

## VAYAHSTHAPANA DASHAKAYA - A REVIEW

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## ABSTRACT

*Vayahsthapana Dashakaya* is a medicinal group including herbal plants and organic minerals mentioned in Ayurveda authentic text Charaka Samhita. *Amruta, Abhaya, Dhatri, Mukta, Shveta, Jivanti, Atirasa, Mandukaparni, Sthira,* and *Punarnava* are the ten ingredients of *Vayahsthapana Dashakaya*. The majority of these ingredients contain *Rasayana* action which is beneficial in anti-ageing treatment. Through *Rasayana* treatment, which is also known as a promotive treatment, one can attain effects including longevity, youthful age, excellent lustre, and complexion. This study was focused to analyze the Pharmacodynamic, Pharmacokinetic and Pharmacological potentials of *Vayahsthapana Dashakaya* and their action in anti-ageing treatment. The contents were collected from authentic Ayurveda texts, monographs, dictionaries, websites, and research articles. Results of the study revealed that 80% possibility of *Deepana* action, *Rasayana* action (70%), *Balya* (50%), *Medhya* (50%), *Hridya* (40%), *Vrushya* (20%), and *Brunhana* (20%) were present as prominent actions of *Vayahsthapana dashakaya* which are beneficial in delaying the ageing process and its ill effects.

**Keywords:** Ayurveda, *Rasayana*, *Vayahsthapana Dashakaya*, Anti-ageing,

## INTRODUCTION

*Vayahsthapana Dashakaya* is a collection of ten *Drava* (Ingredients) which is found in Charaka Samhita *Sutrasthana*, *Shad virechana shatashriteeya adhyaya*.<sup>[1]</sup> *Vayahsthapana Dashakaya* or *Vayahsthapana Gana* is one group among the fifty groups mentioned in this chapter.

अमृताऽभयाधात्रीमुक्ताश्वेताजीवन्यतिरसामण्डूकपर्णीस्थिरा पुनर्नवा इति दशैमानि वयःस्थापनानि भवन्ति Ca.Su. 4/18

<sup>[1]</sup> *Amruta* (*Tinospora cordifolia* Miers), *Abhaya* (*Terminalia chebula*), *Dhatri* (*Embllica Officinalis* Gaertn.), *Mukta* (Pearl), *Shveta* (white variety of *Clitoria ternatea* Linn.), *Jivanti* (*Leptadenia reticulata*), *Atirasa* (*Asparagus racemosus* Willd.), *Mandukaparni* (*Centella asiatica* Urban.), *Sthira* (*Desmodium gangeticum*), and *Punarnava* (*Boerhavia diffusa* Linn.) are included in *Vayahsthapana Dashakaya*.<sup>[1]</sup>

Among this pearl is considered as an organic mineral mixture, not a true mineral.<sup>[2], [3]</sup>

*Acharya* Chakrapani commented *Vayahsthapana* as-वयस्तरुणं स्थापयतीति वयःस्थापनम् Ayurveda deepika on Ca. Su.4/18<sup>[4]</sup> The action which stabilizes the age of the young is called *Vayahsthapana*.

*Vayahsthapana* action can be gained through *Rasayana* action. According to Charaka *acharya* benefits of *Rasayana* treatment includes anti-ageing action. *Deerga Ayu* (Long life), *Smruti* (better recollection) *Medha* (increased intellect), *Arogya* (healthy body and mind) *Tharuna vayah* (youthfulness), good colour & complexion, good voice, an abundance of body and sense organ strength, acceptance to speech and increased lustre are achieved through *Rasayana*.

<sup>[5]</sup> Also, it has been mentioned that method of *Rasayana* treatment is like *Amruta* which is beneficial to gods, having incomprehensible miraculous effects, promotes life span (*Ayushya*), provides health, sustains (Youthful) age, removes sleepiness, drowsiness,

exertion, exhaustion, lassitude, and debility, restores the equilibrium of *vata*, *kapha* and *pitta*, brings stability, alleviates laxity of muscles, kindles internal fire, and produces excellent lustre, complexion and voice.<sup>[5]- [7]</sup>

In humans, ageing represents the accumulation of changes in a human being over time and can encompass physical, psychological, and social changes. Ageing increases the risk of human diseases: of the roughly 150,000 people who die each day across the globe, about two-thirds die from age-related causes.<sup>[8]</sup> As people age, they are more likely to experience several conditions at the same time. Older age is also characterized by the emergence of several complex health states that tend to occur only later in life and that do not fall into discrete disease categories. These are commonly called geriatric syndromes. Between 2015 and 2050, the proportion of the world's population over 60 years will nearly double from 12% to 22%.<sup>[8]</sup> The pace of population ageing is much faster than in the past and ageing increases the risk of diseases.<sup>[9]</sup> Hence study has been focused to find out Pharmacodynamic, Pharmacokinetic and Pharmacological potentials of *Vayahsthapana Dashakaya* and analyzing the action of *Vayahsthapana Dashakaya* in anti-ageing treatment.

