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<b>REVIEW ARTICLE</b>	<b>OPEN ACCESS</b>

## THE AYURVEDIC PATH TO PREGNANCY NUTRITION: A BALANCED APPROACH TO MATERNAL AND FETAL HEALTH

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### ABSTRACT:

As per Ayurveda, the concept of *Ahara* is very individualistic and emphasizes that dietary needs and preferences are unique to each person. It encourages individuals to understand their unique needs and adapt their dietary practices accordingly. Ayurveda gives equal importance to both *Sarwagraha* and *Parigraha* concept of *Ahara*, necessitating the need to gain a deeper insight into diet and nutrition as a whole, rather than quantifying the macro and micronutrients. Although an elaborate and extensive dietary regimen for pregnant women has been suggested by Ayurveda, the practicality and its correlation with the Recommended Daily Dietary Allowance for Pregnant Women remains uncertain. The calorie and fat rich diet recommended by *Ayurveda* during pregnancy has caused apprehension among physicians, owing to the probable risk of Gestational Diabetes and Pregnancy Induced Hypertension. The review provides accurate information and guidance regarding Ayurvedic dietary recommendations during pregnancy by scientifically justifying the recommendations and enabling physicians bridge the knowledge gap and help expectant mothers in making informed decisions about their diet choices. Ayurvedic nutrition during pregnancy emphasizes a holistic approach that includes personalized dietary recommendations based on individual constitution, pregnancy demands and fetal needs for organ development, thereby giving prime importance to the concept of considering *Ahara* as *Oushadha*.

**Key-words:** *Ahara*, *Ayurveda*, Diet, Nutrition, Pregnancy

**INTRODUCTION:**

The concept of *Aahara* in pregnancy is very unique to the science of Ayurveda. It caters to the additional nutritional requirements imposed by pregnancy. *Charakacharya* has quoted that *food* is the one that provides nourishment, strength, lustre, enthusiasm, and improves *Jatharaagni*.

It is a unique concept, designed to fulfil four main intentions: *Anupaghataya, Paripurnatavaya, Sukhaprasavaya, Arogya Bala Varna Samhanana Apatya Jannya*.

Month wise, the maternal needs for nutrition change, based on the fetal developmental stage and physiological changes in mother. As a result, the mother’s dietary needs also vary month to month.

In the context of *Masanumasika Pathya* in *Garbhini*, *Acharya* states that in order to have a *Nirvikara Garbha*, the woman must follow the detailed dietary regimens which begin from the *Prathama Masa*, helping her obtain a *Shreyasi Praja*, hence it highlights the importance of intrauterine environmental factors which reset

physiological parameters, thus helping them endure into adulthood.

**AIMS AND OBJECTIVES:**

1. To provide accurate information and guidance regarding *Ayurvedic* dietary recommendations during pregnancy by scientifically justifying the recommendations and enabling physicians bridge the knowledge gap and help expectant mothers in making informed decisions about their diet choices.
2. To enhance education and awareness of proper nutrition during pregnancy

**METHODOLOGY:** The references for the article has been collected from *Charaka Samhita, Sushruta Samhita, Harita Samhita, Williams Obstetrics, published research articles and electronic databases like PubMed Central, Medline and Google Scholar.*

**LITERATURE REVIEW**

**Uniqueness of *Garbhini Paricharya*- Rationality behind Month Wise Dietary Regimen.**

**Table 1. Relevance Of *Prathama Masa Paricharya***

First Month	<i>Garbha</i>	<i>Garbhini</i>
<b>Events</b>	<p><i>Kalala Roopa- Singhanaka Prakhya and ShleshmaSadrusha</i></p> <p>Fed by <i>Upasneha, Jaleeya Mahabhoota Pradhana</i></p> <p>After 10 days - <i>Budbudha Roopa, Vaayu Mahabhoota Pradhana</i> (for further multiplication and differentiation of cells)</p> <p>Development of morula which contains multicellular mass and fluid.</p>	<p><i>Anga Shaithilyata</i></p> <p><i>Tandra</i></p> <p><i>Trishna etc Sadyograheeta Garbha Lakshana</i></p>

	As quantity of fluid increases, the morula acquires the shape of blastocyst	
<b>Paricharya</b>		<i>Charaka Samhita</i> – Non medicated milk <i>Sushruta Samhita</i> – <i>Madhura, Sheeta, Drava Ahara.</i> <i>Harita</i> – <i>Yastimadhu, Parushaka, Madhuka Pushpa</i> along with <i>Navneeta, Madhu</i> followed by sweetened milk.
<b>Role</b>	<i>Madhura Sheeta Praaya Ahara</i> – <i>Shleshma Sadrusha Guna</i> of <i>Garbha</i> increases. Hence <i>Rasadhatu</i> and <i>Jala Mahabhuta Praya Ahara</i> for <i>Preenana</i> and <i>Rakta Pushti</i> , which aides further zygote development	<i>Ksheera</i> and <i>Madhuroushadha Pradhana Ahara</i> impart <i>Bala</i> , Alleviates discomfort by enhancing the physiological anabolic metabolism.

