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## Review Article

### DIET DURING PREGNANCY: AN AYURVEDIC PERSPECTIVE

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DOI: 10.7897/2321-6328.01333

Article Received on: 09/09/13

Accepted on: 13/10/13

#### Abstract

All the creatures on the earth are related to the process of birth which is a sign of new start along with growth and perception of atma (soul). God has sanctified the female with most precious gift of motherhood. Ayurveda, the system of Indian medicine and science of life deals with the wellbeing of mankind. The event of pregnancy desires patience and determination for almost a year. Hence every science lay efforts to make the process safe, having a lesser amount of trouble and successful with medicinal and non-medicinal ways to attain healthy mother and healthy baby and that is called as Antenatal or prenatal care. Nutrition is defined as the science of food and its relationship to health. Influence of diet of a pregnant woman on fetal development is well known today. Everything that affects the mother has impact up on the baby. To minimize the risk of disturbances for the duration of pregnancy, a regime for the pregnant woman to follow called Garbhini Paricharya (Antenatal Care) is advised in Ayurveda and to understand the effect of said antenatal care scientifically, this study is undertaken with the aim to discuss the role of diet specifically. Ayurvedic classics as well as Modern available literature have been consulted in regard to present paper. Garbhini paricharya (antenatal care) advocated by Ayurveda is to avoid hazardous effects on fetus, to promote normal growth and development of fetus and to conduct normal delivery without any fetal and maternal complications. Dietetic regimen described in Ayurveda is beneficial if followed properly and can be modified as per the life style of an individual accordingly.

**Keywords:** Nutrition, foetal development, diet of a pregnant woman, healthy mother, healthy baby.

## INTRODUCTION

Ayurveda, the system of Indian medicine and science of life deals with the well-being of mankind. God has sanctified the female with most precious gift of motherhood. Health and well-being of a baby in the womb depends up on the health and nutrition of the mother as she is both the seed as well as the soil where in the baby is nurtured for entire period of pregnancy. The nutrient rich soil of the mother's body ensures the germinating seed will obtain optimal nourishment to develop into a strong and stable sapling. A well-fed mother will be competent to provide her fetus all its requirements while accumulating reserves for abundant breast milk. Even three thousand years ago, Ayurveda had given importance to safe motherhood which aims at excellence in the creation of the fetus, its development devoid of anomalies, an easy full term delivery and safe guarding of the health of the mother. Now a day, in nuclear family system, there is hardly ever any person to provide a pregnant woman appropriate direction and help during early motherhood. Everything that affects the mother has impact up on the baby. To minimize the risk of disturbances for the duration of pregnancy, a regime for the pregnant woman to follow called Garbhini Paricharya (Antenatal Care) is advised in Ayurveda which reduce the risk of miscarriage, damage to the fetus, toxemia and other complications of pregnancy.

## MATERIALS AND METHODS

The three great authors Charaka, Sushruta and Vagbhata followed the scientific methods of study to enhance the

perception of Ayurveda towards humanity Hence Ayurvedic classics as well as Modern available literature has been referred in regard to present paper. Nutrition refers to nourishment that sustains life. Pike and Brown, 1984 defined it as "the science that interprets the relationship of food to the functioning of living organism. It includes the uptake of food, liberation of energy, elimination of wastes and all the processes of synthesis essential for maintenance, growth and reproduction"<sup>1</sup> As per Ayurvedic fundamentals, food composed of Panchabhootas (Five primary elements-prithvi (earth), ap (water), tejas (fire), vayu (air) and akasha (space), in four kinds of presentable forms (Peya-drinkable, Lehya-likable, Bhojya- chewable and bhakshya- eatable), having six tastes (sweet, sour, salt, pungent, bitter and astringent), of two potencies (hot and cold) or eight potencies (cold, hot, unctuous, non-unctuous, viscous, slimy, soft and penetrating) and possessing many properties, when ingested, undergoes digestion (in the alimentary tract). After it is digested properly by the Koshthagani (fire like agency present in the stomach and intestines), there arises its vital essence known as "Rasa" which is very subtle (thin and suitable to move through minute channels).<sup>2,3</sup> Thus produced rasa constantly going on like the process of time and where in the circulation of the body elements and the body channels is unimpeded-with growth, strength, complexion, happiness and life, as well as replenish the body elements. Man is said to be born from rasa (essence of food), hence this rasa should be protected (prevented from vitiation or loss) by all efforts, without any lassitude, exercising care in consuming foods