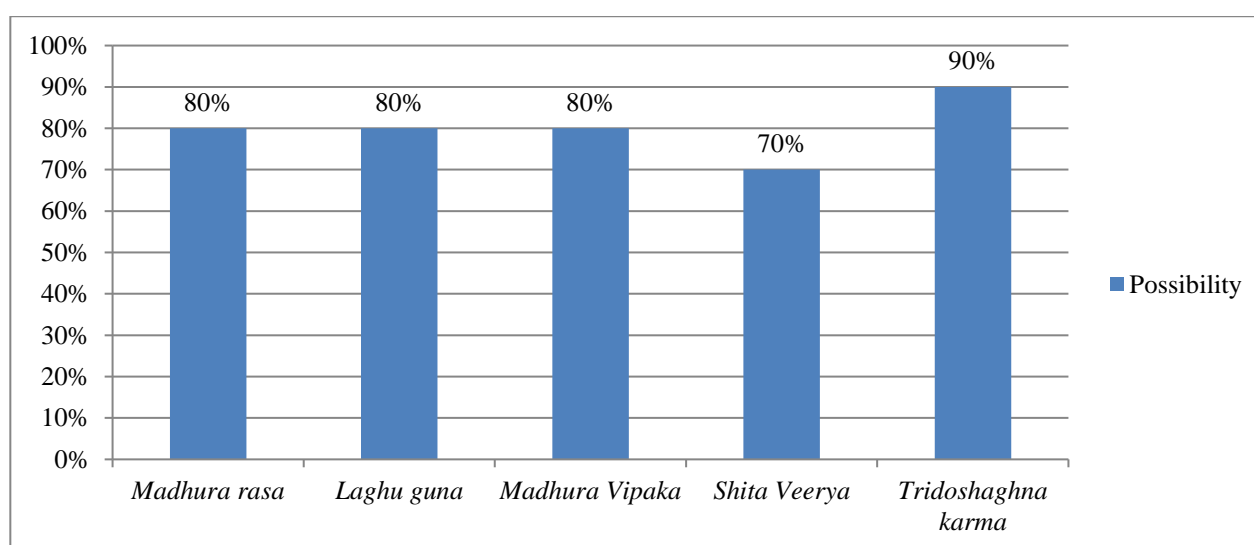
### Methodology

Information on *Vayahsthapana dashakaya* was gathered using classical Ayurveda texts and the Pharmacological study of medicinal plants in *Vayahsthapana dashakaya* was discussed through various sources including books, monographs, research articles and websites. Finally analyzed the gathered data of *Vayahsthapana dashakaya* and evaluated their effectiveness in anti-ageing treatment.

## RESULTS

**Table 1:** Pharmacodynamic properties of Vayahsthapana Dashakaya

Name of the dravya	Rasa	Guna	Vipaka	Veerya	Dosha Karma
Amruta <sup>[10], [12] -[16]</sup>	Tikta, Katu, Kashaya	Snigdha, Laghu, Mrudu	Madhura	Ushna	Tridoshaghna
Abhaya <sup>[10], [12] -[16]</sup>	Kashaya pradhana pancharasa	Ruksha, Laghu	Madhura	Ushna	Tridoshahara
Dhatri <sup>[10], [12] -[16]</sup>	Amla pradhana pancharasa without lavana rasa	Laghu, Ruksha	Madhura	Shita	Tridoshaghna
Mukta <sup>[11], [17]</sup>	Madhura	Laghu	Madhura	Shita	Tridosha shamana
Shweta <sup>[10], [12] -[16]</sup>	Tikta, Katu, Kashaya	Tikshna, Laghu	Katu	Shita	Tridoshaghna
Jivanti <sup>[10], [12] -[16]</sup>	Madhura	Laghu, Snigdha	Madhura	Shita	Tridoshaghna
Atirasa <sup>[10], [12] -[16]</sup>	Madhura, Tikta	Guru, Snigdha, Mrudu	Madhura	Shita	Vata-Pittaghna
Mandukaparni <sup>[10], [12] -[16]</sup>	Tikta, Kashaya, Madhura	Laghu	Madhura	Shita	Tridosha shamaka
Sthira <sup>[10], [12] -[16]</sup>	Madhura	Guru, Snigdha	Madhura	Shita	Tridoshaghna
Punarnava <sup>[10], [12] -[16]</sup>	Madhura, Tikta, Kashaya	Laghu, Ruksha, Sara	Katu	Ushna	Tridoshaghna