**Table 2. Relevance Of Dwitiya Masa Paricharya**

Second Month	<b>Garbha</b>	<b>Garbhini</b>
<b>Events</b>	<i>Ghana Roopa</i> Along with <i>Jaleeya Mahabhoota, Prithvi</i> and <i>Agni Mahabhoota Pradhanyata</i> Central nervous system, sensory organs and digestive system start to develop.	<i>Anga Shaithilyata</i> <i>Tandra Trishnaetc..Sadyograheeta Garbha Lakshana</i>
<b>Paricharya</b>		<i>Charaka samhita</i> - <i>MadhuroushadhaSamskritaKsheera</i> <i>Sushruta Samhita</i> – <i>Madhura, Sheeta, Drava Ahara.</i> <i>Harita</i> – <i>Kakoli Siddha Madhura Paya</i>
<b>Role</b>	Anabolic in nature, Does <i>Uttara Uttara Dhatu Poshana.</i> <i>Madhuroushadha</i> imparts <i>Prithvi Mahabhoota</i> , helps in further cellular growth	By <i>Uttara Uttara Dhatu Poshana</i> , helps in establishing uteroplacental circulation by 8-12 weeks

**Table 3. Relevance Of Tritiya Masa Paricharya**

Third Month	Garbha	Garbhini
<b>Events</b>	<p><i>Sarva Indriyani Sarva Anga Avayava Vriddhi</i></p> <p><i>Vaayu and Akasha Mahabhoota Pradhana</i></p> <p>Limb Rooting occurs denotes growth and differentiation</p> <p>Formation of excretory system</p> <p>Sensory organs start developing which represents the differentiation of neural entity.</p>	<p><i>Chardi, Arochaka and all other Vyakta</i></p> <p><i>Garbha Lakshanas</i></p>
<b>Paricharya</b>		<p><i>Charaka Samhita – Madhu Evam Sarpi</i></p> <p><i>Sanskrita Ksheera</i></p> <p><i>Sushruta Samhita – Madhura, Sheeta,</i></p> <p><i>Drava Ahara.</i></p> <p><i>Harita - Krishara</i></p>
<b>Role</b>	<p>To enhance differentiation of body parts and initiation of nervous tissue, <i>Ghrita</i> and <i>Madhu</i> added.</p> <p><i>Ghrita</i> by its <i>Samskaranuvartanaproperty</i>, effect on constant cellular and tissue level changes that occur at this stage.</p> <p><i>Krishara</i> is <i>Mala Mootrakari</i>, acts upon excretory system</p>	<p>Honey has antioxidants, it is an efficient Anti-Emetic .</p> <p>The combination caters to both the nutritional requirements of the mother, as well as physiological changes.</p>

**Table 4. Relevance Of Chaturtha Masa Paricharya**

Fourth Month	Garbha	Garbhini
<b>Events</b>	<p><i>SthiratvamAapadhyate Garbha</i></p> <p><i>Garbha Hridaya Pravyakti</i></p> <p><i>Chetana Dhatu</i></p> <p>Eye movements begin which indicates maturation of midbrain</p> <p>Differentiation at cellular, tissue and organ level becomes pronounced in fetus.</p>	<p><i>Guru GaatratvamAdhikam</i></p>

<b>Paricharya</b>		<i>Charaka Samhita – Ksheera+ Navaneeta</i> <i>Sushruta Samhita- Shashtika Shali with</i> <i>Dadhi, Jaangala Maamsa , Hridya Aahara.</i> <i>Harita- Samskruta Odana</i>
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**Table 5. Relevance Of Panchama Masa Paricharya**

