



Research Article

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CROSS-SECTIONAL SURVEY TO DEVELOP VALIDATED SCALES FOR ASSESSMENT OF JEERNA AAHARA LAKSHANAS

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ABSTRACT

Digestion of food is the mainspring of nourishment of the body. *Jatharagni* (strength of digestion) plays a vital role in digestion. As digestion progresses, our body shows the signs that reflect the digestion stage known as *Jeerna Aahara Lakshanas*. This research aimed to develop and validate a scale for assessing *Jeerna Aahara Lakshanas* using standardized questionnaire development and validation methods. In the developmental phase, *Jeerna Aahara Lakshanas* were collected from the Samhitas of Ayurveda. The factors that influence digestion, like *Ahara Vidhi Vidhana* (Rules for food consumption) and *Loulya* (greediness for food), are also considered in developing the questionnaire. Keeping the information available in texts of Ayurveda *Charaka Samhitha* and *Ashtanga Hridaya* as primary information, Open-ended questions were formed under different domains and subdomains of *Jeerna Ahara Lakshanas*. The domains and questions were validated by 25 Ayurvedic academicians, practitioners. A set of closed-ended questions was developed based on a 5 and 7 Likert scale response. In the validation process, the closed-ended questions were distributed to 200 healthy volunteers of both genders aged 18-40 after screening health with an SF 12 questionnaire, with prior consent in each stage. The response was analyzed using SPSS 2.0 software, and an assessment of reliability was carried out by adopting the data reduction. The reliability was assessed using the standard Cronbach's Alpha (CA) test. The questions which didn't give the acceptable CA were redacted, and the questions with good and acceptable CA were retained. The final questionnaire was obtained with 51 questions after obtaining a CA of 0.826 in the 5th stage.

Keywords: *Jeerna, Aahara, Lakshanas, Aharapaka, Digestion, Questionnaire*

INTRODUCTION

Ahara (food) is the foremost pillar among the three pillars of life (*Trayopstambha viz. Ahara, Nidra and Bhramcharya*) in *Ayurveda*, which makes the body endowed with growth, strength and complexion¹. *Aaharapachana*, i.e., digestion, is the process that converts unfamiliar (*Vijatiya*) substances into familiar (*Sajatiya*) substances. *Jatharagni* carries out digestion and other *Aahara Parinamakara Bhavas* like *Vayu, Kleda, Sneha, Kala* and *Samayoga*.²

Our body reveals certain marks to represent this digestion process in the form of *Jeerna Aahara Lakshanas*. They are *Swasthanagata dosha* (normal functions of *Doshas*), *Agni Udeerana* (heightened digestive power), *Jata Bubhuksha* (appearance of hunger), *Pipasa Agamana* (appearance of thirst), *Vata Anulomana* (evacuation of flatus), *Vega Utsarga* (evacuation of urine and stool), *Utsaha* (enthusiasm), *Udgara Shudhi* (clear belching), *Laghuta* (lightness), *Srotomukha Vivarana* (open channels), *Hridi Suvimala* (happy state of mind and body and lightness at chest) mentioned in various classical texts^{3,4}. These *lakshanas* can be understood and perceived uniquely by each individual. Hence there is a need to develop and validate the questions to assess *Jeerna Ahara*.

Along with the *Jeerna Aahara Lakshanas*, factors like *Ashta Aahara Vidhi Vishesha Aayatanas* and *Manasika Bhavas* are also considered as they influence the process of digestion. Acharya Charaka says that *Loulya* i.e., greediness and not following *Ahara Vidhi Vidhana*⁵ are the main reasons for the manifestation of *Grahani Vikara*.

In Ayurveda, timely consumption of food is given utmost importance. Consuming food before the digestion of previously consumed food leads to *agni mandya* and various *Ama Janita Vyadhis*. To follow an appropriate method of timely consumption of food understanding, *Jeerna Aahara Lakshanas* become crucial. These help in maintaining the health of a healthy individual by preventing *Ama*.

