



ANUPANA IN RASAUSHADHI: A CLASSICAL CONCEPT WITH MODERN PHARMACOLOGICAL IMPLICATIONS

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Abstract

Rasashastra is a specialty area of Ayurveda that uses certain metals, minerals, and organic substances for therapeutic purposes. Before being administered internally, these compounds will undergo a number of purification and combustion procedures to eliminate any toxicity. *Rasaushadhis* are well-known for their quick effects and low dosage. These medications should be used with the appropriate adjuvants, such as *Anupana*, which can boost the medication's efficacy and produce positive results. The only science that addresses the significance of *Aushada Sevana kala*, *Matra*, etc. in accordance with *Roga-Rogi Bala* and other aspects is Ayurveda. Some acharyas, such as *Brihathreyees* and *Laghuthreyees*, discuss *Anupana*, which should be taken with medication, while describing each illness condition.

This review explores the classical understanding of *Anupana* from authoritative Ayurvedic texts and evaluates its pharmacological significance through a modern scientific lens. Correlating traditional wisdom with contemporary pharmacology, the article highlights *Anupana's* relevance in drug delivery, absorption, and detoxification and synergism.

Key words: *Anupana*, drug delivery, *Rasaushadhi*, pharmacological action, synergism

I. Introduction

Rasaushadhis are herbo-mineral or metallic compositions utilized for medicinal purposes. In Ayurvedic treatment, *Rasaushadhis* are regarded as more successful and advantageous because to their lower therapeutic doses, enhanced efficacy of other formulation components, extended shelf life, rapid action, and superior palatability compared to herbal preparations. The assimilation of Rasa preparations in the body occurs more rapidly due to the many processes known as Samskaras that the preparation experiences. This facilitates the rapid and efficient absorption of even the smallest amounts within the body.⁰¹

Ayurveda's primary goal is to treat the underlying cause of the illness rather than just its symptoms. We use a variety of theories and concepts to achieve that. *Anupana* is one such unique concept in ayurveda. *Anupana* refers to a substance that is taken either before or after ingesting food or medication. It can boost a medication's efficacy, aid in the medications' delivery to the intended area, nourish the body, and more. For a better outcome, it is crucial that the medication be taken with the appropriate *Anupana*.⁰²

A bioenhancer is an agent that, at the therapeutic dose, has no pharmacological activity of its own but can increase the bioavailability and effectiveness of a medicine with which it is co-administered. The purpose of this agent is to increase the overall bioavailability and bio-efficiency of the primary medication; it is not the primary medication itself. Maximizing bioavailability in this context refers to raising the amount of medication in the bloodstream that is available for therapeutic activity.⁰³

II. Materials and methods

Thousands of *Rasa* preparations, herbo-mineral preparations quoted in *Rasashastra* texts some are in *Bhasma* form, few of them are in *Vati* form, *Parpati*, *Kupipakva* preparations etc to counteract specific diseases. Changing of *Anupana* according to disease condition, *Rogi-Roga Bala*, *Dosha*, *Prakriti*, *Karma* could be a reason for better results. Here I mentioned below few important *rasa* preparations and proper *Anupana* for particular disease and its pharmacological implications.

TABLE NO 1

Commonly used <i>Rasaushadhi</i>	Disease specific	<i>Anupana</i> advised
<i>Swarna Bhasma</i> ⁰⁴	<i>Tridoshaja Unmada</i> <i>Roga</i> or <i>Psychosis</i> <i>Apasmara</i> And <i>Yosha</i> <i>Apasmara</i>	<i>Shunti Churna</i> , <i>Pippali Churna</i> and <i>Lavanga Churna</i> <i>Rasa Sindhura</i> , <i>Abhraka Bhasma</i> , <i>Sankhapushpi Churna</i>
<i>Abhraka Bhasma</i> ⁰⁵	<i>Jeerna Jvara</i> <i>Vataja Grahani Roga</i> <i>Arsha</i> , <i>Pandu</i> , <i>Kshaya</i> <i>Prameha Roga</i>	<i>Pippali Churna</i> + <i>Honey</i> <i>Trikatu Churna</i> + <i>Ghrita</i> <i>Trikatu</i> + <i>Triphala</i> + <i>Chaturjata</i> with honey <i>Guduchi Satva</i>
<i>Chandraprabha Vati</i> ^{06,07}	<i>Prameha</i>	Freshly drawn and warm (<i>Dharoshna</i>) milk, <i>Guduchi Kwatha</i>
<i>Tamra Bhasma</i> ^{08,09}	<i>Shwasa</i> <i>Amlapitta</i>	<i>Talisadi Churna</i> and <i>Madhu</i> <i>Pippali Churna</i> and <i>Madhu</i> <i>Amalaka Churna</i> And <i>Guduchi Churna</i>
<i>Tamra Parpati</i> ¹⁰	<i>Grahani</i>	<i>Takra</i>
<i>Shankha Bhasma</i> ¹¹	<i>Amlapitta</i>	<i>Nimbu Swarasa</i>
<i>Arogyavardhini Vati</i> ¹²	<i>Kusta</i> And <i>Yakruth Vikara</i>	<i>Ardraka Svarasa</i> , <i>Honey</i> , <i>Nimba Svarasa</i> , water, milk
<i>Kamadudha Rasa</i> ¹³	<i>Raktapitta</i> <i>Amlapitta</i>	<i>Durva Swarasa</i> <i>Nagakeshara Churna</i> or <i>Ghrita</i>
<i>Lokanath Rasa</i> ¹⁴	<i>Atisara</i>	<i>Madhu</i>