<b>Fifth Month</b>	<b>Garbha</b>	<b>Garbhini</b>
<b>Events</b>	<i>Mamsashonita Upachaya, Manah</i> <i>Pratibuddhitaram</i>  Greater increase in anabolism of blood and flesh in foetus	<i>Karshayam Apadhyate Visheshena</i>
<b>Paricharya</b>		<i>Charaka Samhita – Ksheera+ Navaneeta</i> <i>Sushruta Samhita- Shashtika Shali with</i> <i>Ksheera, JaangalaMaamsa ,</i> <i>Ksheera+Ghrita</i> <i>Harita – Payasa</i>
<b>Role of Payasa</b> – Owing to the <i>Krishata</i> seen in <i>Garbhini</i> during this period, <i>Payasa</i> acts as <i>Balya, Brimhaneeya, Vata-Pitta Shamaka</i> and <i>Kaphavardhaka</i> in nature, which helps in proper growth of fetus and strengthens mother due to its <i>Guru, Snigdha, Sheeta</i> properties and <i>Madhura Rasa</i> .		

**Combined Role of 4th And 5th Month Dietary Regimen:**

Poly Unsaturated Fatty Acids play a key role in this stage of pregnancy, for both the mother and the growing foetus. Long-chain polyunsaturated fatty acids (LC-PUFAs) include docosahexaenoic acid (DHA; 22:6n-3) and arachidonic acid (AA; 20:4n-6). It is well-established that both the intake of LC-PUFA's and the n-6-to-n-3 fatty acid ratio (n-6/n-3) are important contributing factors to nutritional adequacy of LC-PUFAs. *Ghrita* and *Navaneeta* have balanced n6/n3 ratio of PUFA. During 1st few weeks of pregnancy, there is low fetal PUFA

requirements, compared to increased maternal fat deposition. PUFA requirements of mother, the placenta and fetus steadily increase from halfway towards final weeks of pregnancy. [1]

**Role in Mother** – Storage of long chain PUFA is of great importance, as it can be used via placental transfer. Placenta initiates mobilization of fatty acids from maternal adipose tissue to fetal needs. Placental PUFA uptake and transfer is an ultra-selective process. Placental metabolism of PUFA is a substantial precursor of prostaglandins (PGs) E2 and PGF2α, which are closely associated with the initiation of labour. Because of its effective

transfer through the placenta and breast milk, DHA supplementation enhances DHA status in both the mother and her infant.[2]

**Role in Foetus** – PUFA’s play pivotal roles in infant neurodevelopment. In particular, LA and ALA are regarded as nutritionally essential fatty acids because they cannot be synthesized *de novo* from macronutrients and can also convert into AA and DHA, respectively. They accumulate in large amounts in the membrane phospholipids of the developing central nervous system. As precursors of prostaglandins and other eicosanoids, AA and DHA play important roles in regulating normal brain function. Furthermore, AA can be released from the cell membrane and influence structural changes in the membrane, which affects the neuronal membrane fluidity. An appropriate balance of these pathways is essential for normal brain development, whereas, an imbalance leads to impairments in neurogenesis.

Human and animal researches indicate that appropriate quantities of DHA in neural membranes are essential for cortical growth, neurovascular coupling, and glucose uptake and metabolism. Furthermore, several DHA metabolites protect the brain from oxidative tissue injury and stress. A low DHA level in the brain causes behavioural abnormalities and is linked to

learning disabilities and dementia. Neonates with higher DHA levels in umbilical plasma phospholipids had a longer gestational duration than neonates with lower DHA levels.[3,4]

- **Role of *Shashtika Shali* and *Samskrita Odana*** - Rich in dietary fibers, on fermentation of these dietary fibers, Butyrate is produced by gut-microbiota, which is a potent epigenetic modifier. Rich source of Zinc, plays essential role in DNA Methylation during intrauterine life and its deficiency may contribute to alteration in promoter methylation resulting in immune dysregulation. It is a rich source of carbohydrate, which is the prime component for the growth of fetus and good source of energy for the mother in the second trimester.

