

ANUPANA IMPORTANCE IN KAUMARBHRITYA (BALA)

Dr. Pushkar Shekhar Badhe*¹¹Associate Professor Kaumarbhritya, Anand Ayurved College, Vaijapur.Article Received on
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*Corresponding Author

Dr. Pushkar Shekhar
BadheAssociate Professor
Kaumarbhritya, Anand
Ayurved College, Vaijapur.

ABSTRACT

A central challenge of administering medicine to children is a “matter of taste”—drugs, by their very nature, often taste unpleasant, with bitter taste a primary culprit. More than 90% of pediatricians reported that a drug’s taste and palatability were the biggest barriers to completing treatment.^[1] Medicine often tastes bitter, and because children are more bitter sensitive than are adults, this creates problems with compliance. Bitter arises from stimulating receptors in taste receptor cells, with signals processed in the taste bud and relayed to the brain. Most children at some point in their lives are prescribed medicine. Some refuse to take it, and they and their parents suffer the consequences. Although children are subject to many of the same

ailments and diseases as adults and are treated with the same drugs, most drugs (nearly 75%) available in the United States lack Food and Drug Administration (FDA)-approved pediatric formulations and therefore do not have labeling information about pediatric safety and efficacy.^[2] It is a liquid that is advised along with medicine or after medicine. Concept of *anupan* is limited to medicine even it is advised for food also. *Anupan* brings about refreshment, Pleasure, energy, nourishment, satisfaction and steadiness in the food eaten. It helps in broke down, softening, digestion, proper assimilation and instant diffusion of the food taken. Best *Anupan* is *Antariksha jala & Madhu*. So *anupan* is one of the important points in treatment in *Balaroga*.

INTRODUCTION

Childhood is considered as the most important phase in life, which determines the quality of health, well being, learning and behaviour across the lifespan. This may be the reason for giving the foremost position for *Balacikitsa* among *Ashtangas* (8 branches) of *Ayurveda*. Taste is one of the senses through which humans and other animals perceive their

environment. One of the primary taste qualities is bitter, a sensation that arises when specific chemicals are detected by specialized receptors in the tongue, as well as other parts of the oral cavity. Drugs usually are administered not alone but, rather, as part of formulations that are in either liquid or solid form. Liquid formulations are complex mixtures containing many other components besides the active ingredients; excipients include, but are not limited to, bulk materials, flavorings, sweeteners, buffers, preservatives, and coloring agents.^[3] Because masking the bitter taste of medications is a major challenge in formulating liquid medications, drugs are often combined with more pleasant-tasting compounds, for example, sucrose, high-intensity sweeteners, and flavors popular with children, such as bubble gum. Adding both sugars and acids to medication formulations reduces, but does not completely eliminate, the bitterness of drugs.^[4] However, frequent use of sucrose-sweetened medicines has been linked to dental caries in children.^[5-9]

Bheshaja avacharana vidhi (Drug administration) in *Ayurveda* is a science by itself. Under this title it constitutes a concept *Anupana* (vehicle), which forms an integral part of *chikitsa* (treatment). To cure the disease the use of proper *anupana* along with specific drug therapy is equally important. The speciality of *anupana* concept is that the medicines can be used for treating different kinds of diseases by changing the *anupana*. *Anupana* plays a very significant role in treating the diseases and also helps the drug to act quickly. The concept of *anupana* is not limited to medicine. In the concept of food, *Anupana* helps in its better digestion and absorption and provides complete nourishment of the body. *Madhura Rasa* promotes strength, pacify hyperacidity and inflammatory conditions. Actions of Rasas –

Madhura Rasa Karma^[10]

1. Nadi Samsthana- Alhadakara, Shad Indriya Prasadakara, Medhya, Tarpana.
2. Pacahana Samsthana- Anulomana, Trishna Nigrahana.
3. Raktavaha Samsthana- Sandhaniya, Hridya.
4. Shwasana Samsthana- Kanthya.
5. Mutravaha Samsthana- Mutrala.
6. Prajanana Samsthana- Vrushya, Garbhasthapana, Stanyajanana.
7. Twacha- Dahashamana, Twachya, Keshya, Varnya.

