)*, (Varanasi, Chaukhambha Visvabharati Oriental Publishers & Distributors, 2008), Ch. 18, verse 6-8

[17] Prof. P.V. Tewari, *Kaumarabhrtya in Ayurveda (Obstetrics, Gynecology, and Pediatrics)* (Varanasi, Chaukhambha Visvabharati Oriental Publishers & Distributors, second edition 2006), pg.86-87

[18] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Ch. 8, verse 54

<http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>

[19] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 132

[20] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Ch. 8, verse 54

<http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>

[21] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 132

[22] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Ch. 8, verse 55

<http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>

[23] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 132

[24] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), table pg. 130-132

[25] *Caraka Samhita- Sarira sthana*, A canto of Agnivesa's Caraka Samhita with English translation and commentary based on Cakrapani Datta's Ayurveda Dipika, Ch. 8, verse 56

<http://www.scribd.com/doc/132749230/Caraka-Samhita-Sarira-Sthana>

[26] P.V. Tewari, *Kasyapa-Samhita (Vrddhajivakiya Tantra)*, (Varanasi, Chaukhamba Visvabharati Oriental Publishers & Distributors, 2008), Ch. 19 verse 5

[27] Michael Tierra, C.A., N.D, *Planetary Herbology* (Twin Lakes: Lotus Press, 1992)

[28] Dr. V.B. Athavale, *Bala Veda: Pediatrics & Ayurveda* (Delhi: Chaukhamba Sanskrit Pratishthan, 2000), pg. 135

[29] Dr. Vasant Lad, *The Complete Book of Ayurvedic Home Remedies*, (New York, Three Rivers Press, 1998) page 144

[30] Michael Tierra, C.A., N.D, *Planetary Herbology* (Twin Lakes: Lotus Press, 1992)

- [31] Dr. David Frawley & Dr. Vasant Lad, *The Yoga of Herbs* (Twin Lakes, Lotus Press, 1986)
- [32] Dr. Vasant Lad, *The Complete Book of Ayurvedic Home Remedies*, (New York, Three Rivers Press, 1998) page 144
- [33] Dr. Light Miller & Dr. Bryan Miller *Ayurveda & Aromatherapy, The earth Essential Guide to Ancient Wisdom and Modern Healing* (Twin Lakes, Lotus Press, 1995) page 145
- [34] Michael Tierra, C.A., N.D, *Planetary Herbology* (Twin Lakes: Lotus Press, 1992)
- [35] Dr. David Frawley & Dr. Vasant Lad, *The Yoga of Herbs* (Twin Lakes, Lotus Press, 1986)
- [36] Dr. Vasant Lad, *The Complete Book of Ayurvedic Home Remedies*, (New York, Three Rivers Press, 1998) page 144
- [37] Dr. Light Miller & Dr. Bryan Miller *Ayurveda & Aromatherapy, The earth Essential Guide to Ancient Wisdom and Modern Healing* (Twin Lakes, Lotus Press, 1995) page 144