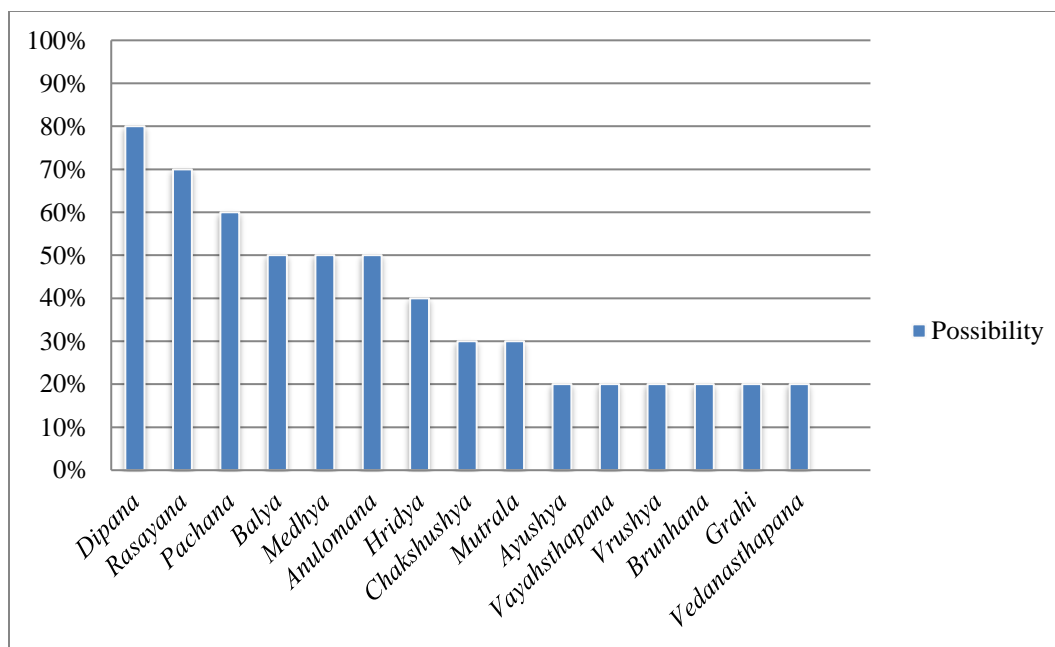


**Figure 1:** Percentage-wise distribution of possibilities of Pharmacodynamic properties of Vayahsthapana Dashakaya

Figure 1 shows, that Madhura rasa (80%), Laghu guna (80%), Madhura vipaka (80%), Shita veerya (70%) and Tridoshaghna karma (90%) are present in Vayahsthapana dashakaya.