Actions of Rasas on Mala

1. *Madhura, Amla, Lavana - Srishta Vin Mutra Maruta*

Qualities of Rasas

1. Madhura Rasa - Snigdha, Sheeta, Guru

Anupana Guna-Karma (Effects)^[11,12] The effect of *Anupana* can be studied under 4 point's i.e., 1. Effect on *ahara* (Food): When the *Anupana* is followed by food it does the following- *Bhuktamavasadayati* (draws the ingested food inward), *Sanghatambhinnati* (split the hard mass of ingested food), *Kledayati* (it moistens food), *Mardavatamapaadayati* (softens), *Sukhamparinamayati* (brings easy digestion), *jarayati* (digests). 2. Effect on *aushadha* (Medicines): *Anupana* followed by *aushadha* brings- *Bhaishajyamkshananevaagneshuprasarpati* (medicine quickly spreads all over body), *Aushadhagunakaram* (enhances the properties of medicines), *Rasadeenamparamanuvahavibhajati* (integration of constitution), *Rasadinamdrutamprasarpati* (spreads with in fraction), *Bheshajyamparibhramayati* (helps in circulation of drug). 3. Effect on *vikara* (Diseases): *Anupana* brings *Doshashamana* (mitigates doshas), *Doshasanghatabhedana* (separates the combined doshas in body), *Pipasahara* (over comes thirst), *amahara* (digests indigested food), *shramahara* (relieves exhaustion), *klamahara* (tiredness), *rogaghnabheshajamsahakari* (enhances the properties of medicine), and *rogibalagunawati* (gives strength to patients). 4. Effect on *Swastha* (Healthy): It does *tarpana* (contentment), *preenana* (satisfies), *urjakara* (invigorates), *brimhana* (nourishment), *ayu* (increases life span), *jeevana*, *balam*, *dridangata* (firmness), *sukhaswasthya* (healthy), *rochana*, *deepana* (appetizer), *vrishya* (aphrodisiac), *varnya* (enhances colour and complexion *Anupana Karmukata*^[13] As the drop of oil put on the surface of stable water spreads so quickly, similarly the *aushadha* along with the *Anupana* spreads in fraction of time throughout the body and produces its effect when administered with appropriate *Anupana*.

Review of literature

Acharya sharangadhara has mentioned that when medicine is administered along with *anupana*, the medicine spread all over the body rapidly as a drop of oil spreads over water very quickly. So *anupana* is helpful for easy absorption of drugs in the body. Proper *anupana* brings refreshment of body quickly and helps in easy digestion resulting in promotion of longevity, strength, pleasure, softening and liquefying of medicine, digesting, assimilation and instant diffusion of medicine. *Yogarajnanakar* wrote that *anupana* of any medicine are responsible factor for minimizing the drug dose and to get synergetic effect. If there are some

toxic or adverse effect manifested by *Ayurvedic* formulation, it can be subsided by the influence of adjuvant and drug dose can be minimized. *Anupana* should have opposite properties of the medicine but not not to be incompatible with it. It helps to properly assimilate with medicine in GI Tract. It also softens hard mass of medicine, moistens and digest it. Single drug can be used to treat most of the diseases when given with suitable *anupana*. Always a clever physician should select *anupana*, which increases disease curing capacity of the medicine with which it is given.

DISCUSSION

Best *Anupana*^[14] *Acharya Sushruta* said that, *Jala* is the best among all *anupana*. The *Yoni* of all *rasa* is *Jala* and it is *saatmya* to all *bhuta*. It is considered as *jivaniya* (vitalizers and rejuvenators). *Mahendra toyam* is considered as *uttama anupana*. For *Vata & Kapha Ushna jala* is the best and for *Pitta & Rakta Sheetala jala* is the best.