and drinks and other activities.<sup>4</sup> This rasa dhatu circulates throughout the body in subtle ways like the continuity of sound, flame and water i.e. in all directions/parts of body.<sup>5</sup> Hridaya (Heart) is its seat (chief place of stay), from the heart it travels through the twenty four dhamanis (arteries), ten of them going upward, ten of them going downwards and four going side wards / obliquely, nourishes the entire body constantly make it grow, supports and maintains it by activities, due to invisible causes.<sup>6</sup> When for some reason the body elements belonging to the essential category have suffered decrease or increase then the essential nutrient fluid by undergoing the required increase or decrease as the result of the food ingested, restores the balance of this group of elements, thus making for health.<sup>7</sup> It is mentioned in Ayurveda that the balanced Ahara Rasa (essence of food) which is taken by the pregnant woman helps in formation of Sapta Dhatus (seven tissues) in required amount in the fetus. Rasa Dhatu (Chyme) of the mother performs three functions. (1) Matru Pushti (nutrition to mother) (2) Garbha Pushti (nutrition to foetus) (3) Stana / Stanya Pushti (nutrition for the development of the breast and formation of milk).<sup>8</sup> Influence of the diet of a pregnant woman on fetal development is well known today. Different phases of fetal development are documented in Ayurvedic obstetrics (Prasuti Tantra) thousands of years prior to modern imaging techniques existed. It is quoted that to maintain each developmental phase certain herbs and foods to be taken during each month of pregnancy. Ancient Ayurveda scholar Acharya Charaka has quoted that a pregnant woman should start to take congenial diets from the very first day as she come to know that she has conceived.<sup>9</sup> Acharya Sushruta has mentioned that She should consume Hridya (palatable), Drava (liquid), Madhura (sweet) and Snigdha (unctuous) Dravyas (substances) medicated with appetizing medicinal herbs and such type of diet should be followed till delivery.<sup>10</sup> It is also mentioned that what so-ever eatables or drinkables are consumed by pregnant women, same will become congenial to the fetus, hence diet should be consumed by taking into consideration the place of living, season and digestive capacity of an individual and these should not be neglected ever.<sup>11</sup> It is mentioned that the pregnant woman is fit for the use of brihana (anabolic) therapy.<sup>12</sup> Welfare and contraindications of mother and the fetus are identical, hence the pregnant woman should use desired congenial diet.<sup>13</sup> She should consume hot water, milk and meat.<sup>14</sup> Some common articles are beneficial to a pregnant woman - Shali and Shastika rice (a variety of rice), mudga (green gram), wheat, flour of parched rice, butter, cow's ghee, milk, rasala (curd mixed with sugar and condiments-shree khand), honey, sugar, jackfruit, banana, fruit of amalaki (*Emblica officinalis*), Draksha (*Vitis vinifera*), sweet and sour substances like Madhu (honey), other along with desired food.<sup>15</sup> Along with these, surana (an edible tuber) and constipating articles along with their juice and all other congenial and beneficial diets.<sup>16</sup> Along with these generalized dictums, Acharyas have described the specific month wise management (Masanusasika garbhini paricharya) of a pregnant woman to compensate the requirements of mother as well as growing fetus and it is quoted that Pregnant woman should at least follow the monthly diet plan.<sup>17-22</sup>

### **I Month**

In the first month, once having doubt of conception, a female should take congenial diet preferably Madhura (sweet),

Sheeta (cold) and Drava (liquid) Ahara (diet) twice in a day in the morning and evening. In between these two diets, non-medicated milk should be taken repeatedly in desired quantity considering digestive power and strength (the quantity which does not produce indigestion). For first twelve days she should take ghrita which is extracted out from milk (Ksheerodhrita Ghrita) and medicated with Shalaparni and Palasa (*Butea monosperma*), water already boiled with gold or silver and cooled be taken as after drink. Yashti, Parushaka, Madhuka alone or combined with butter and honey followed by Madhura Ksheera (sweetened milk). Milk medicated with Garbha Sthapana Dravyas for twice a day.