**Table 2:** Pharmacokinetic Properties of Vayahsthapana Dashakaya

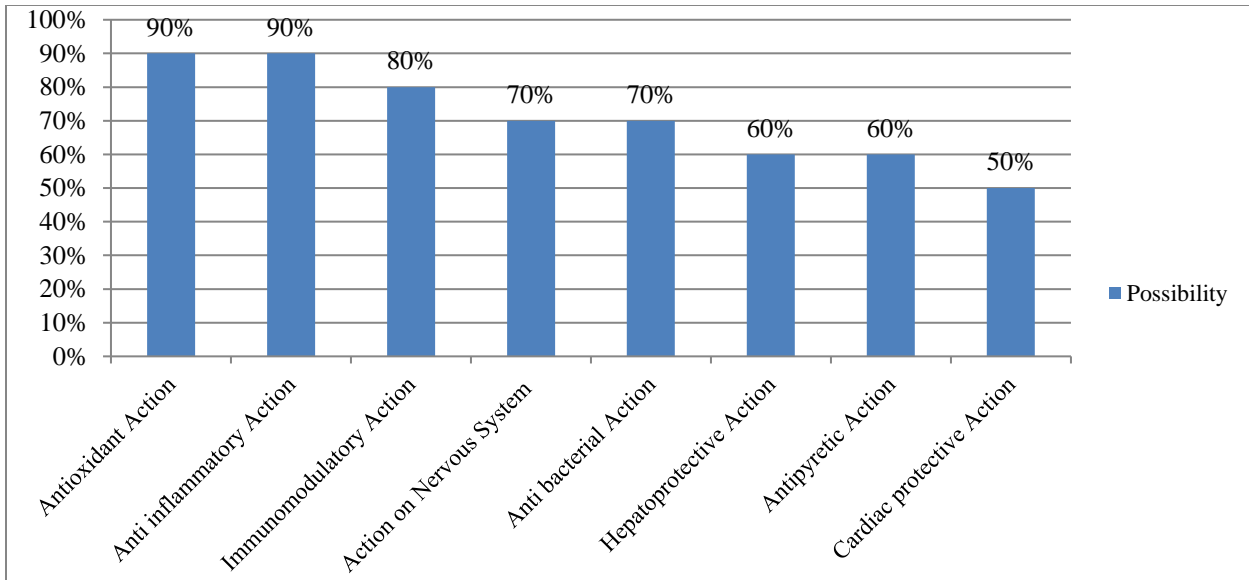
Name of the dravya	Karma
Amruta <sup>[10], [12] -[16]</sup>	Dipana, Pachana, Anulomana, Balya, Hridya, Rasayana, Raktaprasadana, Sangrahini, Vedanasthapana
Abhaya <sup>[10], [12] -[16]</sup>	Dipana, Pachana, Medhya, Rasayana, Chakshushya, Ayushya, Brunhana, Anulomana, Vedanasthapana
Dhatri <sup>[10], [12] -[16]</sup>	Agnidipana, Amapachana, Anulomana, Prajasthapana, Vrushya, Rasayana, Medhya, Balya.
Mukta <sup>[11], [17]</sup>	Lekhana, Medhya, Nadibalya, Dipana, Hridya, Jeevaniya, Shothahara, Kaphanissaraka, Chakshushya
Shweta <sup>[10], [12] -[16]</sup>	Dipana, Pachana, Krumighna, Vishapaha
Jivanti <sup>[10], [12] -[16]</sup>	Balya, Rasayana, Snehana, Vatanulomana, Grahi, Raktapittashamaka, Shukrastambhana, Mutrala, Chakshushya
Atirasa <sup>[10], [12] -[16]</sup>	Balya, Dipana, Shoolaghna, Brunhana, Rasayana, Shukravruddhikara, Medhya, Hridya, Vrushya, Shothahara
Mandukaparni <sup>[10], [12] -[16]</sup>	Hridya, Rasayana, Vayahsthapana, Raktaprasadana, Raktastambhana, Ampachana, Medhya, Ayushya, Svarya, Smruthiprasada
Sthira <sup>[10], [12] -[16]</sup>	Dipana, Pachana, Anulomana, Brunhana, Mutrala, Rasayana, Balya, Vishahara
Punarnava <sup>[10], [12] -[16]</sup>	Dipana, Anulomana, Rechana, Mutrala, Shothaghna, Vayahsthapana, Pandughna, Shophahara, Grahi



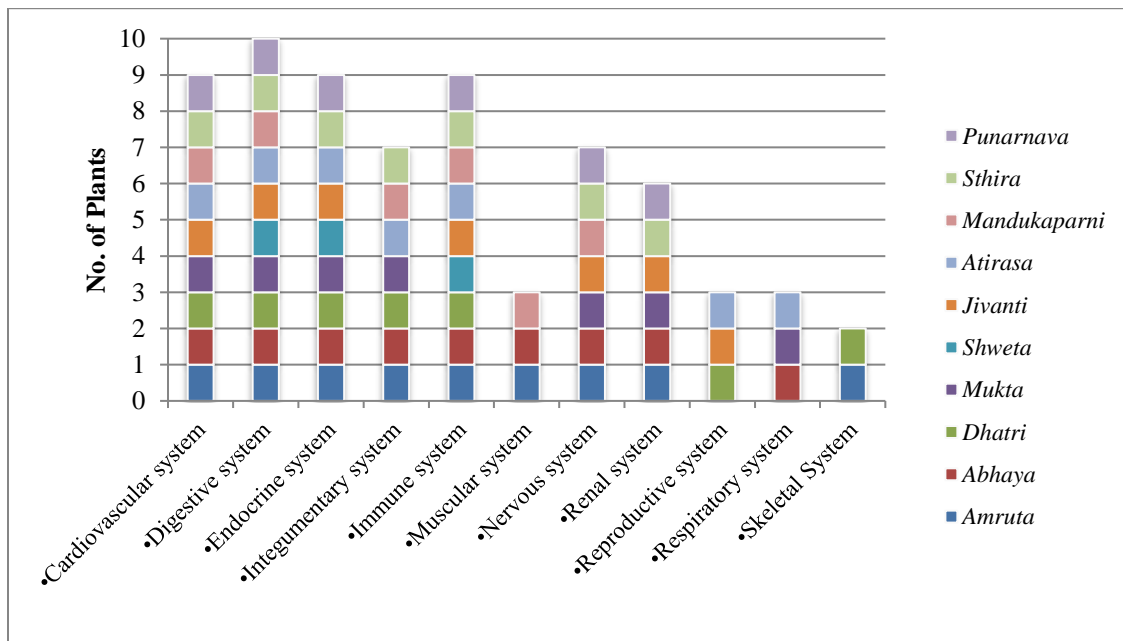
**Figure 2:** Percentage-wise distribution of possibilities of Pharmacokinetic properties of Vayahsthapana Dashakaya  
 Figure 2 shows Dipana (80%) and Rasayana (70%) as prominent actions found in Vayahsthapana dashakaya.

