

## ORA- Cross Sectional Study



### Development and validation of a knowledge, attitude and practice (KAP) Questionnaire on *Ahara Vidhi Vidhana* (Ayurvedic Dietary Guidelines)

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#### ABSTRACT:

**Background:** Dietary regimens contribute to the health of people in both Ayurveda and contemporary public health. Ayurvedic science recognizes Ahara (Food) as essential fundamental principle. Although biomedical field advances, there is a need for attention towards nutrition and dietary guidelines to improve global health and to provide a preventive approach towards Non-Communicable Diseases. **Objective:** To develop and validate Knowledge, Attitude and Practice (KAP) questionnaire on *Ahara Vidhi Vidhana* for assessing dietary behaviors and ultimately promoting preventive health. **Methodology:** The cross-sectional methodological study was conducted in three phases. Phase I includes item generation through literature review and from expert input. Phase II was content and face validation using expert evaluation and a pilot study with validity measured by Item-level and Scale-level Content Validity Index (I-CVI, S-CVI). Phase III assessed reliability through internal consistency using Cronbach's alpha values  $\geq 0.7$  indicating acceptable range of internal consistency reliability. Construct validity was evaluated using Karl Pearson's correlation coefficient test. **Results:** Final version of questionnaire comprised of total 57 items distributed across 11 domains, subdivided into three subscales: Knowledge, Attitude and Practice. Overall Scale-level Content Validity Index (S-CVI) was 0.91, indicating acceptable content validity. Internal consistency reliability was satisfactory with overall Cronbach's alpha of 0.75. Subscale reliability coefficients were 0.81 for Knowledge, 0.755 for Attitude and 0.717 for Practice. Construct validity was acceptable collectively with convergent and divergent validity. **Conclusion:** The Knowledge Attitude and Practice Questionnaire on *Ahara Vidhi Vidhana* is a newly developed and validated tool for assessment and evaluation of dietary KAP among working women. Its use in clinical as well as other research can help to evaluate education to improve dietary practices as explained by *Ahara Vidhi Vidhana*. Future studies should focus on including different populations and incorporate test-retest reliability to ensure stability of the tool

**KEYWORDS:** *Ahara Vidhi Vidhana*, COSMIN, KAP Study, Questionnaire Development and Validation.

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## 1. INTRODUCTION

Life Expectancy in developed countries has shown improvement after advances in medical science and high medical expenditure. This proves that technology alone cannot assure good health. Poor dietary patterns and their intake habits may hamper nutrition. It may lead to many diseases including non-communicable diseases. Physical as well as mental health depends on balanced diet, proper dietary guidelines showing importance of food in maintenance of well-being. [1]

Books written on the *Mahabharata* emphasize that food is main source for the origin and maintenance of all living beings. *Upanishads* further elevate their importance by stating that food is a manifestation of lord *Brahma*. [2] Healthy as well as diseased conditions are the results of *Ahara* (Diet) and its patterns. [3]

To maintain the personal as well as community health Ayurvedic Literature highlights three sub-pillars that are *Ahara* (food), *Nidra* (Sleep) and *Bramhacharya* (Celibacy). [4, 5] However, in today's fast-forward era principles of dietary patterns and their intake habit are overlooked which results in diminished community health. Awareness regarding *Ahara Vidhi Vidhana* to the community may help in maintenance of health in community.

In Ayurvedic literature, food is mainly based on age, seasons, purpose and constitution to provide a proper diet. Following the Ayurvedic dietary guidelines known as *Ahara Vidhi Vidhana* aids in the ease to meet complete utility of *ahara*. Compared to other references, *Charaka acharya's* approach appears more practical because of its clarity towards the outline of