Muscular tissue of the fetus grows considerable from the 4th month onwards, requiring more proteins, which is fulfilled by *Samskrita Odana*.[5]

- **Role of *Jangala Mamsa*** - Rich source of choline, maternal choline supplementation during pregnancy modifies histone and methylation of DNA in fetal liver and brain. Meat serves as major source of Alpha Linoleic Acid.[6]

**Table 6. Relevance Of *Shashta Masa Paricharya***

Sixth Month	Garbha	Garbhini
Events	Establishment of <i>Buddhi</i> and <i>Balavarnopachaya</i> Fetal neurons begin to develop dendrites which establish synaptic connections with neighbouring neurons to form vast regions of	<i>Bala Varna Haani Apadhyate Visheshena</i> <i>Shramo Adhik</i> <i>Kikkiksa</i>

	interconnected neural network. The canalicular period of lung development, during which the bronchi & bronchioles enlarge & alveolar ducts develop, is nearly completed. Terminal sacs required for gas exchange have not yet formed	
<b>Paricharya</b>		<i>Charaka Samhita – Madhuroushadha Samskaarita Ksheera Sarpi</i> <i>Sushruta Samhita - Gokshura Siddha Yavagu or Gritha</i> <i>Harita – Madhura Dadhi</i>
<p><b>Role Of Gokshura Siddha Yavagu</b> - Yavagu provides strength and nourishment to bodily tissues and pacifies Vata Dosha in mother. Gokshura provides diuretic and anti-inflammatory properties. It helps to reduce edema and other complications of pre-eclamptic toxemia occurring in later months of pregnancy.</p> <p><b>Role of Madhura Dadhi</b> – Curd is rich in vitamin A, C, D, calcium, proteins, probiotics and folic acid. It helps in formation of Gut Microbiota which is completed between 12-14 weeks, This helps in maturation of immune system supplementation with probiotics during pregnancy modifies methylation of DNA particularly of obesity promoting genes and also prevents allergic diseases in offspring.[7]</p>		

**Table 7. Relevance Of Saptama Masa Paricharya**

Seventh Month	Garbha	Garbhini
<b>Events</b>	<i>Sarvanga Pratyanga Vibhaga Pravyakti</i> Lung alveoli begin to secrete surfactant, which helps to maintain the patency of the alveoli of the lungs sign of respiratory system maturity	<i>Nitya Klaanta w.r.t Shonita, Maamsa Klaanta Shareera - Kashyapa</i>
<b>Paricharya</b>		<i>Charaka Samhita – Madhuroushadha Samskaarita Ksheera Sarpi</i> <i>Sushruta Samhita -Prithakparnyadi Dravya Siddha Ghrita</i> <i>Harita – Ghrita Khanda</i>
<ul style="list-style-type: none"> <li>• <b>Role of Prithakparnyadi Gana Siddha Ghrita –</b></li> </ul> <p><b>For Mother</b> - A/C Kashyapacharya, 7th month comprises of Klanta Shareera, hence Vidarigandhadhi Dravyas</p>		

impart *Prajasthapana, Vayasthapana, Balya, Bruhmana, Angamarda prashamana* properties.  
**For Fetus-** It contains *Brihati*, which contains steroidal alkaloid and steroid, which helps in fetal lung maturity which occurs in 7th month.[8]

**Table 8. Relevance Of Ashtama Masa Paricharya**

<b>Eighth Month</b>	<b>Garbha</b>	<b>Garbhini</b>
<b>Events</b>	<i>Asthiri Ojo Bhavati</i>	Increased Maternal Weight
<b>Paricharya</b>		<i>Charaka Samhita -Ksheera Yavagu with Ghrita</i> <i>Harita – Ghrita Pooraka, Vividha Anna</i> after 8th month

**Combined Role of Third Trimester Dietary Regimen**

Substantial amount of DHA is accreted in fetal brain during the last trimester more efficiently than any other PUFA. DHA is profoundly associated with fetal cognitive development during last trimester. AA and DHA play major role in neurogenesis, myelination and synaptogenesis, maturation of CNS during fetal development in the last trimester. The speed of all these processes is enhanced during the 3rd trimester, thereby demanding large amount of LC-PUFA.[9]

**DISCUSSION:**

**Role of Fat-Rich Dietary Regimen And Correlation With Gestational Diabetes Mellitus:**

As pregnancy progresses, insulin sensitivity decreases between 50-70%, hence increases the circulation of metabolic fuels such as Arachidonic Acid, glucose and fatty acids. GDM impairs the DHA metabolism by decreasing the concentration of it in both the mother and fetus. Thus, having a negative impact on infant-children neurological and immune development.

