

**A CONCEPTUAL STUDY ON MALNUTRITION ACCORDING TO AYURVEDA AND
AYURVEDA MANAGEMENT OF KARSHYA (MALNUTRITION) IN CHILDREN****Dr. Priyanka Balasaheb Vapre*¹, Dr. Vishakha Vikas Pachore², Dr. Jayprakash Ashok Khairnar³, Dr. Jasmin K. Gohel⁴**¹Lecturer, Rognidan, Ashvin Rural Ayurved College At Manchi Hill, Sangamner, Maharashtra.²Reader, Stri Roga Evam Prasuti Tantra, Ashvin Rural Ayurved College At Manchi Hill, Sangamner, Maharashtra³Professor, Kaumarbhurutya, Ashvin Rural Ayurved College At Manchi Hill, Sangamner, Maharashtra.⁴Reader, Shalyatantra, Noble Ayurved College and Research Institute, Bamangam, Junagadh, Gujrat.***Corresponding Author: Dr. Priyanka Balasaheb Vapre**

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ABSTRACT

Ayurveda emphasize prevention over cure. A balanced diet with proper dietetic rule can help avoid a lot of common health concerns. The source of life for all living beings is food, growth, strength, intelligence, satisfaction, all are established in food. Ayurveda classic haphazardly explain nutritional issues. Each and every disease is due to faulty *Ahara* and *Vihara*. *Ahara vidhi* is equally important to get optimum benefits from consumed food. Childhood malnutrition is thought to be the cause of 35% of all fatalities in children under the age of five, as well as 21% of total worldwide disability-adjusted life years lost in children. *Karshya* not only concerns with weight loss, but also compares with malnutrition-like disorders. In Ayurveda, *Karshya* is a disease as well as cause, prodromal symptoms, feature of different diseases and bad prognostic sign. *Karsha* is also a physiological in *Vataja prakriti*^[1] individual.

KEYWORDS: *Karshya*, Kuposhanajanya vyadhi, Brimhana, Rasayana *Shatavari*, *Kapichchu*, Malnutrition, *Yuktivyapashraya Chikitsa & Panchakarma*.**INTRODUCTION**

Nutrition is having a major role in human's life. Malnutrition is a condition where children fail to maintain natural body capacities such as growth, learning and physical activities resisting power to infections as well as recovering from diseases. According to WHO poor feeding of infants and lack of nutrition in young children resulting in malnutrition is, "The single most risk factor for disease." It has a major role in more than the half of the nearly 11 million deaths in each year among children under 5 years of age. Malnutrition is viewed under *Apatarpanjanya Vyadhis*. Depending upon severity and aetiology they may be considered as *Karshya*, *Parigarbhika*, *Phakka*, *Balshosha*, *Shushkarevati*. Treatment of *Karshya* according to *Ayurveda* are *Nidanparivarjan*, *Shodhan Chikitsa*, *Sanshman Chikitsa*, *Brihan Chikitsa* and *Rasayana Chikitsa*. Drugs which are useful in *Karshya* Are *Ashwagandha*, *Shatavari*, *Vidari*, *Bala*, *Krushmand* and Drugs which are present in *Jivaniya Gana*.^[2]

A) *Nidana* (Aetiology)**The etiological factors that lead to Malnutrition can be classified into 3 headings.****1) *Aharaja*****a) Qualitative***Alpa Bhojana* (inadequate food),*Ruksha Annapana* (food that causes dryness) andExcessive intake of *Katu*(spicy), *Tikta* (Bitter), and *Kashaya* (Astringent) Rasa.**b) Quantitative***Anashana* (no food intake),*Alpashana* (less food intake),*Prमितashana*(Intake of nutritionally deficient food),*Langhana*(fasting).**2) *Vihara****Sharirika Vatasevana*(excessive exposure to wind),*Atapasevana* (Excessive exposure to sunlight),*Atibhargamana* (child labour),*Kriyaatiyoga*(excessive purification therapies),*Malmutrdivogavarodha* (suppression of natural urges),*Ativyayam* (excessive exercise)

3) Manasika

Atichinta (worry),
Atikrodha (anger),
Atibhaya (fear)