**Table 3:** Pharmacological Potentials of Vayahsthapana Dashakaya

Name of the Dravya	Pharmacological Potentials
Amruta	Anti-inflammatory, Diuretic, Anthelmintic, Nerve tonic, Antioxidant, Antimicrobial, Anti-toxic effects, Anti diabetic, Anti stress activity, Cholagogue, Detoxicant, Immune tonic, Hypolipidemic effect, Prevent skeletal muscle atrophy, Hepato protective and Immunomodulating activities [12], [14], [15], [16], [20], [23], [38], [39]
Abhaya	Laxative, Astringent, Anthelmintic, Nerve tonic, Expectorant, Antioxidant, Immunomodulatory, Antibacterial, Antifungal, Antiviral, Antiprotozoal, Hepatoprotective, Cardioprotective, Cytoprotective, Anti-diabetic, Renoprotective, Anti-inflammatory, Hypolipidemic, Hypocholesterolemic, Gastrointestinal motility, Antiulcer, Antispasmodic, Purgative and Antiallergic activities [12], [14], [15], [16], [20], [28]
Dhatri	Antacid, Anti-inflammatory, Antipyretic, Digestive, Laxative, Hepatoprotective, Astringent, Haemostatic, Antioxidant, Cardio tonic, Immunomodulatory, Anti-cancer, Nutritive, Ophthalmic and Aphrodisiac activity [12], [14], [15], [16], [20], [35], [36]
Mukta	Antipyretic, Anti-ulcer, Brain tonic, and Antihypertensive activity [17], [18], [21], [30], [31],
Shweta	Nootropic, Anti-inflammatory, Analgesic, Antipyretic, Anti-diabetic, Antioxidant, Anthelmintic, Hepatoprotective, Antimicrobial and Immunomodulatory effect [12], [14], [15], [16], [20], [34], [37], [40]
Jivanti	Anti - abortifacient, Anti-anaphylactic, Antidepressant, Anti-epileptic, Antimicrobial, Antitumor/in vitro cytotoxic, Antioxidant, Antipyretic, Analgesic, Anti-inflammatory, Antiulcer, Anxiolytic, Cardioprotective, Diuretic, Galactagogue, Hepatoprotective, Immunomodulatory and Rejuvenating activities [12], [14], [15], [16], [20], [26], [41]
Atirasa	Demulcent, Galactagogue, Anti-inflammatory, Aphrodisiac, Female Reproductive Tonic, Spermatogenic, Antihemorrhagic, Expectorant, Adaptogen, Immunomodulatory, Antibacterial, and Antioxidant effects [12], [14], [15], [16], [20], [33]
Mandukaparni	Nerve tonic, Antipyretic, Mind tonic, Antispasmodic, Analgesic, Cognitive enhancing, Anxiolytic, Anti-convulsant, Neuritogenic, Wound healing effect, Antidepressant, Immunomodulatory, Antioxidant, and Anti-Inflammatory activities [12], [14], [15], [16], [20], [24], [25]
Sthira	Anti-inflammatory, Analgesic activity, Antioxidant, Hypocholesterolemic, Anti-amnesic activities, Anti-diabetic, Antipyretic, Cardiovascular effects, Anti-ulcer, Anti-bacterial and Wound healing activity [12], [14], [15], [16], [20], [29], [32]
Punarnava	Diuretic, Lithagogue, Cardiotonic, Immunomodulatory, Immunosuppressive, Anticancer, Antidiabetic and Hypoglycemic, Antifibrinolytic, Anti-Inflammatory, Hepatoprotective, Antimicrobial, Antioxidant and Anticonvulsant activities [12], [14], [15], [16], [20], [27]



**Figure 3:** Percentage-wise distribution of possibilities of relevant Pharmacological Potentials of Vayahsthapana Dashakaya  
 Figure 3 revealed that the highest percentages of Antioxidant, Anti-inflammatory and Immunomodulatory actions are present in Vayahsthapana Dashakaya.