Understanding these *Lakshanas* has its utility in various aspects; in *Snehapana, Hystane Jeerna Anne* (after the digestion of the previous night's meal) has been given importance. *Sujeerna Anne* (after complete digestion of meal) is one of the criteria mentioned in *Pradhana Karma* of *Vamana* (emesis).

Bhuktam Purva Anna sheshe (intake of food when there is incomplete digestion of previously consumed food) leads to *Adyashana*, which causes various morbid diseases and death. A questionnaire is just a set of mimeographed or printed questions

that respondents fill out to express their views. There are two types of questionnaires: structured and unstructured. Structured questions are those in which the answers are specific, concrete, and preset.

All responders are asked the same questions in the same language and order.

All questions and answers are described in a carefully structured questionnaire, and comments in the respondents' own words are minimized. The prepared questionnaire can be administered through interviews, mail, or directly distributed to the respondent. Inter-interviewer reliability, Test-retest reliability, and Internal consistency reliability should be checked during the questionnaire's pre-testing.

The scale's content validity was determined by showing the items to Ayurvedic, Philosophy, and Sanskrit experts and obtaining their concordances. Their suggestions for improving things were adopted whenever possible, and the articles were rewritten to elicit better replies. Cronbach's-alpha [CA] is a statistical test that measures internal consistency dependability.

This research was carried out to develop and validate a scale for assessing *Jeerna Ahara Lakshanas*.

MATERIALS AND METHODS

The study was initiated after receiving the Institutional Ethics Committee Clearance [IEC No. SKAM/IEC/002/2020]. Informed consent from the volunteers.

The Volunteers were screened for their health status using the Standardized SF12 Health assessment questionnaire. After an assessment, 200 healthy volunteers were included in the study. The volunteers between 18- 40 years of either gender were included, whereas the non-Willing subjects and those suffering from metabolic disorders or under any constant medications were excluded from the study.

The questionnaire was validated through SPSS 2.0 software, and internal consistency was determined using Cronbach's Alpha test.

The study was carried out in the following phases

Phase 1: Development of questionnaire

The development of the questionnaire was done in three stages.

Stage 1

The content validity of any interrogatory tool refers to how well the tool's constituent items relate to the idea being measured. Domains and subdomains were developed after selecting the *Jeerna Ahara Lakshana* from *Charaka Samhita*¹ and *Ashtanga Hrudaya*². Under each domain and subdomain, open-ended questions were created, validated by expert groups, including 25 academicians, practitioners, and general adults. Based on this, a set of 93 open-ended questions were formed.

The questions were grouped under three major headings

1. Factors influencing the *Ahara Jeerna (Aharavidhi Vidhana, Laulya)*
2. *Jeerna Ahara Lakshanas* (signs of complete digestion)
3. *Swasthana Gata Doshas* (normal functions of *Doshas*, absence of *Dosha Sanchaya Lakshanas*)

Stage 2

During this stage, 93 closed-ended questions were framed using five and seven graded Likert scales based on the respondent's opinion.

Stage 3

In this stage, the questions were cross-checked with 5th standard students and 1st-year BAMS students for language understanding and perception.

Phase 2: Validation of questionnaire

Here validation of the questionnaire was done in the following stages. In 1st stage, the previously developed questionnaire with 93 questions was distributed to 50 volunteers. The response was noted and analyzed in SPSS software, and reliability analysis was carried out for data reduction. The review of internal consistency was assessed using the standard Cronbach's Alpha (CA) test. The test value ranged from 0- to 1.0. The rule of thumb for reliability statistic value was used to assess reliability. I.e. Excellent > 0.9, Good >0.8, Acceptable>0.7, Poor>0.5, unacceptable<0.5. The questions which didn't give the acceptable CA were redacted, and the 58 questions with good and acceptable CA were retained.