LC-PUFA prevents GDM, by improving peripheral glucose uptake .However, early pregnancy intake of LC-PUFA of 300ng/dl might be associated with developing GDM. Consuming it in later pregnancy resolves the pro-oxidative and inflammatory states.[10]

**Role of Fat-Rich Dietary Regimen And Correlation With Gestational Hypertension:**

Gestational Hypertension is associated with vasoconstriction and endothelial tissue damage. Long chain polyunsaturated fatty acids (LCPUFAs) have significant potential to modify placental and fetal lipid environments and thereby modulate health outcomes. The omega-3 LC-PUFA in particular have been shown to exhibit both antioxidant and anti-inflammatory properties, and have potential therapeutic applications in reducing oxidative damage, inflammation and vasoconstriction during pregnancy. Hence, counteracting the mechanism which leads to PIH.[11]

**Role of Ksheera and Ksheerapakas in Pregnancy and its role in preventing Pregnancy Complications:**

*Acharya Charaka* has mentioned the use of *Ksheera* and *Madhuoshadha Dravya SiddhaKsheerapaka* in the 1st month of gestation and 2nd, 3rd, 4th month of gestation respectively. The various commonly available drugs which can be used for preparation of *Ksheerapaka* are *Yashtimadhu, Bala, Gokshura,, Punarnava, Morata, Parushaka, Madhuka* etc. As per *Ayurveda*, *Ksheera* plays a crucial role with respect to *Ahara* in *Garbhini Paricharya*.

The initial month of pregnancy is associated with nausea, vomiting and discomfort, leading to reduced interest and palatability towards milk. Hence the concept of depending largely on milk for catering to the nutritional requirements is questionable, however once the physiological discomfort is managed, the expecting mother should be encouraged to commence the intake of milk, owing to its diverse health benefits. Milk contains proteins, lipids, fatty acids, minerals, enzymes, vitamins, phospholipids, and pigments in trace amount. It has antioxidant and immunomodulatory properties.

*Madhura Rasa* and *Vipaka* of milk helps to reduce the *Tikshna* and *Ushnatva* of the drugs used in preparation of *Ksheerapaka* and thus increases the palatability during pregnancy.

#### **Importance of *Ksheerapaka Kalpana*:**

Subjecting milk to the process of *Ksheerapaka Kalpana* results in increased viscosity, reduced, resistance to oxidation, changes in flavour and alteration in protein stability.

It leads to breakdown of fat globules into finer and more stable state of dispersion. This process leads

to liquification of fat which increases the amount of fat surface and inactivation of lipases.

Thereby increasing the solubility of fat and protein in the media, which may enhance the extraction of the medicinally important active constituents and retains in the media. It would also be supportive in the absorption of the medicament.

#### **Role of *Garbhini Paricharya* in preventing frequent Urinary Tract Infection:**

*Gokshura* is mainly composed of spirostanol and furostanol saponins of the chlorogenin, hecogenin, diosgenin, tigogenin, gitogenin, neogitogenin, ruscogenin, neohecogenin and sarsasapogenin and Flavonoids (Kaempferol, Kaempferol-3-glucoside, and Tribuloside) which are responsible for its diuretic, anti-inflammatory, antioxidant property, encouraging its use in frequent urinary tract infections during pregnancy.[12]

#### **Role of *Garbhini Paricharya* in preventing Anaemia**

*Acharya Harita* has mentioned the use of *Parushaka (Grewia asiatica Roxb.)*. It is rich in iron, calcium, potassium, sodium, vitamin-C, vitamin-B2, carbohydrates; hence it is good in anemia during pregnancy. It is a rich source of sodium and potassium, hence it is helpful in maintaining electrolyte balance and providing energy.

*Sarkara* is rich in iron and contributes to fulfil daily iron requirement, as half a cup (100g) of *Sarkara* (Jaggery) contains calcium (40-100mg), potassium(1056mg),magnesium(70-90mg),sodium (19-30mg), iron (10-13mg), phosphorus (20-90mg),

zinc (0.2-0.4mg), manganese (0.2-0.5mg), copper (0.1-0.9mg) and chloride (5.3mg).[13]

#### **Role of *Garbhini Paricharya* in preventing Upper Respiratory Tract Infections:**

*Yashtimadhu* contains Isoliquiritigenin, which is a natural flavonoid that is derived from the root of the licorice. Isoliquiritigenin has exhibited anti-inflammatory and antioxidant properties. The 18 $\beta$ -glycyrrhetic acid and glycyrrhizic acid were reported to lessen the inflammatory cytokines generation. It has shown its effectiveness through many studies in inhibiting airway constriction, hyperreactivity, eosinophils infiltration, remodelling, and inflammation in the airway, hence it can be efficiently used in Asthma in pregnancy or any Upper Respiratory infections during pregnancy.[14]

#### **Role of *Garbhini Paricharya* in preventing P/V spotting:**

Sub-chorionic Haemorrhage or Haematoma is the leading cause for for the troublesome spotting per vagina during the first trimester. The *Ahara* mentioned in *Garbhini Paricharya* is a rich source of Alpha Lipoic Acid (ALA).