TABLE NO-2 Pharmacological implications

<i>Anupana</i>	Classical	Modern
<i>Shunti Churna</i> ¹⁵ <i>Pippali Churna</i> ¹⁶ <i>Lavanga Churna</i> ¹⁷	<i>Deepana, Pachana, Ruchya, Vrishya</i>	Radical scavenging, anti-inflammatory, strong anti-oxidant Antibacterial, anti-inflammatory, insecticidal, antimalarial, CNS stimulant antimicrobial, antioxidant etc
<i>Rasa Sindhura</i> ¹⁸ <i>Abhraka Bhasma</i> ¹⁹ <i>Shankhapushpi Churna</i> ²⁰	<i>Yogavahi, Rasayana, Balya, Dhatukshaya</i> <i>Medhya, Rasayana, Vrishya</i> <i>Medhakrita, Swarakara, Grahabhutadidoshahara</i>	Nervine tonic, immune booster Neurobehavioral activity, oxidative stress Neuroprotective, memory enhancing activity, anxiolytic
<i>Madhu</i> ²¹	<i>Excellent Yogavahi, Tridoshahara</i>	Antioxidant, antiviral, immune modulating properties
<i>Trikatu</i> ²² <i>Ghrita</i> ^{23,24}	<i>Amapachana, enhances Agni</i> <i>Yogavahi Rasayanam</i>	Increases the bioavailability or biological activity of the drug, antiviral, appetizer Rapidly crosses blood brain barrier, facilitates the bowel movement.
<i>Triphala</i> ²⁵ <i>Chaturjata</i> ²⁶	<i>Tridoshic Rasayana, Yogavahi</i> <i>Deepana, Pachana, Ruchya</i>	Antioxidant, increases the production of red blood cells and hemoglobin, wound healing. Carminative, cardiotonic, anthelmintic, expectorant.
<i>Guduchi Satva</i> ²⁷	<i>Maha Nashana, Vayasta and Amrita</i>	Hypoglycemic and antihyperglycemic activity
<i>Ksheera</i> ²⁸ <i>Guduchi Kwatha</i> ^{29,30}	<i>Rasayana, Jeevaneeya, Balya</i> <i>Avoids Kledavridhi, Dhatupushtikara</i>	Reduces gastro-intestinal irritation, Immune-booster Antidiabetic activity, prevent release of glucose into the blood

<i>Talisadi Churna</i> ^{31,32}	<i>Kapha Bhedhaka, Vatanulomana, Vatakaphaghna</i>	Mucolytic in action
<i>Amalaka Churna</i> ^{33,34} <i>Guduchi Churna</i> ³⁵	<i>Pittashamaka, acts on Dhatu Shithilata Pittaghna</i>	Gastroprotective, hepato-protective, antiulcer etc Antacid
<i>Takra</i> ^{36,37}	<i>Srotoshodhaka, Grahi, Deepana, Pachana</i>	Natural probiotic
<i>Nimbu Swarasa</i> ^{38,39}	<i>Deepana, Pachana, Jvarahara</i>	Hepato-protective, detoxification activities, anti-oxidant, effect on the digestive sysyem
<i>Ardra Swarasa</i> ^{40,41}	<i>Agni Deepana, Ruchya, Sheetapittahara</i>	Anti-inflammatory, hepatoprotective, anti-oxidant
<i>Durva Swarasa</i> ⁴²	<i>Jeevaneeya, Raktasthambhaka</i>	Anti-oxidant, anti-inflammatory, stoppage of bleeding
<i>Nagakeshara Churna</i> ⁴³	<i>Pachana, Raktasthambhana</i>	Anti-oxidant, analgesic, liver appetizer

Discussion

When we observe the *Nirukti* of *Anupana*, its actions resemble a vehicle due to its characteristics, which include making deglutition easier, acting as a catalyst (increasing the drug's activity), and providing greater results when treating patients. It functions as a property enhancer. Some *Anupana*'s intensify the effects of medications. Aids in the quick absorption of medications. Eliminates undesirable qualities, By masking the scent of the medication, it serves as *Gandhanashaka* and *Ruchikaraka*.⁽⁴⁴⁾

Anupana is chosen based on *Rasa*, *Guna*, *Veerya*, *Vipaka*, and *Prabhava* of the drug and the *Rogi Bala*, *Roga Bala*, and *Dosha predominance*. For instance, Ghee (*Ghrita*) is chosen for its *Snigdha* and *Sheeta Guna*, particularly when the *Rasaushadhi* is *Tikshna* or *Ushna*

According to contemporary pharmacology, *Anupāna* functions as a site-specific targeting agent, regulator of absorption, and bio-enhancer. For example, *Takra* and *Triphala Kashāya* may promote local action in lower GIT circumstances like *Grahani* and *Bhagandara*, whereas honey and ghee may improve the absorption of lipid-soluble components.

Conclusion

With strong formulations like *Rasaushadhis*, *Anupana* is not just an adjunct but a therapeutic determinant in Ayurvedic pharmaceuticals. Dosha-prakriti, drug properties, and disease-specific indications are the foundations of the classical wisdom's well-organized justification for *Anupana* choosing. Understanding how *Anupana* may affect drug action, absorption and safety is supported by contemporary pharmacology. It is possible to improve *Rasaushadhis* acceptance, effectiveness, and safety by fusing traditional ideas with contemporary scientific methods. The role of *Anupana* in Ayurvedic formulations should be scientifically established through clinical trials, pharmacokinetic investigations, and experimental validation.

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