



## Review Article

### A CONCEPTUAL REVIEW OF ANUPANA PRACTICES IN AYURVEDA

Data Ram \*<sup>1</sup>, Ajay Pratap Chauhan <sup>2</sup>, Vineet Singh <sup>3</sup>

<sup>1</sup> Assistant Prof., Department of Swasthavritta and Yoga Sanjeevani Ayurvedic Medical Collage Amroha, Uttar Pradesh, India

<sup>2</sup> Assistant Prof, Department of Dravyaguna, Sanjeevani Ayurvedic Medical Collage Amroha, Uttar Pradesh, India

<sup>3</sup> Department of Swasthavritta and Yoga, Faculty of Ayurveda, IMS, BHU, Varanasi, Uttar Pradesh, India

\*Corresponding Author Email: drdataram1983@gmail.com

Article Received on: 22/10/19 Approved for publication: 12/12/19

DOI: 10.7897/2230-8407.1012324

#### ABSTRACT

Anupana is a fluid vehicle which is taken before or along or after with Ayurvedic consultation. Anupana is an integral part of Ayurvedic consultation either as a dietary guideline or with medicine. This provides a favourable environment at every tissue level to obtain the highest efficacy of diet and medicine. Anupana (vehicle) is practiced in Ayurveda and Indian tradition since time immemorial. Anupana aids or assists the action of the main ingredients and also increase patient strength (Rogibala). This unique science has the facilities to select vehicle according to constitution of an individual, Dosha, Roga and medicine selected. Nowadays, the concept of Yogavahi has been also accepted by modern medical science in terms of bio enhancer. So, more emphasis should be given on Anupana to obtain the accurate results of Ayurvedic consultation both for Ahara(diet) and medicine.

**Keywords:** Anupana, Yogavahi, bio enhancer

#### INTRODUCTION

A Review of Anupana practices is conceptual to furnish and explore the available scattered knowledge in Ayurveda texts. The dravya (substances) used as Anupana now proven by new scientific researches with new terminology as bio-enhancer and with other functions. This is necessities to re-emphasis on Anupana for obtaining the accurate result of Ayurvedic consultation.

We concluded that Anupana is the best way to reduce dose, toxicity, increase bioavailability and Lowers the adverse effects and will have a beneficial influence on the economy of the country. The recommendation of medicine and Ahara (diet) is incomplete in Ayurveda without the practice of Anupana. The concept of Anupana (vehicle) is practiced in Ayurveda since ancient times. Information related to description, importance and utility of Anupana is found to be scattered in Ayurvedic literature. The practice of proper Anupana is decreasing by Ayurvedic experts day by day, but modern science inclined towards this concept and searching with new term bio-enhancer. Many drugs both synthetic and herbal face the problem of reduced bioavailability, which is the rate and extent of drug entering into the systemic circulation and becomes available at the site of action therefore particular Anupana can play an important role to enhance the bioavailability of drugs. This concept is mentioned as Yogvahi<sup>1</sup> (A substance which enhance the property and action of core drug) in Ayurveda is used to increase the effect of medicines by increasing oral bioavailability, decreasing adverse effects and to avoid parenteral routes of drug administration. Specific Yogvahis or bio-enhancers are come under Anupanadravya.

#### Anupana

Anupana is the media that can be taken either before or after or along with drugs or diet. Anupana is the best digestant if taken after food.<sup>2</sup> Pashchatpaana (after intake of a meal), Madhyapaana (in between meal), Antahpaana (right after the meal), Sahapaana (along with meal), Aadipaan (before meal) these term used for Anupana based on administration time with reference to food or drugs.

#### Ideal anupana

An ideal Anupana (after drink) is that which has properties opposite to those of food or medicine but not incompatible with them, at the same time it should not harm the dhatus (tissues) such after drink is always valuable.<sup>3</sup> Rainwater (Mahendrajala) is considered as the best Anupana by all the Acharya. Acharya Charaka was practicing Anupana strictly that can see in their text which denotes a specific Anupana to every herbal or poly herbal preparation. Milk is best suited just as nectar for those who are debilitated by diseases, medicines (and therapies), walking long distances, speaking, sexual intercourse, fasting, exposure to sun and such other tiresome activities; for the emaciated, the aged, and children. In general condition milk (paya) is excellent Anupana.<sup>4</sup>