### **II Month**

Sweet, cold, liquid diet, sweetened milk or milk medicated with Madhura group or kakoli.

### **III Month**

A pregnant woman should ingest more milk with honey, ghee and Shashtika shaali (a variety of rice) cooked in milk, Krishara -olio prepared with rice and pulse.

### **IV Month**

Butter extracted from milk (not from curds) in the quantity of one aksha (approximately 10 g) or milk with the same amount of butter should be given. Cooked shasti (a variety of rice) with curds, pleasant food, mixed with milk and butter and meat of wild animals should be given to the pregnant women during the fourth month.

### **V Month**

Ghrita extracted from milk or Ghrita with milk, Shashti rice with milk and Hridya Ahara with adequate quantity of Ksheera Sarpi, Yavagu, Payasa and food similar to that of the fourth month should be given except that, ghee is given (mixed with milk) instead of butter.

### **VI Month**

Ghrita (ghee) or rice gruel medicated with gokshura (*Tribulus terrestris*) Ksheera Sarpi alone and Madhura Dadhi (sweet curd).

### **VII Month**

Madhuraushadha siddha Ksheera Sarpi, Ghrita medicated with Prithakparnyadi group of drugs are indicated.

### **VIII Month**

Yavagu prepared with milk and mixed with Ghrita (Snigdha Yavagu) and Jangala Mamsarasa (unctuous gruels and meat-soup of wild animals); Ksheera Peya along with Ghrita, Ghrita Puraka.

### **IX Month**

Snigdha Mamsarasa with Ahara of Bahu Snehayukta Yavagu (Meat soups with cooked rice and fat or rice gruel mixed with good quantity of fat) should be given as diet. In this last crucial stage lighter food is advised such as rice soup with ghee, split mung bean soup. For those who cannot follow all these monthly observances, a simple solution is to take *Sida rhombifolia* with milk before bed and 1 table spoon Mahakalyanaka Ghee before breakfast for the whole pregnancy. These assist the child's physical and mental development as well as preventing congenital abnormalities.

**DISCUSSION**

Garbhini paricharya (antenatal care) is the most important aspect in the whole area of Prasuti Tantra (obstetrics) for the reason that rest of the aspects depend on this phase. Dietary regimens for pregnant women are mentioned in Garbhini Paricharya, General as well as month wise, emphasizing on requirement for proper growth and development of fetus, for keeping good health of the mother, for normal labor, and making mother and baby free from postnatal complications too. It is quoted that if the woman during the period of pregnancy takes wholesome diet the fetus get delivered easily in time in its well-developed form and without pain.<sup>23</sup> Furthermore it is also mentioned that the dietary regimen described in this section, if adopted promotes the growth of fetus without causing any abnormality.<sup>24</sup> Food is vital breath of living beings. Complexion, Cheerfulness, good voice, life, happiness, strength, intellect all are dependent on food.<sup>25</sup> While describing general dietary regimen the stress is given upon satvika type of food- in qualities as well as specific. Milk and drugs of Madhuragroup (Anabolics) have been advised for entire pregnancy period. Milk is a wholesome diet. It provides nutrition and stability to the fetus. It is sweet, unctuous, cold, galactagogue, refreshing, body promoting, intellect promoting, strength promoting, mind promoting, fatigue-alleviating, demolisher of dyspnoea, cough and internal haemorrhage, wholesome for all living beings, pacifier (of doshas), eliminator (of malas), reliever of thirst and appetizer. This is most useful in kshina (weakness), anemia, gastritis, emaciation, burning sensation and oedema.<sup>26</sup> Milk contains nine essential nutrients, Calcium – 30 % Daily Value Calcium helps build and maintain strong bones and teeth. This mineral also plays an important role in nerve function, muscle contraction and blood clotting. Vitamin D – 25 % Daily Value When fortified, a glass of milk provides about 25 % of the Daily Value for vitamin D. Vitamin D helps promote the absorption of calcium and enhances bone mineralization. Milk is one of the few dietary sources of this important nutrient. Protein- 16 % Daily Value the protein in milk is high quality, which means it contains all of the essential amino acids or "building blocks" of protein. Protein builds and repairs muscle tissue, and serves as a source of energy Potassium-11 % Daily Value Potassium regulates the body's fluid balance and helps maintain normal blood pressure. It's also needed for muscle activity and contraction. By providing 11 % of the Daily Value of potassium, milk contains more than the leading sports drink. Vitamin A-10 % Daily Value A glass of milk provides 10 % of the Daily Value of vitamin A. This nutrient helps maintain normal vision and skin. It also helps regulate cell growth and maintains the integrity of the immune system. Vitamin B<sub>12</sub>-18 % Daily Value Vitamin B<sub>12</sub> helps build red blood cells that carry oxygen from the lungs to working muscles. Riboflavin-24 % Daily Value Milk is an excellent source of riboflavin, providing 24 % of the Daily Value. Riboflavin, also known as vitamin B<sub>2</sub>, helps convert food into energy – a process crucial for exercising muscles. Niacin-10 % Daily Value (or Niacin Equivalent) Niacin is important for the normal function of many enzymes in the body, and is involved in the metabolism of sugars and fatty acids. Phosphorus helps strengthen bones and generates energy in body's cells. Providing 20 % of the Daily Value, milk is an excellent source of phosphorus. Milk has been referred to as the complete liquid food. Other nutrients are also present in smaller amounts. Ghee alleviates pitta and vata, is beneficial