Properties of *Madhu* (Honey) in *Ayurveda*: This is one of the best *Yogvahi* substance i.e. without changing its own properties, honey carries the effects of the drugs added to it. It means it enhances the properties and actions of the substances with which it combines.^[15]

Properties according to modern science:^[9] Various experiments and studies on honey have shown that it possesses antiseptic, antimicrobial, anti-inflammatory, sedative, mild laxative, healing and cleansing properties.

Therapeutic uses of Honey (*Madhu*) It is used for cold, cough, fever, sore eye and throat, tongue and duodenal ulcers, liver disorders, constipation, diarrhea, kidney and other urinary disorders, pulmonary tuberculosis, marasmus, rickets, scurvy and insomnia.^[16]

Godugdha (Cow Milk) Ayurvedic View

According to *Charak Acharya* *Godugdha* is *Madhura* (Sweet) in taste, *Sheeta Virya* (Cold) in potency, *Mrudu* (Softening the Cells/tissues), *Snigdha* (Demulcent), *Bahala* (Thick), *Shlakshna* (Smooth), *Picchila* (Sticky in nature), *Guru* (Heavy), *Manda* (Dull), *Prasanna* (Causes enthusiasm). Acts as *Rasayana* (Vitalizer), *Oja Vriddhi* (Increases essence of all the seven *Dhatus*; *Rasa-Rakta-Mamsa-Meda-Asthi-Majja-Shukra*)

Modern view

Godugdha (Cow's milk) naturally contains the abundant amount of protein needed for her calf. That amount of protein is not only unnecessary but unhealthy for human beings. Excess amount of protein in our diets causes calcium to leach out of our bones.

Ghrta- Properties

In *Bhavaprakasa* it is told that *ghrita* is *Rasayana*, tasty, good for eyes, stimulant for digestion, supports glow and beauty, enhances memory and stamina, promotes longevity and protects the body from diseases. Other properties of *ghrita* include cooling and *mruduta* of *angas*, enhancing clarity of voice and complexion. It is conducive for *rasa dhatu*, *sukra dhatu* and *ojus*. [C.Su 13/14]

Recent Studies

Ghee contains 8% lower saturated fatty acids which makes it easily digestible. Due to having 4-5% linoleic acid, an essential fatty acid, it promotes proper growth of human body. *Ghee* also contains vitamin A, B, E and K. Vitamin A and E are antioxidant in nature and are helpful in preventing oxidative injury to the body. Vitamin A also keeps epithelial tissues of body intact, keeps outer lining of eyeball moist and prevents blindness. *Ghee* is lipophilic and this action of *ghee* facilitates transportation of ingredients of formulation to target organ and final delivery inside the cell, because cell membrane also contains lipids.

CONCLUSION

Concept of *Anupana* is a unique contribution and essential part in administration of *Ahara* as well as *Aushadha*. *Anupana* play a major role regarding potentiating of drug action through pharmacodynamics and pharmacokinetics as well as improvement of *aushadhabala* and *rogibala*. With the help of same drugs, we can treat many kinds of diseases with different *anupana* which means *anupana* can easily intervene the mode of action of the main drug. Other than intervention of drug action, *anupana* helps in palatability (e.g. honey, sugar, jaggery etc.), easy administration (e.g. along with water, *ghee*, *swarasa*, decoction etc.) and prevent irritation of mouth, throat and stomach (*ghee*, *tilataila*, *kumara swarasa* etc.). It also controls adverse drug effect and drug allergies due to its anticorrosive action and minimizing action of toxicity. Thus, suitable *Anupana* should be selected for different individuals and different conditions to obtain maximum benefit so in *balroga Ayurveda* medicine with *anupana* like *godugdha*, *gogrita*, *madhu* is better choice.

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