High titres of pro-inflammatory cytokines and low titres of anti-inflammatory cytokines increase the risk of sub-chorionic hematoma. ALA reduces the levels of pro-inflammatory cytokines (IL-1 $\beta$ , IL-6, IL-8 and IL-17), while it increases the Secretion of anti-inflammatory cytokines (IL-10). It also inhibits cyclooxygenase 2, which causes a decrease in prostaglandin E2 and nitric oxide (NO) secretion, thus reducing the risk of miscarriage in

the first trimester of pregnancy by accelerating the resorption of sub chorionic hematoma.[15]

#### **Role *Garbhini Paricharya* in Preventing Recurrent Miscarriage:**

Recurrent miscarriage is a critical disorder of pregnancy known to be caused due to trophoblast dysfunction, genetic polymorphism, elevated oxidative stress and inflammatory markers.

The various dietary regimens mentioned in *Garbhini Paricharya* such as *Ksheera*, *Ghrita*, *Madhuraoushadha*, *Shali* etc are a rich source of omega 3 fatty acids. Docosahexaenoic acid (DHA) promotes secretion of vascular endothelial growth factor in a trophoblast cell line. Hence omega-3 fatty acids exert regulatory effects on trophoblast dysfunction.

Omega 3 fatty acids reduce serum lipid peroxidation and improve the level of serum total antioxidant capacity, thereby reducing the load of cytokines, macrophages involved in the probable mechanism of inducing recurrent miscarriage.

*Harita* has mentioned the usage of *Navneeta* in the 1sttrimester.It is a rich source of vitamins like A, E, D, K and contains mainly zinc as the prime mineral. It plays a major role in many biological functions like protein synthesis, cellular division and nucleic acid metabolism.

Studies show that severe zinc deficiency increases fetal death due to spontaneous abortions or multiple congenital anomalies.[16]

#### **Role of *Garbhini Ahara* and Epigenetics – *Shreyasi Praja Utpatti*:**

In *Garbhini Paricharya*, it was found that each and every dietary article has ability to modify genetic

expression thereby imparts strong immunity to fetus and prevents from metabolic disorders of adulthood.

Epigenetic mechanisms utilize a variety of strategies in regulating gene expression generally through DNA Methylation or histone modification.

These changes are brought about mainly by nutrients like macronutrients, micronutrients, microminerals and dietary polyphenols supply. Hence, diet plays major role during pregnancy by regulating the genetic expression by reversal of abnormal gene activation.[17]

#### **Role of *Garbhini Paricharya* in Post-Partum Outcomes**

*Sutika* is a state of *Shoonya Shareera* in whom *Sarva Dhatu Shithilata* occurs due to constant *Pravaahana* and *Rakta Nisruti*, hence the body prepares itself way prior in the process of mammogenesis and lactogenesis.

*Acharya Harita* has mentioned the use of *Madhuka* and *Kakoli* in the 1st and 2nd trimester respectively along with milk. They act as *Balya*, *Brimhaneeya* and *Jeevaneeya*, Hence acting as potent galactogues and rich source of calcium, iron, phosphorus potassium and vitamins.

Hence, a conscious effort to follow *Garbhini Paricharya* provides woman the strength, overall nourishment and good physical and mental ability to undergo the challenging phase of post-partum smoothly.

#### **Superiority of *Garbhini Paricharya* over Daily Dietary Allowance during pregnancy**

The science of *Ayurveda* looks at *Aahara* through a broader perspective. Rather than quantifying the

benefits possessed by consuming certain foods, *Ayurveda* believes in the concept of considering *Aahara* as *Oushadha*.

*Aahara* here not only caters to the physical aspects of nutrition, but also to the emotional, psychological and functional aspects of overall nutrition of an individual. This aspect of *Aahara* is very critical during pregnancy, as pregnancy possesses *Douhridavastha*, which inturn possess the need to consume wholesome, likeable diet which is conducive to the pregnant mother and the growing fetus.