what to avoid, follow, how to eat, how much to eat as well as who should adhere to these rules and principles. [6] These guidelines are intended to be used in both healthy as well as diseased individuals. One should consume *ushnaashniyat* (warm food) in order to stimulate *agni*, *Snigdham aashniyat* (Unctuous food) for nourishment and *Matravata aashniyat* (proper quantity) as per their *agni*. Meals should be taken *Jeerna aashniyat* (after digestion of previously consumed meal) and must be *Virya Avirudham* (compatible in potency) in order to maintain balance. Food should be consumed in *Ishtadesha ishtasarvopkram* (a clean and pleasant setting), *Na Atidrutam* (not too fast), *Na Ativilambitam* (not too slow) as well as *Ajapla*, *Ahasana*, *Tanmana Bhunjita* (without distractions). Lastly, *Aatmaanam Abhisameekshya Samyak Bhunjita* (Mindful Eating), considering the balance of *doshas* and *dhatu*s. [7, 8]

In public health research Knowledge, Attitude and Practice (KAP) study design provides fundamental framework. Knowledge is ability to acquire, retain and use information as mixture of experience, comprehension and skill. Attitude refers to tendencies to react in specific way to some situations for observing and interpreting events based on certain predispositions or to organize opinions into interrelated structures. Practice is implementation of rules and knowledge that results in action. Effective practice is art associated with progress of knowledge and technology and is done in ethical manner. [9] Its approach is structured to assess the health related behaviors which helps the researchers to design various interventions for

community and also evaluate their outcomes. Levels of knowledge and attitude were shown to influence individuals' efforts towards prevention of diseases. [10]

Though many KAP tools exist to assess dietary behaviors and health related practices among population but none have been standardized or validated specifically to address principles of *Ahara Vidhi Vidhana* according to Ayurveda classics. Previous existing KAP questionnaires are mainly focused on modern nutritional concepts rather than Ayurvedic perspectives, thereby lacking to capture holistic as well as preventive dimensions of Ayurvedic dietary science or guidelines. Developing a tool purely based on classical Ayurvedic principles and validated using contemporary psychometric standards (COSMIN) is crucial for evaluating awareness, beliefs and practices regarding *Ahara Vidhi Vidhana*. Such a questionnaire will bridge a methodological gap, support evidence-based integration of Ayurveda into dietary behavior research and help evaluate impact of Ayurvedic diet education on public health outcomes among population.

Objective of this study is to develop and validate Knowledge, Attitude and Practice (KAP) questionnaire on *Ahara Vidhi Vidhana* to ensure contextual relevance, content accuracy and its reliability through assessment and evaluation of dietary habits in target population.

## 2. MATERIALS AND METHODS

**2.1 Study Design:** Cross-sectional instrument validation study conducted to develop and validate a Knowledge, Attitude and Practice questionnaire on *Ahara Vidhi Vidhana*, following guidelines of COSMIN and CROSS to obtain methodological quality and transparency.

**2.2 Sample Size:** Total of 30 participants were included in this study. The present study represents initial validation (pilot phase) to evaluate the feasibility, clarity and internal consistency of the tool prior to wider field application. Sample size was hence considered adequate for preliminary psychometric testing and refinement of instrument.

**2.3 Sampling and Participants:** Participants was selected based on purposive sampling. Inclusion: Working women between ages of 20 to 60 years with minimum qualification of graduation in order to understand the questionnaire and those who are willing to participate.

Exclusion: Individuals with cognitive impairment or incomplete responses.

**2.4 Data Collection:** Data were collected through paper-based questionnaires delivered in person. Average time to complete the responses was 15–20 minutes and all 30 responses were complete and analyzed.

**2.5. Ethical consideration:** Ethical clearance was obtained from Institutional Ethics Committee (Approval No: IEC/BMK/119-2024, dated 12<sup>th</sup> march 2024). Informed consent was also obtained from all participants following the Declaration of Helsinki (2013).

**Data confidentiality and storage protocol:** All gathered data were treated with strict confidentiality, hard copies were maintained in institutional archives and will be retained for 5 years before secure disposal, access is for principal investigator.

**Data availability statement:** Available from corresponding author upon reasonable request. Supplementary material including final questionnaire,

expert review forms and validation table has been provided along this submission.