Similarly, at the end of the 2nd stage, 50 volunteers were the questions and based on the responses, 61 questions were retained. During the 3rd stage, 61 questions were again distributed to 50 volunteers, containing 51 questions. In stage 4, 51 questions were distributed to 25 volunteers, resulting in 38 validated questions. During the final stage, i.e., 5th stage of validation, 38 questions were distributed to 25 volunteers, and reliability was cross verified. (Table 1)

Table 1: Number of volunteers, Number of questions and CA obtained in each step

Step	Number of Volunteers	Number of questions	Overall CA
1 ST Round	50	93	.829
2 ND Round	50	58	.773
3 RD Round	50	61	.704
4 TH Round	25	38	.826
5 TH Round	25	39	.826

OBSERVATIONS & RESULT

Out of 200 subjects, 172 (86%) were from 20-to 25, whereas 28 (14%) were from 25-35. 48 (24 %) were male, whereas 152 (76 %) were female.

Table 2: Questionnaire

Sl	Case processing summary of final step (Listwise deletion based on all variables in the procedure.) Questions and domains	Mean	SD	CA
1	IIIDIII-AGNIUDERANA: Does your digestion process take longer than usual even when a small quantity of meal is consumed?	3.8	1.11	.731
2	IVDI-JATABUBUKSHTA: Do you feel hungry at mealtime?	4	1	.741
3	VDISDII-AKSHI: In general, do you observe dryness in your eyes?	3.92	.862	.736
4	VDIISDII-NASA: In general, do you observe dryness in your nose?	4	.957	.738
5	VDIISDII-KARNA: In general, do you observe excessive secretions from your ears?	4.6	.645	.740
6	VDIVSDI-TONGUE: In general, do you observe excessive coating in your tongue?	4.3	.7	.741
7	VIDI-UDGARA SHUDHI: Do you get clear belching? (Without the smell and odour of previously consumed food)	2.92	1.03	.767
8	VIIDI-HRIDI SUVINMALA: In general, are you happy throughout the day?	3.6	.912	.725
9	VIIIDII-HRIDI SUVIMALA: Do you observe any chest discomfort /tightness/heaviness?	4.32	.802	.730
10	VIIIDII-VATA ANULOMANA: Does your flatus have a bad/unacceptable odour?	3.8	.725	.746
11	IDIXSDI- STABDHATA: Do you feel the abdomen's sensation of bloating / distension?	3.8	.94	.729
12	IXDISDV-PURISHA: BRISTOL STOOL SCALE was used to assess the consistency	3.4	1.38	.765
13	IXDISDVI PURISHA: Do you pass frothy stools?	4.4	.916	.744
14	IXDISDVII-PURISHA: Do you observe undigested food materials in your stool?	4.16	.687	.750
15	IXDISDIX-PURISHA: Do you observe any unusual or offensive odour from your stools?	4.16	.624	.746
16	IXDIISDIV-MUTRA: Do you observe cloudiness/turbidity in your urine?	4.4	.816	.745
17	XDISDII-LAGHUTA: Do you feel the heaviness of your body in between meals	3.68	.945	.741
18	XIIDI- PIPASAGAMANA: Do you have an unbearable thirst?	3.76	.925	.747
19	XIIDII-PIPASAAGAMANA: Do you feel thirsty all the time, irrespective of fluid intake?	3.76	1.12	.759
20	XIIDIII-PIPASAAGAMANA Do you feel thirsty in between meals?	3.24	1.05	.762
21	IIDISDI-UTSAHA -V Are you persistent involuntarily performing activities like wanting to talk, wanting to read, wants to do other routine work?	3.76	1.20	.723
22	IIDISDIV-UHWASA NISHWASA-V Do you find difficulty/ discomfort breathing while climbing 10 stairs or walking 100 meters etc.?	4.08	1.22	.736
23	IIDISDV-CHESTA-V Can you perform activities like sitting, laughing, speaking, walking etc., without any difficulty?	4.36	1.18	.733
24	IIDIISDI-USHMA -P Does your body feel warm at most times?	2.96	1.36	.768
25	IIDIISDIII-DARSHANA-P Are you able to perceive objects clearly in bright light?	4.44	.869	.735
26	IIDIISDIV-RUCHI-P Do you have a desire/ interest in taking food?	4.36	.700	.729
27	IIDIISDVI-RUCHI-P How would you rate your tasting capacity?	4.24	.663	.743
28	IIDIISDVII-PRABHA-P Does your skin have a good glow?	3.8	1	.738
29	IIDIISDIX-MEDHA-P Do you have the ability to remember a long list of tasks like household activities, the content of books, personal activities etc.?	3.68	1.24	.732
30	IIDIISDX-DHI-P Do you quickly analyze any given situation?	4	.912	.733
31	IIDIISDXII-TANU MARDAVA Do you observe softness in your body parts?	3.88	.881	.744
32	IIDIISDI-STIRATVA-K Do you notice compactness in your body?	3.68	.945	.743
33	IIDIISDIII-SNIGHDATVA-K Do you feel the presence of oiliness in the skin, hair? (Even without the application of oil/moisturizer/cosmetics etc.)	3.64	1.03	.765
34	IIDIISDV- SANDIBANDHA K Do you appreciate loose skin or muscles around the joints?	4	1.11	.753
35	IIDIISDVII- KSHAMA K Do you patiently handle/tolerate minor unfavourable situations in day-to-day life?	3.60	1.04	.740
36	IDXSII- PORNA KOSHITA: Do you feel the fullness of your stomach quickly even when food is consumed in little quantities?	4	0.913	.753
37	IDXSDIV- POORNAKOSHITA Do you observe any gurgling sounds in the abdomen?	3.67	.935	.745
38	IDXISDI-HRULLASA Do you feel nauseous? OR have the feeling of vomiting before intake of food?	4.24	.673	.745
39	IDXISDII- GAURAVA AALASYA Even though you can perform activities, do you feel lethargic or lazy?	4.36	.710	.728