**Figure 4:** Distribution of No. of plants which show action on specific systems of the human body

Above figure No. 4 interprets that the ingredients of Vayahsthapana dashakaya act on the systems of the human body.

Almost all the ingredients act on the Digestive system (100%) and nine of the ingredients act on the Cardiovascular, Endocrine, and Immune systems.

## DISCUSSION

Ageing is an inevitable process that everyone must face. Vata dosha is dominant in old age and sapta dhatu are in deficient condition. [5] Rasayana is that

by which one attains *rasadi dhatus* with affluence; or the means of attainment of longevity, strength, energy, and firmness and sustain youthfulness as effects of *rasa*, *virya* and *vipaka* located in *Rasayana*. It promotes, sustains, or generates *dhatus* and qualities.

<sup>[6]</sup> Among pharmacodynamic properties of *vayahsthapana dashakaya*, the majority of the ingredients contain *Madhura rasa*, *Laghu guna*, *Madhura Vipaka*, *Sheeta Veerya* and *Tridoshaghna* properties (Fig.1). As a whole compound, ingredients of *Vayahsthapana dashakaya* act to pacify tridosha, dhatu and mala of the human body, through these properties. There is an 80% possibility of *Deepana* action, 70% possibility of *Rasayana* action, *Balya* (50%), *Medhya* (50%), *Hridya* (40%), *Vrushya* (20%), and *Brunhana* (20%) among pharmacokinetic properties (Fig. 2). These properties act on various systems of the human body, repairing the processes that are affected due to ageing. Among these, through *rasayana* action one can gain longevity. <sup>[5]</sup> Seven ingredients of *Vayahsthapana Dashakaya* contain *Rasayana* action according to figure 2. If a person takes these herbal drugs regularly, he can maintain the youth for a longer time.<sup>[5]-[7]</sup> Also various medicinal recipes include ingredients of *Vayahsthapana dashakaya* mentioned in *Caraka Samhita Rasayana* chapter which proves that these ingredients help to maintain youthful age. According to research papers, *Rasayana* action can be interpreted with Immunomodulatory action, in the modern aspect, which prevents recurrent infection and expels the damaged cells, as well as adaptogenic action and anti-ageing action. <sup>[12]</sup> There is a 90% of possibility of Antioxidant activity, Anti-inflammatory action (90%), Immunomodulatory effects (80%), Nervous system effects (70%), Hepatoprotective action (60%), and Cardiac effects (50%) among pharmacological potentials of *Vayahsthapana Dashakaya* which protect the human body from ill effects of ageing (Fig. 3). Ageing results due to various factors including oxidative damage, damages to cells due to heterogeneity, imperfectness, and infidelity of biological systems, programmed cell death and more factors that are still not known. <sup>[8], [43]</sup> According to these theories ageing affects almost all the systems

of the human body. Almost all the ingredients of *Vayahsthapana Dashakaya* act on the digestive system (Fig. 4). In Ayurveda, *Agni* plays the main role in maintaining health. So, by acting on the digestive system *Vayahsthapana Dashakaya* helps in digestion and metabolism by maintaining the proper functioning of *Agni* which leads to proper nourishment of *dhatus* which in turn fulfil *Rasayana* action. <sup>[5]</sup> Also, figure No.4 interprets that all the ingredients of *Vayahsthapana Dashakaya* collectively act on all the systems of the human body and prevent structural and functional changes occur due to ageing.

## CONCLUSION

All the pharmacodynamic and pharmacokinetic properties collectively pacify *Dosha*, *Dhatu*, *Mala* and maintain the equilibrium of the body which helps to stabilize the process of ageing. The pharmacological potentials of *Vayahsthapana Dashakaya* help to prevent damages and protect the human body from ageing disorders. It can be concluded that *Vayahsthapana Dashakaya* is effective in anti-ageing treatment.

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