4) Others

Grahani (Inflammatory Bowel Disease),
Visuchika (Infective Diarrhoea),
Krimi (Worm Infestation),
Ksheeralasaka (Lactose intolerance/milk protein allergy),
Jirnyadhi^[4] (Chronic debilitating diseases),

B) SAMPRAPTI (PATHOPHYSIOLOGY)^[5]

Nidana Sevana



Agni Dushti



Amotpatti–Sama Ahararasa Will formed



Ahararasa formation But loss through Mala Inadequate



Rasa Dhatu And improper absorption



Dhatukshaya



Malnutrition

1) Balshosha (Marasmus Kwashiorkor)

Two different authors mention the term *Balshosha* and *KshirajPhakka* that are nutritional deficiency disorders. The causative factors of *Balshosha* are *Shlaishmikaannasevana* (Excessive energy dense food), *Diva Swapa* (Excessive day sleep) and *Shitambu* (Cold liquid items). Intake of these causative factors for long period of time leads to impairment of Agni further leading to *Aruchi* (Reduced digestive capacity), *Jwara* (Fever), *Pratishyaya* (Running nose) and *Kasa* (Cough). If these conditions were not detected and treated early will may lead to *Shosha* (Emaciation) called *marasmus Kwashiorkor*. As per *Kshiraj Phakka* is concern the intake of *Shlaishmikadughdha* will lead to *Agnidushti* results in *Bahuvyadhi* (Infectious diseases) and *Kshaya* (Failure to thrive)

2) Parigarbhika/Garbhaja Phakka (Kwashiorkor)

When the child is on feeding breast milk of pregnant women which has *Alpaposhakansha* (poor nutrients) and also abrupt stoppage of breast milk leads to *Parigarbhika/ Garbhaja Phakka*, The condition presents with symptoms of *Kasa* (cough), *Vaman* (vomiting), *Agnisada* (impaired digestive fire), *Tandra* (stupor), *Jwara* (fever), *Aruchi* (anorexia) and *Koshtavrudhhi* (pot belly).

3) Karshya/Underweight

Karshya is a under nutrition condition which results from less intake, *Vatdushitstanya* or secondary to debilitating disorder where child becomes malnourished.

4) Vyadhi Sambhavaja Phakka (Diseases leading to Karshya)

It is a severe form of malnutrition condition which is result of chronic diseases like *Prameha*, *Grahani*. Clinical symptoms shows *Shushkaspikha* (wasting of buttocks), *Shushkabahu* (wasting of upper limbs), *Shushkauru* (wasting of thighs), *Mahoshira* (big head appearance), and *Mahodara* (pot belly). Due to wasting in body parts, *Nischeshhta* (inability to walk) of *Adhokaya* (lower limbs) etc. represents grades of *Marasmus*. *Prameha* is a metabolic disorder where *Dhatusara* (essential nutrients) is lost, as happens in *Glycosuria*, *Phenyl Ketone-Albumin urea* thus child develops life threatening condition if not managed properly. In some cases diseases due to *Grah adushti* (debilitating infections), *Grahanivikaras* (diseases of Pancreas) shall also land up in malnutrition.

5) Shushka Revati (Debilitating infections)

Ancient *Acharyas* describes many *Grahas* (Demon) in Ayurveda literature. The *Graha* affects the child represents infectious spectrum of diseases that results into *Sarvangakshaya* (Emaciation). This child though feed with enough quantity of high quality of food ends up in malnutrition. When the condition becomes chronic the same child presents with *Annadweshha* (aversion to food), *Nanavidh Shakrita* (Different colour stools), *Vivarnata* (Loss of lustre), *Udaragranthi* (Abdominal nodular swelling), *Jivhanimnata* (Geographic tongue).

Upadrava (Complications)

Grahani leads to *Agnimandya*, *Shwasa* and *Kasa* With above discussed perspectives we can conclude that the Malnutrition is either due to *Agnimandya* or due to *Dhatukshaya*.

D) Chikitsa

Therefore the principle of treatment shall be the line of *Agnidipana*, *Dhatusartavardhan*, *Brimhana*. In case of malnutrition along with other complications like inability to speak, walk, irritability and others diseases the respective treatment should be adopted.