After completion of all the stages of validation above enlisted, 39 questions were retained, with Cronbach's alpha .826.

DISCUSSION

Ayurveda is one of the healthcare systems based on individualization and a person-centred approach. Clinical evaluations about the *Agni* are critical in dietary recommendations, lifestyle advice, and therapeutic intervention. Furthermore, the state of *Agni* varies depending on an individual's constitution, age, seasonal rhythm, and other factors, and it's even more crucial to precisely assess *Agni*'s power in an individual from an Ayurvedic perspective. *Agni* is also essential from a medicinal standpoint because the nature of the medication, dose, and routes of delivery are all dependent on the power of *Agni*. A scholar created a questionnaire with a total of 20 points, which was divided into the following categories: *Abhyavaharana Shakti* (6 points), *Ruchi Aaharakale* (4 points), *Jaranashakti* (6 points), *Vata Mutra Purisha Mukti* (regular bowel and bladder movements) (4 points).⁶

Another study has developed a tool for assessing *Agni Bala* based on various aspects of *Vishamagni*, *Tikshnagni*, *Mandagni*, and *Samagni* gleaned from several Ayurvedic publications. The questionnaire uses a closed-ended Likert-type scale with five options for each question. The tool contains a total of 64 queries. There are 14 questions in the *Vishamagni* category, 13 in the *Tikshnagni* category, 13 in the *Mandagni* category, and 24 in the *Samagni* category.⁷

Both the studies did not include the main factors which influence *Jeerna Ahara* like *Ahara Vidhi Vidhana*, *Loulya*, *Prakruta Vata*, *Pitta* and *Kapha* under *Svasthanastha Dosha*. With this aim, 51 questions were validated, which included 12 questions related to *Ahara Vidhi Vidhana* and *Loulya*, 20 questions about *Jeerna Ahara Lakshanas*, i.e., *Agni Udeerana*, *Jata Bubhuksha*, *Pipasa Aagamana*, *Srotomukha Vivarana*, *Hridi Suvimala*, *Udgara Shudhi*, *Vata Anulomana*, *Purisha* and *Mutra Vega Utsarga* and *Laghuta* and the remaining 19 questions related to the normal functions of *dosha*, i.e., *Swasthanagata dosha* and the symptoms

associated with the absence of *Sanchaya Dosha Lakshanas*. (Table 2)