**2.6 KAP questionnaire** on *Ahara Vidhi Vidhana* was developed and validated in three systematic phases as tool development, validity assessment and reliability assessment.

### **2.6.1 Phase One: Tool Development**

Item Generation Process: Initial draft of items was generated through literature review, discussion with experts and focused group discussions to check content validity and conceptual clarity. Classical Ayurvedic text *Charaka Samhita Vimana Sthana Chapter 1 (Rasavimaniya Adhyaya)* was chosen as primary source of reference. Contemporary research articles were searched for review from various databases like PubMed and Google Scholar using keywords knowledge, attitude, practice, questionnaire development and validation.

Suggestions and comments from expert panel were considered for rephrasing and to ensure the relevance. This method strengthened the draft questionnaire's content validity and contextual sensitivity.

### **2.6.2 Phase Two: Validity Assessment**

**2.6.2 I Expert Panel and Content Validity:** 6 experts were chosen through purposive sampling based on their qualifications and area of expertise. Panel includes 4 professors of *Swasthavritta* and *Yoga*, 1 Ayurveda dietitian and 1 biostatistician. Study protocol framework and assessment tools were validated by concerned experts team. Content validation was carried out by subject experts which includes Dr. Sushant Sukumar Baragale, MD, PhD (*Swasthavritta* and *Yoga*), Associate

professor, SDM Ayurveda Medical College and Hospital, Hasan, Karnataka, Dr. Mrudul Chitrakar, MD, PhD (*Swasthavritta* and *Yoga*), Professor of *Swasthavritta* and *Yoga* at All India Institute of Ayurveda (AIIA), Goa. Dr. Amal S. Chandran, MD (*Swasthavritta* and *Yoga*), Associate Professor, J.S. Ayurveda Mahavidyalaya, Nadiad, Gujarat. Dr. Smita Bhat U.S., M.D. (*Swasthavritta* and *Yoga*), Associate Professor at Alvas Ayurvedic Medical College, Moodubidire, Karnataka. Dietary components was reviewed and validated through Dr. Swati B. R., M.D. (Ayu), M.Sc. (Nutrition), Associate Professor, Poornima Ayurvedic Medical College and Research Centre, Raichur, Karnataka. Statistically planning and data analysis were guided by Mr. Alex M. Carvalho, M.Sc. (Biostatistics), Senior Lecturer, Department of Epidemiology and Biostatistics, KLE Academy of Higher Education and Research (KAHER), Belagavi, Karnataka. All had a minimum of 5-10 years of academic and research experience. A 4-point Likert scale was utilized to rate the relevance of each item (1 = Not Relevant, 2 = Somewhat Relevant, 3 = Relevant, 4 = Highly Relevant). Content validity indices (CVIs) were calculated for individual items (I-CVI) and overall scale (S-CVI) to confirm the validity of questionnaires content through using Delphi method. Items with I-CVI < 0.78 were reviewed and removed. The final S-CVI for the instrument was 0.91, indicating excellent content validity of the tool. [11]

**2.6.2 II Cognitive Pre-testing and Face Validity:** Cognitive pre-testing was undertaken by conducting pilot study on 30 participants from target population. Participants were asked to complete questionnaire

during this process they were asked to comment on the general layout of the questionnaire and in particular were instructed to give feedback on how easy they found it to read, how easy it was to fill in, which words of the questionnaires were ambiguous and which words they found difficult in understand. Ambiguities or difficult statements were identified and minor linguistic modification was done and fine tuning of question structure was done after in order to enhance readability of questionnaire and consistency of the resulting responses. Average time needed to complete was 15-20 minutes, indicating that it would be feasible time for field administration purpose. [11]