1) Abhyantarachikitsa

By oral use of various *Kalpas* (Medicine preparations) *Haritakichurna* (powder of *Terminalia chebula*), *Trivruttakshira* (roots of *Operculina turpethum* boiled in milk), *Draksha rasa* (fruit juice of *Vitis vinifera*) can be used. *Rajanyadichurna*, *Aravindasava*, *Pippalyadighrita*, *Kushmandaavaleha*, *Kalyanakaghrita*, *Chyavanprasha* are used for *Dhatusaravardhan*.

2) Bahyachikitsa

By external application therapy *Udavartana* (dry powder massage), *Abhyang* (oil massage),

Shirodhra (steadily fripping of medicated oil or liquids on forehead),
Shashtikashalipindsweda (sudation therapy with cocked rice),
 Basti (medicated enema) to stimulate child and to rehabilitate

Care should be taken to avoid the factors which can aggravate the malnutrition.

E) *Pathya*

1) *Aahara*

Nutritional diet that includes all components like proteins, fats, Carbohydrates along with minerals.

2) *Vihara*

It includes preventive as well as rehabilitative measures that are effective for both mind and body like playful activities, peace of mind, music therapy, active and passive physical exercise.

CASE HISTORY

A 2 year 8 months old female patient was brought to the Out Patient Department of Kaumarabhritya, her parents with complaints of not gaining weight appropriate for age and associated with less interest towards food since 1 year. This child, does not like homely feeds, but likes bakery food products, that too in less quantity.

CLASSIFICATION OF PEM

Table 1: Indian Academy of Paediatrics (IAP)^[6] Classification.

GRADE	CHARACTERISTICS
First Degree	Weight between 80 and 70% of expected for age.
Second Degree	Weight between 70 and 60% of expected for age.
Third Deree	Third Degree Weight between 60 and 50% of expected for age.
Fourth Degree	Weight below 50% of expected in case the child has demonstrable pitting edema, the letter "K" is placed in front of the evaluated grade.

After a thorough interrogation with the parents regarding the diet, life style and habits of the child and the history of present illness and after a proper evaluation regarding the present condition of the child, he was admitted to the inpatient department of our hospital and planned for Deepana pachana, Sarvanga Abhyanga, Swedana, Basthi and Brimhana, Karshyahara oushadhi.

EXAMINATION

Table 2: Assessment of general condition of the child.

Bowel	Altered
Appetite	Slightly reduced
Micturition	Regular
Sleep	Sound

Table 3: Assessment of Karshya.

PARAMETER	FINDINGS
Kshudha (Hunger)	Slightly reduced
Koshta (Bowel habits)	Altered
Daurbalya (Generalised weakness)	Generalised weakness present
Nidra (Sleep)	Sound
Aakruthi (Appearance)	Genera appearance is lean
Cheshta (Activities)	Reduced activities

Table 4: Chief Complaints.

SL No.	Complaints
1	Shushka Sphik (Dried up buttocks)
2	Shushka Udara (Dried up abdomen)
3	Shushka Greeva (Dried up neck)
4	Dhamanijala santataha (Prominent vascular network)
5	Twagasthi shesho (Remnant of skin and bone)

TREATMENTS GIVEN

A single course of treatment which comprises of Deepana, Pachana, Sarvanga Abhyanga, Swedana and Basthi along with Karshyahara and Brimhana oushadhi was given.

Table 5: Treatments Given.

1. Deepana paachana with: Panchakola phanta (20ml-20ml-20ml) before food- [Only for first two days]
2. Sarvanga Abhyanga with Mahamasha thaila
3. Shashtika Shali Pinda Sweda (S.S.P.S)
4. Matra Basthi with Aswagandha Ghrita (20ml)
5. Ksheerapaka with a powder combination of Aswagandha, Bala and Shathavari ⁷ (20ml-20ml-20ml)
6. Aswagandha Leha (1sp-0-1tsp) with Warm milk before food.
7. Draksharishta (1tsp-0-1tsp) with equal amount water after food.