The guidelines related to the rules and regulations regarding the method of consumption of *Ahara* are *Ahara Vidhi Vidhana*. For instance, *Ushnamashniyat* rules indicate food should be consumed in a warm state, which results in good taste and maintains the normalcy of *Jatharagni* controls the *Vata* and *Kapha*. *Snigdamashniyat* indicates Diet should be unctuous, refers to the consumption of food with ghee, results in good tastes, quickens the process of digestion, eases the digestion, nourishes the body and sense organs, increases strength, and enhances complexion, normalizes the functions of *Vata*. *Matravatashniyat* means food should be consumed in proper quantity and *Aahara Matra* should be decided based on *Agni Bala*⁸ However, the quantity of diet differs based on the *Guna* of *Ahara*. *Guru* (heavy) *Ahara* should be consumed only up to one third or half satisfaction point, and *Laghu* (light) *Ahara* should not be consumed in surfeit to maintain the *Bala* of *Agni*⁹. One must fill only one-third of the total stomach capacity with solids, one-third with liquids, and keep the other one third for the movement of *Dosha*¹⁰. So only when a person consumes food according to the quantity which is suitable to oneself it quickly passes down the bowel, doesn't disturb the *Agni*, gets digested without any discomfort and promotes life span.

Veerya Avirudha, compatible food, expels the doshas out of the body. If food consumed is incompatible causes various disorders like *Visarpa*, *Unmada*, *Adhmana*, *Grahani*, etc. *Ishtadeshe Ishtasarvopkarnam, cha Ashniyat*, i.e., meals taken at favorable places and provide comfort and satisfaction with favourable instruments. The person tends to get up in between meals when they do not have a favorable environment and instrument, making the food cold and less tasty. Eating in an unfavourable climate may also disturb *Raja* and *Tama Dosha* of *Manas*. In turn, it results in various psychological disorders like *Unmada* etc. *Naatidrutamashniyat* and *Naativilambitamashniyat* are Not eating too fast or slow. If food is eaten too fast, it may enter the respiratory tract and cause choking or other respiratory tract infections or problems like GERD. Also, a person will not be able to appreciate then taste. When food is taken at the proper speed, enzymatic juices mix properly and ease digestion. Eating too slowly leads to overeating, lack of satiety, and the food becomes cold, which leads to indigestion. The brain takes about 20 minutes to recognize that stomach is full, so eating with optimum speed prevents overeating. *Ajalpanahasana tanmanabhunjeet* is eating without talking or laughing, Mindful eating. When a person is laughing or talking, there are chances of food entering the respiratory tract. Having a diverted mind while eating may lead to entry to the unnoticed foreign body and the food. Olfactory and visual senses activate the brain to secrete digestive juices; hence one should consume food with complete concentration. *Atmanamabhisamikshya Bhunjeet Samyak* is Eating after analyzing one's needs; therefore, the diet should be taken according to *Rutu, Desha, Satmya, Prakruti, Agni*, and *Bala*. Ama formation occurs in the body if these rules and regulations are not followed, which is the root cause of most diseases. Hence following these rules and regulations become crucial.

Along with *Ahara Vidhi Vidhana*, *Laulya* is another factor responsible for *Grahani*. If an individual indulges in food without following the rules and regulations of diet intake, he quickly suffers from diseases caused by the vitiation of *grahani* because of his greediness. Hence these factors are included in the 1st part of the questionnaire by observing their importance to maintaining *Agni* and health.

In this study, the questions related to *Ahara Vidhi Vidhana*, and *Manasika Bhavas* were excluded from calculating Cronbach's alpha from the 4th stage of validation. They were only the influencing factors for the assessment of *Jeerna Ahara Lakshanas*.

The *Jeerna Ahara Lakshanas* indicates the completion of the digestion process, and these signs indicate the time of food consumption. The criteria *Agni udeerana* indicates an increased state of *Kayagni* and the capability to digest the food consumed. *Jataragni* is present in *Jathara* (stomach and Duodenum); according to *Acharya Vagbhata Grahani* – the duodenum, the average state responsible for the duration of life, health, courage, ojas (the essence of the *dhatu*s), the strength of all the *Bhutagni* and *Dhatvagni*. The power of the *Grahani* is from *Agni* itself, and the strength of *Agni* is from *Grahani*. If food is consumed in the absence of *Agni Udeerana*, the strength of *Agni* changes and affects *grahani*, thereby manifesting diseases.