### **2.6.3 Phase Three: Internal Consistency, Reliability and Construct Validity Assessment**

Internal Consistency, Reliability and construct validity: Reliability of questionnaire was calculated by using Cronbach's alpha coefficient. Tool consists of total 57 items divide into 11 domains structured into three major sub-scales as follows: Knowledge: 27 items (3-point Likert scale: I don't know = 0, I know a little bit = 1, I know about it = 2), Attitude: 17 items (3-point Likert scale: Not at all = 0, Somewhat = 1, completely= 2), Practice: 17 items (3-point Likert scale: Never=0, Sometimes=1, Always = 2). A Cronbach's alpha value  $\geq 0.70$  was considered as acceptable value of internal consistency. Cronbach's alpha given were 0.81 (Knowledge), 0.755 (Attitude) and 0.717 (Practice) with overall Cronbach's alpha of 0.75 which confirming a good internal reliability. [12]

Construct Validity of items was calculated using Karl Pearsons Coefficient for testing correlation. All the items

were calculated for each subscale of knowledge attitude and practice to find out degree of association between each item and to assess their scores. Correlation values ( $r > 0.30$ ) were considered acceptable. Convergent and divergent validity was confirmed through correlations between all the subscales.

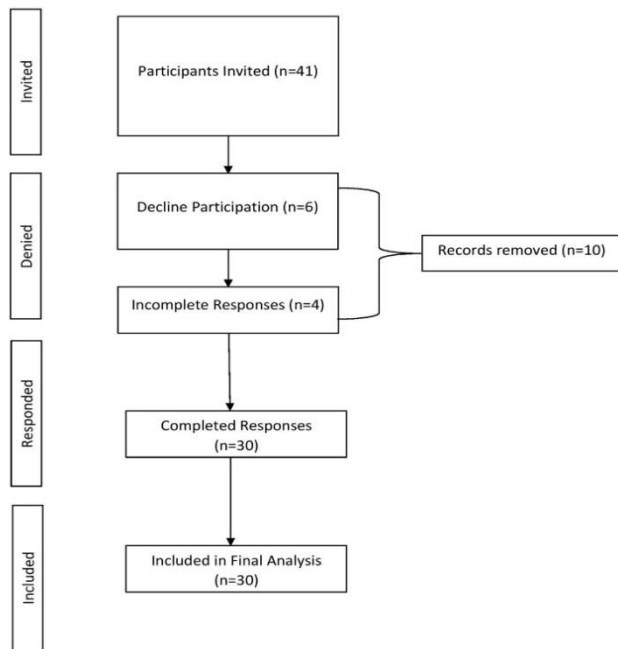
**2.7 Statistical Analysis:** Statistical analysis included evaluation of internal consistency reliability through Cronbach's alpha, which shown acceptable reliability for all subscales ( $\geq 0.70$ ). Karls Pearsons correlation test used to assess construct validity. Construct Validity. Test retest reliability and responsiveness was not undertaken at this stage as only baseline data were retrieved, these will be evaluated in anticipated pre and post interventional study. These steps consistent with COSMIN guidelines, ensuring methodological rigor at the same time providing a foundation for further psychometric evaluation in larger scale.

## **3. RESULTS**

Total of 41 participants were invited out of them 30 participants responded completely which was later included in final analysis, indicating 73.1% completion rate. Participant flow is shown in Figure 1, while the demographic profile of the participants is in Table 1.

### **3.1. Phase One: Tool Development**

The thorough literature review was carried out and the tool containing sixty-one items was organized under eleven domains and finalized. Eleven domains representing ten dietary domains as per shloka including one general domain were divided into Knowledge (27), Attitude (17) and Practice (17) components for understanding the construct.