#### Mechanism of Anupana

Anupana facilitates the absorption of drugs or food just like oil spreads quickly on the surface of the water. It increases the penetration of substances or entry into micro-channels.<sup>5</sup> Anupana saturates, nourishes, provides energy, increases the bulk of the body, brings about completion, settles down to intake food breaks down the food-mass, produces softness, moistens, digests and

helps in easy transformation and quick absorption of food. Intake of suitable Anupana saturates the person and digests the food easily for promotion of life and strength.<sup>6</sup> Anupana work with numerous way such as

1. Vehicle
2. Synergistic
3. Adjuvant
4. Appetiser
5. Digestive

These actions are comparable with bio-enhancer action:

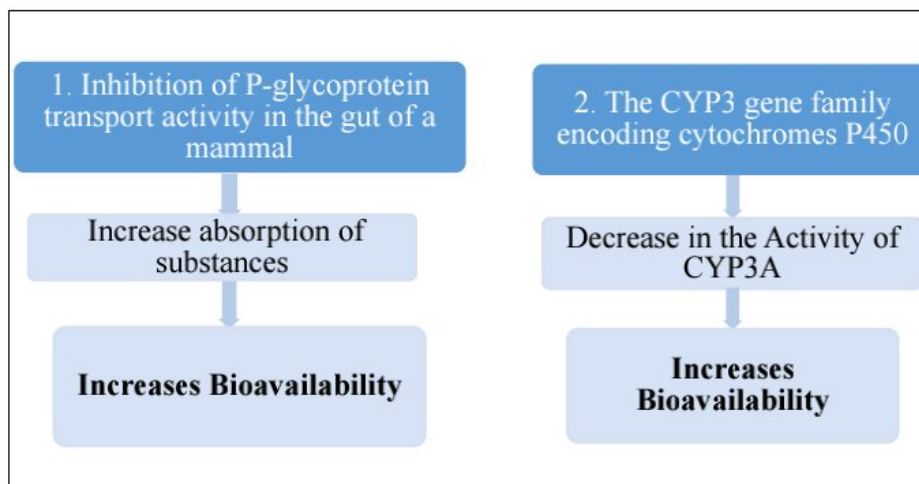


Figure 1: Two main mechanism of bio-enhancer

#### Indications of anupana

✓Vataja Roga (diseases)- Snighda (the quality which provides oily appearance) and ushna (the quality which increases the temperature) dravya  
 ✓Pitaja Roga (diseases)- Madhura (sweet) and sheeta (the quality which reduces the body temperature) dravya  
 ✓Kaphaja Roga (diseases)- Ruksha (which results in absorption of moisture) and ushna dravya  
 ✓The best Yogavahi dravya in Ayurvedic medicine are honey, milk, pure water, Ghrita (clarified butter), oil and Swarna (gold) preparation.<sup>7</sup> Honey has the property to enter in micro-channels and purify them. Ghrita crosses the different blood barriers in the body with so many other properties.<sup>8</sup> There are many examples in Ayurveda an Aushadha (single or poly herbal drugs) with different Anupana dravya pacify numerous diseases.

*Tinosopra cordifolia* (Guduchi) a single herbs<sup>9</sup>

- Pacifies vata dosha along with ghee Anupana.
- Pacifies pitta with seeta (sugar).
- Kapha along with honey.
- It also relives constipation when mixed with guda (jaggery) and relives symptom of amavata (rheumatoid arthritis) along with ginger.

Yogaratanakar described the Anupana dravya according to different diseases<sup>10</sup>

- Jwara (fever)- Kirattikta (*Swertia chirata*), musta (*Cyperus scariosus*), parpata (*Fumaria indica*)
- Grahini (Irritable bowel syndrome)- Takra (butter milk)
- Arsha (Haemorrhoids)- Bhallataka (*Semecarpus anacardium*), chitraka (*Plumbago zeylanica*)
- Pandu (Anemia) - Mandurabhasma
- Kshaya (Emaciation/ Tuberculosis)- Shudhashilajatu

- Shula (generalised or specific Pain)- Fried Hingu (*Ferula narthex*) and karanjabeejamajja (*Pongamia glabra*)
- Pliharoga (liver and spleen diseases)- Pippali (*Piper longum*) churna
- Nidrakshya (Insomnia)- Mahishdugda (buffalo milk) with sharkara (sugar)

Acharya Bhavamishra explained Rituharitaki to obtain Rashayna (Rejuvenate) property of haritki (*Terminalia chebula*) in different ritus.<sup>11</sup>