Jaata bubhuksha, i.e., appearance of hunger *Kshut*, is a symbol of gastric emptying time. As food moves from the stomach to the intestine, the stomach becomes empty. Per day two, Meals are described by Sushruta Samhita. Morning and evening mealtimes should be between the third and fourth Prahara (approximately 3 hours 45 minutes after sunrise) and between the third and fourth Prahara of the day (about 3 hours before sunset). (i.e., before and after 3 p.m.)¹⁰. According to Ashtanga Sangraha, eating an evening meal on time is not a problem even if the morning meal is not thoroughly digested. However, morning meals should not be consumed until the evening meal gets digested. In the morning, till the appearance of hungry and bowels cleared, one should not take a meal. If the food is not appropriately digested regularly, one Meal a Day should be considered. A study has observed a correlation between gastric emptying and increased hunger, indicating that declining gastric stimulation may induce appetite. Also, the researcher observed hunger is caused by a reduction in the stimulation of upper tiny intestinal receptors by nutrients. Less than 20% of the meal remained in the stomach when hunger ratings increased, and the gastric emptying rate slowed. Even researchers observed fullness of the stomach reduced when hunger increased. The time required for hunger to appear ranges from 90 to 360 minutes. Hence the distension of the abdomen during and after meal consumption is crucial in determining appetite.¹¹ However, the strength of digestion varies, according to *Prakruti*. Individuals associated with *Pitta Lakshana* have *Teekshna Agni* and More hunger, whereas a *Kapha* person possesses less digestion and hunger strength. Hence these two characters should be observed in accordance with *Prakruti*.

Pipaasagaman means the appearance of thirst, which is an indicator of the completion of digestion. Meal-related (prandial) thirst could, in theory, be secondary to blood alterations caused by the water demands imposed by food digestion and absorption. This is not the case, as prandial thirst arises before blood osmolality or volume change. Instead, eating causes thirst, indicating that the impending homeostatic burden imposed by other food consumption is approaching¹².

Vaatanulomana and *Visrushta Mutra Pureesha* criteria describe evacuation of flatus urine and stools. *Mutra* and *Pureesha* are *Ahara Mala*. Suppression of *Adhovata* results in visceral indurations, secretory stasis, pain, weariness, retention of wind, urine, and faeces, impairment of vision and digestion, and heart disease. Flatus is produced by either swallowed air (nitrogen and oxygen) or the fermentation of poorly digested carbohydrates in the colon by bacteria, which produces a mixture of carbon dioxide, hydrogen, and methane. The flatulence release is related

to the digestion of carbohydrates, fibres in the intestine, frequency of the same are 5 to 20 times which varies according to the person, type of food consumed etc. Ingested food stays in the stomach for 4 hours maximum. During this time, protein and lipid breakdown occurs. Starch breaks down in the small intestine and absorbs monosaccharides, amino acids, and free fatty acids within 1 to 5 hours. Production of short-chain fatty acids and other by-products and water, ion, and minerals absorption at the large intestine within 12 to 24 hours.

Laghuta, i.e., lightness, is a subjective feeling. After complete digestion, there is a relative decrease in the body's weight, which accounts for more energy expenditure during digestion. As per *Ayurveda*, urine is formed from the large intestine. The main function of the same controls *Kleda* in the body. Similarly, regulation of both Urine and stool formation occurs during *Katu Avasthapaka*. *Katu Avasthapaka* occurs in the large intestine. Hence, the *Jeerna Ahara Lakshanas* occurs within 24 to 45 hours of food ingestion. Acharya Charaka states that this may take up to 7 days while explaining *yavanna prayoga* and considers *Shudda Mala Pravritti* to decide the *Rasayana Prayoga*.