**Figure 1. Participants flow diagram**

**Table 1. Demographic Characteristics of the Study Participants (n = 30)**

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	20–30	8	26.7
	31–40	12	40.0
	41–50	8	26.7
	51–60	2	6.6
Education Level	Graduate	26	86.7
	Postgraduate	2	6.6
	Doctoral	1	3.3
Occupation	Government Employee	8	26.7
	Private Employee	15	50.0
	Others	7	23.3
Residential Area	Urban	21	70.0
	Rural	9	30.0

Necessary Suggestions and inputs from respective staff were taken into account for the clear theoretical construct and refined alignment. The knowledge, attitude and practice subscale included the specific response criteria stated in table

**Table 2. Subscale and Specific Responses of Knowledge, Attitude and Practice questionnaire on *Ahara Vidhi Vidhana*.**

Subscale	Responses
knowledge	I don't know (0)
	I know a little (1)
	I know about it (2)
Attitude	Not at all (0)
	somewhat (1)
	completely (2)
Practice	Never (0)
	Sometimes (1)
	Always (2)

### 3.2 Phase Two: Validity Assessment

**3.2.1 Expert Panel and Content Validity:** Based on expert estimation using the Item-level Content Validity Index (I-CVI), items with I-CVI < 0.78 were omitted and marginal items were revised. Out of 61 initial items, 4 were omitted and 2 were modified, resulting in 57-item final item scale divided into Knowledge, Attitude and Practice subscales. Overall S-CVI was 0.91, indicating excellent content validity. Factor loadings ranged from 0.5–1.0, indicating satisfactory construct representation. (Table 3)

**Table 3. Item Reduction, Factor Loading and Content Validity Summary.**

Subscale	Total Items Initially	Deleted Items (I-CVI < 0.78)	Modified Items	Retained Items	Factor Loading Range	Remarks
Knowledge	27	04	00	23	0.5–1.0	Items with I-CVI < 0.78 were excluded
Attitude	17	00	01	17	0.83–1.0	One item modified for wording
Practice	17	00	01	17	0.83–1.0	One item refined for clarity
<b>Total</b>	<b>61</b>	<b>04</b>	<b>02</b>	<b>57</b>	—	Final questionnaire retained 57 items

**3.2.2 Cognitive Pre-testing and Face validity:** Regarding phrasing and wording of the Knowledge, Attitude and Practice questionnaire on *Ahara Vidhi Vidhana* only minor issues were reported and addressed after pilot test. Respondents reported that they faced difficulty regarding few items and needed to read them more than one time in order to understand and answer. So to encounter this the slight revisions were implemented during this stage. Item 26 (previously 28) was rephrased from “How often do you avoid overeating by stopping when you feel full even if there is food left?” to “How often do you eat more even when you’re full, just because there’s food left?” in order to improved clarity. Furthermore item 44 (previously item 47) was modified from “How often do you use plastic utensils for food preparations?” to “How often do you use separate utensils for raw and cooked food preparations?”. Respondent took on an average 15 to 20minutes to respond and complete the given questionnaire. Following this respondents feedback was discussed. The English version of tool was translated to Marathi and Kannada Languages for the sake of convenience.

**3.3 Phase Three: Internal Consistency Reliability and Construct Validity Assessment**

Internal consistency reliability was evaluated by using Cronbach’s alpha, which demonstrated acceptable to good internal consistency among subscales. Overall Cronbach’s alpha for 57-item scale was 0.75. Subscale wise alpha values were 0.81 (Knowledge), 0.755 (Attitude) and 0.717 (Practice). S-CVI of 0.91 indicating satisfactory internal consistency. Construct validity was analyzed by using Karl Pearson’s correlation. It indicated all the knowledge, attitude and practice subscales showed positive and significant correlations between items and their respective total scores ( $r=0.21-0.70$  and  $p<0.05$  to  $p<0.01$ ) confirming good construct validity. High within subscale supported convergent validity and lower value reflected divergent validity. Together these results validated Knowledge, Attitude and Practice questionnaire on *Ahara Vidhi Vidhana*. Summary of internal reliability and content validity index along with total number of items in subscale outline in table 4.