for rasa and ojas, it is cooling, softening and improves voice and complexion.<sup>27</sup> Godhuma (wheat) is vata alleviating, sweet, cold, vitaliser, bulk promoting and unctuous.<sup>28</sup> Mudga (green gram) is astringent-sweet, cold, katu vipaka, light, non-slimy, alleviates kapha and pitta and is the best among the legumes used as pulses.<sup>29</sup> Grapes alleviate thirst, burning sensation, fever, dyspnea, wasting, vata pitta, udavarta, bitterness in mouth and dryness of mouth.<sup>30</sup> Fully ripe fruit of Panasa is sweet, slightly astringent, unctuous, cold and heavy.<sup>31</sup> Amlaka contains all the rasas except lavana (saline). It is rough, sweet, astringent, sour and excellent alleviator of kapha and pitta.<sup>32</sup> Fresh butter is appetizer and cordial.<sup>33</sup> Cow ghee promotes memory, intelligence, agni (digestion), alleviates vata, pitta. It is the best of all fats, is cold, madhura rasa, madhura vipaka has thousand potentialities and so, if used properly according to prescribed methods, exerts thousand (types of) action. Old (cow) ghee alleviates intoxication, epilepsy, fainting, phthisis, insanity, poison, fever and pain in female genital tract, ear and head.<sup>34</sup> Flour of roasted grains if taken in liquid form, saturates the person immediately and provides strength quickly.<sup>35</sup> Rasala is bulk promoting, aphrodisiac, unctuous, strength promoting and relishing.<sup>36</sup> The fruits of amalaki are astringent, cooling, digestive, stomachic, laxative, diuretic, antipyretic and tonic. They are useful in headache, dyspepsia, colic, flatulence, hyperacidity, anemia, emaciation, hepatic disorders, jaundice, diarrhea, dysentery, intrinsic hemorrhages. They are having effect (Karma) of Dahaprashamana (reduces burning sensation), Chakshushya (healthy for eyes), Medhya (Memory booster), Nadibalya (Nervine Tonic), Balya (Strength promoter), Rochana, Deepana (Stomachic), Anulomana (agents removing dosha from anus), Amlatanashaka (reducing acidity), Yakriduttejaka (liver stimulant), Hridya (beneficial for heart), Shonitasthapana (Hemostatic), Kaphaghna (reducing cough), Garbhasthapana (healthy implantation of embryo), Mootrala (diuretic), Pramehaghna (anti diabetic), Kushthaghna, (alleviate skin disease). Jwaraghna, Rasayana (rejuvenating). Pharmacological activities of anti-mutagenic, antioxidant, immunomodulatory, antifungal, antibacterial, antiulcer, HIV-1 reverse transcriptase inhibitory action<sup>37</sup>. The drugs of Madhura group are having anabolic property.<sup>38</sup> If we see the prescribed dietary regimen in respect to benefit of mother it may be helpful to mother in such a way in prevention of complications of pregnancy like Nausea, Vomiting, Anemia, Hemorrhage in pregnancy, Hypertensive disorders etc. furthermore it is supportive to improve health status of the pregnant woman as well. Milk medicated with Madhura group of drugs or milk with honey and Ghritta as advised in second and third month of gestation by Charaka also supply adequate quantity of glucose to the pregnant lady. Honey is a rich source of Dextrose, Sucrose, Dextrin's, Vitamin B and C, which maintains adequate blood glucose level of mother required by the fetus through placenta for metabolism. Ghritta by supplying fats provides energy for pregnant woman's metabolic needs and for fetal growth, as during pregnancy maternal system mostly utilizes fat for her metabolic needs and saves glucose for fetal metabolism. Honey provides extra calories and glucose for maternal and fetal metabolic needs and for growth and development of fetus. Meat is a rich source of vitamins and having ten essential amino acids. Drugs of vidarigandhadi gana, like Shaliparni, Vidari (*Ipomoea paniculata*), Mahabala (*Sida rhombifolia*), Nagbala (*Grewia hirsute*), Gokshura (*Tribulus*