Udgarashuddhi, i.e., clear belching without the presence of odour or smell of previously consumed food. A reflex is triggered, resulting in relaxation of the lower esophageal sphincter, upward air movement through the esophagus, and finally passing through the upper esophageal sphincter, with the occasionally audible belch. Any taste, odour, or undigested food materials in the belching indicates incomplete digestion. Aerophagia is more than 20 belches per minute, resulting from excess engulfed air. It is a commonly reported symptom associated with various disorders, including gastroesophageal reflux disease (GERD) and functional gastrointestinal system disorders; in *Ayurveda*, these can be due to *Ajeerna* and indigestion related disorders like *Amla pitta*.

Srotomukha vivarana⁸ refers to unobstructed channels related to the *Bahir Mukha Srotas* (*Akshi, Karna, Nasa*, etc.), as these *Srotas* carry waste products in them. Hence, digestion of food can directly impact these *srotas*; they are considered to elicit these *Lakshanas* of digestion. A study is evident to relate laryngopharyngeal reflux (LPR) in patients with the ocular surface disease (OSD), which was analyzed with laryngopharyngeal reflux (LPR) in patients with the ocular surface disease (OSD). Laryngopharyngeal reflux (LPR) in patients with ocular surface disease (OSD) Similarly, GERD may manifest itself as an extraesophageal manifestation, such as nasopharyngitis, leading to ear diseases¹³. Also, the individuals with GERD in this study were at significantly greater risk of Chronic Sinusitis.¹⁴

These studies indicate the impact of indigestion on the eye, ear and nose; hence, prediction can be made that normal digestion supports usual physiological functions of the same. *Hridi Suvimala* refers to clarity at the seat of *Hridaya* commented as *Swakarya Patu Indriyatmake Dehe*, which indicates a normal clear perception of a sense organ. The functionality of the eye, ear and nose is discussed under previous criteria; taste perception enhances once food gets digested completely. For example, patients observe *Madhurasyata* during *Ama Ajeerna*, *Tiktasyata* in *Vidagdajeerna* and *Kshayasyata* due to *Vistabdajeerna*. Here the meaning of *Hridaya* is not limited to the heart, which is a seat for *Manas, Indriya, Atma*, and *Ojas*.

Thus, it has a broad spectrum. So *Vishuddha Hrudaya* means proper functioning of *Manas, Indriya* will be very good, and the person will be attentive. Here as the criteria considered to indicate digestion, *Atma* and *Ojas* are not considered, as the effect of

digestion is not immediate. Hence *Hridi suvimala* indicates normal sensory perception and Mind.

Swasthanagata dosha refers to *Dosha Swapathage, Dosha Swamargage*, which means when the daily digestion of food takes place in the body, the *Doshas* remain normal and perform their assigned functions. Hence normal functions of *Vata Pitta* and *Kapha* are considered here. In the text, *Ashtanga Hrudya* mentions that the absence of *Sanchaya Dosha Lakshanas* can be regarded as *Doshas'* normal function.

Hence, this study observes the negative correlation between *Vata, Pitta*, and *Kapha Sanchaya lakshana*. However, all the *Lakshanas* of *Jeerna Ahara* cannot be taken into consideration at the same time for the assessment as few *Lakshanas* appear immediately after the digestion of food like lightness in the body while few of the *lakshanas* appear in due course of time like nourishment of the body and few *Lakshanas* may also occur repeatedly like in case of *Udgara*.

CONCLUSION

The questionnaire obtained at the end of this research can be a self-administrable scale to analyze the *Jeerna Ahara Lakshanas* in healthy individuals and patients. The *Lakshanas* of *Swasthanagata Doshas* (normal functions of *Dosha*) were seen to be high in people who had a good score of *Jeerna Ahara Lakshanas*. Hence these are positively correlated. Also, in this study, not following the rules and regulations and consuming food with greediness negatively correlates with *Jeerna Ahara Lakshana* and *Swasthanastha Dosha*. However, this questionnaire needs to be revalidated with the patients having impaired digestion, proving this scale's utility in individuals with *Mandagni, Vishamagni, Teekshnagni* and diseased patients.

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