- Shishir ritu (late winter) – Haritaki (*Terminalia chebula*) with Pippali (*Piper longum*)
- Vasant ritu (Spring season) – Haritaki (*Terminalia chebula*) with Madhu (Honey)
- Grishmaritu (summer season) – Haritaki (*Terminalia chebula*) with Guda (Jaggery)
- Varsha ritu (Rainy Season) – Haritaki (*Terminalia chebula*) with Saindhava (Rock salt)
- Sharad ritu (Autumn season) – Haritaki (*Terminalia chebula*) with Sharkara (Sugar)
- Hemanta ritu (Early winter season)– Haritaki (*Terminalia chebula*) with Shunthi (*Zingiber officinalis*)
- The Yogarajguggulu vati is used in different diseases with change in Anupana. Relieves in eye disorders with triphalakashaya (decoction of triphala) Anupana, counter obesity with honey Anupana, in skin disorders with Nimbakashaya (decoction of *Azadirachta indica*), Udararoga (abdominal disorders) with – Punanavaadikashya.<sup>12</sup>

The Constituents discovered as Bio-enhancer: Newly discovered bio-enhancers are described in Ayurveda with different terms like Yogsavahi or subtle (Suksham Dravya) and as Anupanadravya. The newly discovered constituents have bio-enhancer as well as itself improving particular tissue pathology where they are used. Some of the following proven bio-enhancer is as:

Table 1: Bio-enhancer property sample

Chemical constituent	Source	Increases bioavailability	Reference
Piperine	<i>Piper longum</i>	Increases Bioavailability of all ATT Rifampicin by 60%	Atal et.al.1985 <sup>13</sup>
Capsaicin	<i>Capsicum annum</i>	Increases Bioavailability of Theophylline	A Bouraoui et.al.1998 <sup>14</sup>
Gingerol	Ginger (10-20 mg/kg,bw)	By facilitation of better absorption Aziazithromycin-78%, Ketoconazole-125%	GN Qazi et.al.2002 <sup>15</sup>
Quercetin	Citrus fruit	Dillitizem, Digoxin, Varapamil	JS Choi and Li 2005 <sup>16</sup>
Glycyrrhizin	<i>Glycyrriza glabra</i>	Increase efficacy of anti-cancer drugs	SPS Khanju et al.2005 <sup>17</sup>
Cavone	<i>Cuminum cyminum</i>	Cycoserine 75%, Cloxacilline 100%, Zidovudine 92%	Qazi & Bedi et. al.2006 <sup>18</sup>
Turmeric	<i>Curcuma longa</i>	Celiprolol and midazolam by better absorption	W Zhang et.al.2007 <sup>19</sup>
Cow urine Distillate	Cow urine	It enhances the transport of antibiotics like rifampicin, tetracycline and ampicillin across the gut wall by 2-7 folds	SPS Khanju et.al.2007 <sup>20</sup>
Niaziridin	Drumstick pods	Clotrimazole 5-6 fold	SPS Khanju et.al. <sup>21</sup>

Anupana is contraindicated in patients of dyspnoea, cough, diseases of ENT and Eye, traumatic wound in the chest and in infected wounds. Excessive journey, excessive talking, excessive study, excessive singing, excessive sleeping and exercise should not be performed after taking Anupana.<sup>22</sup>

## CONCLUSION

The traditional wisdom of Ayurveda has a strong principle of Anupana. Anupana works for a wide range with ingested substances, and ought to be drilled by physicians. Anupana improves the palatability and drops down the toxicity by enhancing the bioavailability of dravya. The cutting edge researchers likewise coordinating with the idea of regular bio-enhancers. By the increase in bioavailability with Anupana is the most ideal approach to reduce drug doses and lessen the toxicity of drugs. The danger of adverse effects and other unfriendly impacts should also be escaped. In that way, it will affect the economy of the nation. Consequently, utilization of Anupana as bio-enhancers alongside core medication is the most ideal approach to accomplish this objective.