ADVISE AT THE TIME OF DISCHARGE**Advice at the time of discharge: TREATMENT**

1. Abhyanga (Daily body massage) with Mahamasha thaila-to be continued in home.
2. Hingwashtaka Churna (1tsp-1tsp-1tsp) with food.
3. Aswagandha Leha (1tsp-0-1tsp) with warm milk before food.
4. Draksharishta (1tsp-0-1tsp) with equal amount water after food.
5. Ksheerapaka with powder combination of Aswagandha, Bala and Shathavari (20ml-20ml-20ml) to be continued in home.
6. 6 Ushna Jala Pana

CLINICIAN ASSESSED OUT COMES

1. This child was with complaints of not gaining weight appropriate for age and associated with less

interest towards food since 1 year. Remarkable changes were noticed in the appetite and digestion of the child.

2. After initiating the treatments, child has started accepting feeds comparatively easier and started asking for it when hungry.
3. Initially, the child was said to have generalized weakness in the body because of inappropriate weight gain and loss of appetite, which was conveyed by parents. After the course of treatment, general health status has improved.
4. Weight has increased from 8.1kg to 8.75 kg by the completion of 10 days of treatment.

Table 6: Improvements Noted.

SL NO.	PARAMETER	IMPROVEMENTS
1	Kshudha (Hunger)	Appetite has very well improved.
2	Koshta (Bowel habits)	Bowel habits improved
3	Daurbalya (Generalised weakness)	Weakness reduced.
4	Nidra (Sleep)	Sleep pattern improved.
5	Aakruthi (Appearance)	General health status improved.
6	Cheshta (Activities)	Activities have improved.

DISCUSSION

Brumhana and *Vrushya* Yoga have resulted in obtaining the phenomena of ideal anabolism. *Brumhana* Yoga has *Kapikachhu*, *Shweta musli*, and *Shatavari* are *Brumhana* and *Vrushya* both properties in it, that's why it shows a better result. *Basti* is better in *Vatahara Guna* and fruitful in microcirculation that is why it produces a better result.

CONCLUSION

In the present study, it has been concluded that *Brumhana* is the line of treatment in *Karshya* (malnutrition) and gives a fruitful result. *Ayurvedic* medication and procedures are very efficacious to overcome this malnutrition named, a great burden on society. Assimilation has also a very big role for the absorption of *Brumhana Yoga*, and for this, regulation of *Agni is very important*. *Basti* procedure is more efficacious than drug administration. Overall *Ayurveda* is very efficacious in *Karshya*.

REFERENCES

1. Sushruta. SushrutaSamhita, edited with Ayurveda TatvaSandipika by Shastri Ambika data Kaviraja. 1st ed. Varanasi.
2. Ghai OP, Paul VK, Bagga A, editor Ghai Essential Paediatrics, chap. 2nd, edition 7th (reprint), CBS Publishers and distributors, New Delhi 110002, India, 2010; 26.
3. Alagappan R, editor Manual of Practical Medicine, chap. 8th, edition 4th, Jaypee Brothers . 4. Bhisaga

charya Satyapala, editor Kashyap Samhita Vriddha jeevakiyatantra a with The Vidyotani Hindi Commentary and Hindi Translation of Sanskrit Introduction, Chikitsasthana chap. 17th, verse 4, Edition 1st(reprint), ChaukhambhaVishvabharti Oriental publishers and distributors, Varanasi, 221001, India,

4. Agnivesha. CharakaSamhita.AyurveddipikaAy ushihindiCommentry. 1st ed. 5 website: <http://www.ayurlog.com>, January 2019; 7th(1st). Varanasi Chaukhambaorientalia, 2005; 830.
5. Vagbhata. Ashtanghridayam,Nirmalahindi commentary. 1st ed. Delhi. ChaukhambaSurbharati, 2007; 599.
6. Sen Das K G. Jwaradhikara. In Siddhinandan Mishra (eds.) Bhaishajya Ratnavali 1st ed. Delhi; Chaukhamba surbharati, 2009; 211.
7. Kashyap, Kashyapsamhita with Hindi commentary and hindi translation of Sanskrit introduction by Ayurvedalankar Bhisagachary Shri Satypal, 10th ed. Varanasi, Chaukhamba Sanskrit sansthancharu printers, 2005; 140.