*terrestris*), Prishniparni (*Uraria picta*), Satavari (*Asparagus racemosus*), Sariva (*Hemidismus indica*), Krishna Sariva, Punarnava (*Boerhaavia diffusa*), Kapikachchhu (*Mucuna pruriens*), etc. are Bacteriostatic, Antifungal, antibacterial, diuretic, anti-inflammatory, carminative, appetizer, anti hypertensive, rejuvenating and tonic.<sup>39</sup> So these drugs help to combat the oedema, hypertension, urinary tract and genital tract infections and also improve appetite and are hepatoprotective. During 1<sup>st</sup> trimester of pregnancy, nausea and vomiting are the common and troublesome problems for majority of the females.<sup>40</sup> hence, they are unable to take proper diet and get nourishment. Use of cold, sweet, liquid diet and milk can check dehydration and provide essential nourishment. In first month of gestation Acharya Vagbhatta specifically advised Ghritta extracted from milk medicated with Saliparni (*Shorea robusta* Gaertn.) and Palasha (*Butea monosperma*) along with sweet cold and congenial diet. As Palash bark (*Butea monosperma*) and Saliparni roots are digestive, astringent, appetizer, anathematic, nerve tonic useful in anorexia and dyspepsia, so Ghritta extracted from medicated milk of these drugs acts as a good medicine for excessive nausea and vomiting during first trimester.<sup>41</sup> Acharya Harita has mentioned that Madhuyasti (*Glycyrrhiza glabra*) and Madhukapushpa (*Madhuca indica*) etc. should be given with butter and honey. These all drugs are digestive, stomachic, appetizer, used in vomiting and indigestion. So these drugs improve digestion and appetite in first trimester when taken along with Ghritta.<sup>42</sup> By the end of 2nd trimester, most of the pregnant women suffer from such complications of water accumulation as oedema over feet etc. due to disturbances of renal function.<sup>43</sup> Use of Gokshura (*Tribulus terrestris*) may prevent these disturbances, as it is a good diuretic.<sup>44</sup> (*Tribulus terrestris* Linn) belongs to the family Zygophyllaceae, on the basis of extensive review of all available ancient and modern literature regarding its diuretic action. The experimental and clinical studies reported till now by various workers (Chopra RN, 1939, Gujerat ML, 1955, Karandikar GK, 1960, Singh RCP, 1971 and Singh RG 1991) also strengthen the diuretic action of the drug. Gokshura (*Tribulus terrestris* Linn.) is having a significant anti-hypertensive effect both systolic and diastolic without any side effects. The drugs group Prithakaparni (*Uraria picta*), Vidrigandha (*Pueraria tuberosa*) are diuretics and anabolics.<sup>45</sup> They relieve emaciation and renal disturbances, their regular use in seventh month helps in maintaining the health of mother and in proper development of the foetus. During seventh month, abdominal skin gets stretched giving rise to itching and striations, which are, called kikkis.<sup>46</sup> by taking sips of the infusion of berries or butter medicated with Manjistha (*Rubia cordifolia*), Yavagus (Rice Gruel), which is advised by Charaka in 8th month, the pregnant woman keep her free from diseases and she delivers the child possessing best health, energy, complexion, voice and compactness of the body.<sup>47</sup> Only adverse effect of this is the child may become tawny in complexion. Even though milk, gruel etc. may cause tawny colour in eyes, still they are required to be administered to the pregnant woman during ninth month because tawny colour in eyes is not a serious morbid condition and can be easily corrected as a later stage and the intake of milk, gruel etc. are very much beneficial during this period. If we throw light on dietary regimen in respect to foetal aspect, Anti mutagenic activity of amalaki can put a stop to congenital and genetic defects in foetus if consumed during pregnancy. By improving digestion it helps in the