## REFERENCES

- Murthy PM editor. Sharangadhar Samhita. Poorva Khanda, English commentary. Varanasi: Chaukhambha Sanskrit Series Office; 2001. 1/44. p. 8.
- Bhisagacharaya Pt. H.S.S.P. Ashtanga Hiridya. Sutra Sthana. English commentary. Varanasi: Chaukhambha Surbharti Prakashan; 1997. 8/47. p. 158.
- Upadhya Y. Ashtanga Hiridya.Sutra Sthana. English commentary. Varanasi: Chaukhambha Prakashan; 2010 8/51. p. 103.
- Upadhya Y. Ashtanga Hiridya. Sutra Sthana English commentary. Varanasi: Chaukhambha Surbharti Prakashan; 1997. 8/52. p. 159.
- Shashtri RD editor. Charaka Samhita. Agnivesha compiler. English commentary, SutraSthana, Varanasi: Chaukhambha Sanskrit Sansthan; 2009; 27/325-326. p. 564.
- Shashtri KA . Sushruta Samhita. Maharishi Sushruta compiler. English commentary, Sutra Sthana, Vol. 1, Varanasi: Chaukhambha Sanskrit Sansthan; 2011. 46/435. p. 279.
- Murthy PM editor. Sharangadhar Samhita. Poorva Khanda. English commentary, Varanasi: Chaukhambha Sanskrit Series Office; 2001. 1/44. p. 8.
- Sharma PV. Dravyagunavijnana. vol. 2.Hindi commentary, Varanasi: Chaukhambhabharti Academy; 2009.9. p. 762.

- Kumara A. and Tiewari P. Yogaratanakara. vol. 2. Varanasi: Chaukhambha Visvabharti; 2010.77. p. 1251.
- Pandey G.S editor. Bhavaprakasa Nighantu. Haritakyaaadivaga. Varanasi: Chaukhambhabharti Academy; 2010. p. 6.
- Prof. Mishra SN editor. Bhaisajyaratnavali. vol. 1. Varanasi: Chaukhambha Subhaartiprakashan; 2007. 26. p. 527.
- Atal N, Bedi KL. Bio enhancers: Revolutionary concept to market. J Ayur Integ Med 2010; 1(2): 96-99.
- Bouraoui A, Braziel ZL, Zougahi H. Effects of capsicum fruit on theophylline absorption and bioavailability in rabbits. Drug-Nutrient Interactions 1988; 5(4): 345-350.
- Qazi GN, Tikoo L, Gupta AK, Ganju K, Gupta DK, Jaggi BS et al. Bioavailability enhancing activity of *Gingiber officinale* and its extracts/ fractions thereof. European patent EP 1465646; 2002.
- Choi JS, Han HK. The effect of quercetin on the pharmacokinetics of verapamil and its major metabolite, norverapamil, in rabbits. J Pharm Pharmacol 2004; 56: 1537-42.
- Khanuja SPS, Kumar S, Arya JS, Shasany AK, Singh M, Awasthi S et al. Composition comprising pharmaceutical/ nutraceutical agent and a bio enhancer obtained from *Glycyrrhiza glabra*. US Patent US 6979471; 2005.
- Qazi GN, Bedi KL, Rakesh KJ, Tikoo MK, Tikoo AK et al. Bioavailability/Bio efficacy enhancing activity of *Cuminum cyminum* and extracts and fractions thereof. U.S. Patent US 7514105; 2009.
- Zhang W, Tan TM, Lim LY. Impact of curcumin induced changes in P glycoprotein and CYP3A expression on the pharmacokinetics of peroral celiprolol and midazolam in rats. Drug Metab Dispos 2007; 35: 110-115.
- Khanuja SPS, Kumar S, Shasany AK, Arya JS, Darokar MP. Use of bioactive fraction from cow urine distillate ('Gomutra') as a bio enhancer of anti-infective, anti-cancer agents and nutrients U.S. Patent US 7235262; 2007.
- Khanuja SPS, Arya JS, Santakumar T, Saikia D, Kaur H. Nitrile glycoside useful as a bio enhancer of drugs and nutrients, process of its isolation from *Moringa oleifera*. U.S. Patent US 6858588; 2005.
- Pt. H.S.S.P. Bhisagacharaya, editor. Ashtanga Hiridya. English eommentry. Sutra Sthana, Varanasi: Chaukhambha Surbharti Prakashan; 1997. 8/53-54. p. 15.

## Cite this article as:

Data Ram et al. A Conceptual review of Anupana practices in Ayurveda. Int. Res. J. Pharm. 2019;10(12):27-29  
<http://dx.doi.org/10.7897/2230-8407.1012324>

Source of support: Nil, Conflict of interest: None Declared