Stating the definition of *Pathya*, *Acharya Charaka* quotes that *Pathya* is the one that is pleasing to the mind and body of the individual and does not cause any adverse effects. Hence, the *Ahara* which is *Hridya* or liked by an individual or the *Ahara* which is conducive to an individual with respect to palatability, appearance and their personal liking can only be considered *Pathya* for that individual. Hence food which might be in par with the daily macro and micronutrient intake of a pregnant woman, if not pleasing to the pregnant woman cannot be considered as *Pathya*, Hence it is important to understand that *Ahara* is not a bowl full of macro and micro nutrients, but a diet pattern which has adequate nutrients, is palatable with respect to taste, liking and caters to maximum points mentioned under the *Ashtavidha Ahara Vidhi Vishesha Ayatana*.

According to *Harita*, pregnant mother on consuming wholesome diet and thereby fulfilling her dietary needs, gives birth to *Roopvan*, *Shoora*, *Pandita*, *Sheelvaan* and *Vidwaan* offspring. Hence

this clearly highlights the role of *Ahara*, beyond just fulfilling the physical dynamics, but caters to the emotional, psychological wellbeing of both the mother and the fetus. The concept of *Ahara*, specifically in pregnancy is very unique as it gives prime importance to the basic principles of *Ayurveda*, by considering *Rasa Dhatu* as the prime focus.

Commenting on this, Acharya *Dalhana* has clearly mentioned that the *Ahara Rasa* obtained from the *Chaturvidha Ahara* consumed by the mother, gets divided for fulfilling three main functions like, nourishment of the pregnant woman, formation of breast milk and fetal nourishment.

*Acharya Dalhana* and *Bhoja* further clarify that the process of utilization of this *Ahara Rasa* by the growing fetus is through *Kedara Kulya Nyaya*, hence justifying the highly selective process through which the nutrients are utilized as per their specific needs.

*Ahara Rasa* is considered as the basis of nourishment of an individual. Only an *Uttama Poshita Ahara Rasa* is capable of doing *Uttara Uttara Dhatu Poshana*, this concept highlights the need of consuming wholesome diet which not only fulfills the macro and micronutrient demand, but is also palatable, creates a positive outlook towards food, is liked by the pregnant woman and at the same time is capable of providing overall health and well being to both the fetus and the mother.

*Gokshira* being *Jeevaniya*, *Rasayana*, *Medhya*, *Balya*, *Stanyakara* and *Shramahara*, adequately possess all the properties required by the pregnant

mother and fetus for their nutrition and overall wellbeing.

*Ghrita* imparts *Dhee*, *Smriti* and *Medha*. It is *Agnivardhaka* and *Yogavaahi* in nature.

*Acharya Charaka* and *Sushruta* have mentioned the concept of *Upasneha* and *Upasweda* through which *Garbha Poshana* occurs. *Garbha Nabhi Nadi* is attached to the *Matru Rasavahanadi*, carrying the *Ahara Rasa*, and the fetus grows through *Upasneha*. Hence consumption of *Ghrita* and *Ksheera* play a crucial role in carrying out this process of *Upasneha*, as it contains fatty acids which helps in remodeling of uteroplacental architecture to facilitate increased blood flow and surface area for nutrient exchange.

#### **CONCLUSION:**

The *Ahara* aspect of *Garbhini Paricharya* caters to the maternal and fetal nutritional requirements adequately, if followed religiously along with the regular dietary pattern consumed on day to day basis. The science of *Ayurveda* being beyond numbers, this unique and individualistic dietary regimen may not alone be adequately in par with the recommended daily dietary allowance, However owing to the various fetal and maternal advantages, it is highly recommended to encourage pregnant mothers indulge and involve completely in the process of understanding and adapting to this regimen, building a holistic connection with appropriate diet and hence contribute to the upliftment of a healthy progeny at large.