absorption of the food consumed during pregnancy so as to improve nutrition. Shonitasthapana and Garbhasthapana qualities may lessen chances of Abortion and give stability to the foetus. As per the development of the embryo/foetus, the requirements of food and nutrition will be different hence the needs and desires of the mother will also be changed. By keeping this fact in mind, Ancient Ayurvedic Scholars have given the month wise dietetic regimen in detail. In the first trimester, an initial phase of pregnancy, especially in the first month it is said that the embryo takes the form of jelly because of intimate mixture of the five mahabhutas and get nourishment directly by transudation (upasnehan), therefore the aim should be to care for the balance of rasa and rakta as well as to stabilize the pregnancy.<sup>48</sup> That's why more jaleeya (liquid) substances like juicy fruits, milk, liquid diet and so are advocated. Madhura and sheeta veerya substances help in the formation of cellular mass and support growth. During second month the embryo takes a compact form and starts to assume a shape with its limbs and head.<sup>49</sup> Milk medicated with Madhura group of drugs as advised by Harita in second month of gestation, milk medicated with Kakoli and Rasayana, Madhura (having sweet taste) drugs like Shatavari (*Asparagus racemosus*), Madhuyasti (*Glycyrrhiza glabra*), Vidari (*Pueraria tuberosa*), Bala (*Sida cordifolia*), Ashwagandha (*Withania somnifera*), Punarnava (*Boerhaavia diffusa*) by their four mode of actions (Neutraceutical, Immunomodulatory, Antioxidant and Adaptogenic) are helpful in healthy growth of foetus in womb and save it from noxious agents in the period of organogenesis. In third month, placenta is established by now and baby's motor and sensory faculties start to develop. By the end of the third month, the body parts of the foetus become differentiated, sensory perceptions and motor reactions start developing, the heart starts beating, and is said to express its desires through the mother's blood.<sup>50</sup> This is the period when woman craves for certain foods/flavours. The needs of both the foetus and the mother are identical. Hence, Ayurveda recommends that her cravings be fulfilled as far as possible, if not contraindicated.<sup>51</sup> Dauhrida (bi cardiac) is a unique concept of Ayurveda.<sup>52</sup> Dau means two and hrida means the heart. Hence sometimes woman expresses desires which are not indicated to be consumed in the pregnant stage. But Ayurveda advocates that such desires if expressed by the woman are to be fulfilled by the attending relatives with some modifications by neutralizing their injurious effects through processing or adding wholesome things.<sup>53</sup> As this desire is indicative of deficiency of that property of the material inside the body of the foetus, hence fulfilment of the daurida (bi cardiac) is helpful for the proper growth of the foetus in utero. By suppression of longings, vata gets vitiated, moves inside the body and destroys or deforms the foetus in the formative stage. From the fourth to the seventh month, drugs, which give strength to the uterine muscles and nourishment to the embryo help to prevent intrauterine growth retardation (IUGR). Foetus derives nourishment through the umbilical cord by the kedar kulya method (just like a cornfield from the aqueduct) and mother's appetite often increases over the entire second trimester.<sup>54</sup> Diet should be one of rice, milk, butter and gee. Fruits which are orange or yellow in colour are advocated such as mangoes, apples, carrots, amalaki etc. Leafy vegetables are also advised. During the fourth month there is solidification and the development of the limbs, foetus becomes compact and gets stabilized and this adds to the weight of the fetus.<sup>55</sup> as a result

there is more need of solids, and more of solid food is advised. To prevent intrauterine growth retardation (IUGR), milk decoction made with *Desmodium gangeticum* (Shaliparni) is advised. From 4<sup>th</sup> month onwards, muscular tissues of foetus grow sufficiently.<sup>56</sup> According to the principle Mamsa Dhatu (muscle tissue) gets well-nourished with its Svayoni Vardhana Dravyas (diet having similar qualities) i.e. Jangala Mamsa (fat content).<sup>57</sup> For this reason, Sushruta might have advised the pregnant woman to take Jangala Mamsa. Kashyapa says that the meat soup which is taken by pregnant woman not only helps in achievement of pregnancy, but also provides nourishment to the foetus. It also suppresses Vata of pregnant woman.<sup>58</sup> Brahmi (*Bacopa Monnieri*) helps in calming the nerves and is also a good prajasthan (sustainer of pregnancy).<sup>59</sup> In 5<sup>th</sup> month, Blood, muscles, the mind and five senses develop.<sup>56</sup> Ghee, milk and rice soup is to be taken along with split mung dal (green gram) or a preferred protein source. As per conventional nutrition science, Mung (green gram) and Urad (black gram) do have proteins in different proportions. They can be taken in place of each other for protein requirements of the body. But, in Ayurveda, it is said that Mung (green gram) as more Pathya (Congenial), Supachya (easily digestible) and Laghu (light) whereas, Urad (black gram) is described as Guru (heavy), Snigdha (unctuous) and Pushtikara (which nourish the body). This difference is mentioned due to more Akasha and Agni Tattva in Mung and more Prithvi and Jala Tattva in Urad.<sup>60</sup> It is also during the sixth month that the fatty tissue is formed, in comparison to other months, there is further increase in the strength and complexion of the foetus during sixth month of gestation.<sup>61</sup> There is an all-round development of the foetus during the seventh month of gestation.<sup>62</sup> The diet given in the seventh month should be the same as in the sixth month. This would help in the proper development of the foetus. In second trimester muscular tissue of the foetus grows sufficiently, so more calories and proteins are required for healthy growth. So diet rich in Madhu (honey), Ghrita (Ghee), Butter, Milk and Sasti rice, Meat etc provide essential nutrients to the growing foetus. Hence, the use of these drugs will help in maintenance of proper health of Garbhini (a pregnant woman) and development of foetus. A study by Mardones – Sutender *et al* (1999) on pregnancy – Underweight women supplemented with milk based fortified product showed greater weight gain, greater mean birth wt. and superior iron status. Fat, salt and water is reduced in the diet from the seventh month onwards. Rice soup with ghee can be a regular easily digested dish. In 8<sup>th</sup> month, the foetus is well developed, at this stage the mother must be careful not to overeat as her digestion is weak and the stomach small.

## CONCLUSION

By comparing modern diet regime with the Ayurvedic one we see that both diets incorporate rice, cereals, Pulses, Milk and milk products, meat etc. in sufficient quantities. The difference lies in the advice given about fats; modern dieticians do not advocate large quantities of fats and sweets but allow taking them sparingly. Because fats and carbohydrates provide the extra calories for metabolic needs, as present day woman life is sedentary, as a result she does not require extra calories as they can be deposited as extra fat in her body. Therefore the use of fats and sweets sparingly is required to meet the essential metabolic needs of mother and for the growth and development of foetus. But for cellular

growth protein is required most, so use of protein in sufficient quantity is advisable by both diet systems. The aims of Grbhini paricharya (antenatal care) advocated by Ayurveda are to avoid hazardous effects on foetus, to promote normal growth and development of foetus and to conduct normal delivery without any foetal and maternal complications.

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**Cite this article as:**

Dhiman Kamini, Dhiman K.S. Diet during pregnancy: An Ayurvedic perspective. J Biol Sci Opin 2013;1(3):288-293 <http://dx.doi.org/10.7897/2321-6328.01333>