#### **REFERENCES:**

1. Basak S, Mallick R, Banerjee A, Pathak S, Duttaroy AK. Maternal Supply of Both

- Arachidonic and Docosahexaenoic Acids Is Required for Optimal Neurodevelopment. *Nutrients*. 2021 Jun 16;13(6):2061. doi: 10.3390/nu13062061. PMID: 34208549; PMCID: PMC8234848.
2. Duttaroy AK, Basak S. Maternal Fatty Acid Metabolism in Pregnancy and Its Consequences in the Feto-Placental Development. *Front Physiol*. 2022 Jan 20;12:787848. doi: 10.3389/fphys.2021.787848. PMID: 35126178; PMCID: PMC8811195.
  3. Greenberg JA, Bell SJ, Ausdal WV. Omega-3 Fatty Acid supplementation during pregnancy. *Rev Obstet Gynecol*. 2008 Fall;1(4):162-9. PMID: 19173020; PMCID: PMC2621042.
  4. Kim, H., Kim, H., Lee, E. et al. Association between maternal intake of n-6 to n-3 fatty acid ratio during pregnancy and infant neurodevelopment at 6 months of age: results of the MOCEH cohort study. *Nutr J* 16, 23 (2017). <https://doi.org/10.1186/s12937-017-0242-9>
  5. Shweta d. A novel approach in the man through odana kal. Vol-2, Issue-1- Jan-Feb-2014.
  6. Indrio F, Martini S, Francavilla R, Corvaglia L, Cristofori F, Mastrolia SA, Neu J, Rautava S, Russo Spena G, Raimondi F, Loverro G. Epigenetic Matters: The Link between Early Nutrition, Microbiome, and Long-term Health Development. *Front Pediatr*. 2017 Aug 22;5:178. doi: 10.3389/fped.2017.00178. PMID: 28879172; PMCID: PMC5572264.
  7. Zhou L, Xiao X. The role of gut microbiota in the effects of maternal obesity during pregnancy on offspring metabolism. *Biosci Rep*. 2018 Apr 13;38(2):BSR20171234. doi: 10.1042/BSR20171234. PMID: 29208770; PMCID: PMC5897743.
  8. Fernando, K. & Wakkumbura, Hema. (2021). Scientific Review On Garbhini Paricharya According To Ayurveda Classics. *International Journal of Scientific and Research Publications (IJSRP)*. 11. 607-619. 10.29322/IJSRP.11.08.2021.p11674.
  9. Kim, H., Kim, H., Lee, E. et al. Association between maternal intake of n-6 to n-3 fatty acid ratio during pregnancy and infant neurodevelopment at 6 months of age: results of the MOCEH cohort study. *Nutr J* 16, 23 (2017). <https://doi.org/10.1186/s12937-017-0242-9>
  10. Du, H., Li, D., Molive, L.M. et al. Advances in free fatty acid profiles in gestational diabetes mellitus. *J Transl Med* 22, 180 (2024). <https://doi.org/10.1186/s12967-024-04922-4>
  11. Duttaroy AK, Basak S. Maternal Fatty Acid Metabolism in Pregnancy and Its Consequences in the Feto-Placental Development. *Front Physiol*. 2022 Jan 20;12:787848. doi: 10.3389/fphys.2021.787848. PMID: 35126178; PMCID: PMC8811195.
  12. Saeed, Muhammad et al. Promising phytopharmacology, nutritional potential, health benefits, and traditional usage of *Tribulus terrestris* L. herb. *Heliyon*, Volume 10, Issue 4, e25549.
  13. Zia-Ul-Haq, Muhammad & Stankovic, Milan & Rizwan, Komal & De Feo, Vincenzo. (2013). *Grewia asiatica* L., a Food Plant with Multiple Uses. *Molecules* (Basel, Switzerland). 18. 2663-82. 10.3390/molecules18032663.
  14. Wahab S, Annadurai S, Abullais SS, Das G, Ahmad W, Ahmad MF, Kandasamy G,

- Vasudevan R, Ali MS, Amir M. Glycyrrhiza glabra (Licorice): A Comprehensive Review on Its Phytochemistry, Biological Activities, Clinical Evidence and Toxicology. *Plants (Basel)*. 2021 Dec 14;10(12):2751. doi: 10.3390/plants10122751. PMID: 34961221; PMCID: PMC8703329.
15. Petca A, Bot M, Maru N, Calo IG, Borislavski A, Dumitrascu MC, Petca RC, Sandru F, Zvanca ME. Benefits of  $\alpha$ -lipoic acid in high-risk pregnancies (Review). *Exp Ther Med*. 2021 Nov;22(5):1232. doi: 10.3892/etm.2021.10666. Epub 2021 Aug 31. PMID: 34539828; PMCID: PMC8438679.
16. King, J.C. and Cousins, R.J. Zinc. In: Ross, A.C., Caballero, B.C., Cousins, R.J., Tucker, K.L. and Ziegler, T.R. eds. *Modern Nutrition in Health and Disease*. 11th Ed. Baltimore: Lippincott Williams & Wilkins; 189-205, 2014.
17. Metere, A., & Graves, C. E. (2020). Factors Influencing Epigenetic Mechanisms: Is There A Role for Bariatric Surgery? *High-Throughput*, 9(1), 6. <https://doi.org/10.3390/ht9010006>

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