**Table 4. Reliability, Content Validity Index and item per subscale summary.**

Subscale	Number of Items	Cronbach’s Alpha	I-CVI Range	S-CVI
Knowledge	23	0.81	0.50–1.00	-
Attitude	17	0.755	0.83–1.00	
Practice	17	0.717	0.83–1.00	
<b>Overall Scale</b>	<b>57</b>	<b>0.75</b>	-	<b>0.91</b>

#### 4. DISCUSSION

This study developed and evaluated the *Ahara Vidhi Vidhana* (KAP) Questionnaire to assess knowledge, attitude and practice in the working women as targeted population. Findings show evidence that supports the validity and reliability of the instrument. Finalized version of questionnaire consists of 57 items into 3 subscales that are knowledge, attitude and practice. Initial draft of questionnaire was framed through review of literature and subsequently inputs from respective experts were incorporated to ensure the included items reflect the classical reference appropriately.

Content validation was conducted after receiving feedback from panel of experts, followed by revision of few items for relevance. 4 items that got inadequate I-CVI values were excluded and for some items modifications were carried out to improve clarity. S-CVI value of 0.91 was strong enough to indicate agreement among experts and confirm that questionnaire items effectively addressed the construct domains.

To strengthen the questionnaire's feasibility face validity testing was carried out. Participants from targeted population were able to complete the questionnaire within 15-20 minutes. A few items were revised those who were having difficulty to interpret. Revision of these items helped for easy readability. Contextual improvement was strengthened by these modifications. For easy understanding the tool was translated into two local languages, Marathi and Kannada to increase accessibility and inclusiveness in targeted population.

Further the tool was subjected for internal consistency and reliability for 57 items. Overall Cronbach's alpha of

0.75 met the acceptable value for reliability of questionnaire. Knowledge subscale got Cronbach's alpha of 0.81, while the attitude (0.755) and practice (0.717) subscales were also satisfactory at the values which are consistent with widely acceptable range.

Present study demonstrated acceptable internal consistency with an overall Cronbach's alpha of 0.75 for the questionnaire. Subscale wise alpha values were 0.81, 0.755 and 0.717 for Knowledge, Attitude and Practice respectively. Karl Pearson's correlation analysis showed positive correlations between individual items and their respective subscales, later supporting construct validity through both convergent as well as divergent validity. These reliability estimates compare favourably with those reported in validated KAP instruments in other health research domains like COVID-19 KAP tools (Park et al., 2021;  $\alpha = 0.74-0.82$ ) and preventive health behaviour KAP instruments (Asmare et al., 2022;  $\alpha = 0.70-0.85$ ). [13, 16] All values fulfilled COSMIN criteria for acceptable reliability ( $\alpha \geq 0.70$ ). Additionally, calculated scale-level content validity index (S-CVI) of 0.91 exceeded the recommended threshold for excellent content validity as proposed by Polit and Beck (2007) [14]. In short, psychometric performance of *Ahara Vidhi Vidhana* KAP questionnaire was robust and also aligned with international standards for instrument development and validation. Importance of *Ahara* and proper nutrition helps to maintain individuals' health and it is linked to enhancing growth and longevity. Among the basic fundamental principles of Ayurveda, *ahara* is one. [15] *Ahara Vidhi Vidhana* will help to utilise the benefits of *ahara* completely. This

study was mainly concerned with development of Ayurvedic questionnaire specifically to address the KAP domain in *Ahara Vidhi Vidhana* context. Previous studies have shown that community compliance with disease prevention measures is largely influenced by the level of knowledge, attitude and practices. [10, 16-17] Using both the qualitative and quantitative methods makes this tool reliable and valid for any Ayurvedic clinical study or KAP studies.

**Strength:** A key and major strength of current study is its robust methodological design adopting expert guided item generation based on classical Ayurvedic reference and using standardized method for validation like I-CVI, S-CVI and Cronbach's alpha that confirmed content validity as well as acceptable internal consistency and reliability of questionnaire.

**Limitations:** Present study was conducted as a pilot validation with sample size (n = 30) as well as at a single geographic site. So limited population included in this study may limit wider applicability of the findings. However, questionnaire has been translated into 2 vernacular languages (Marathi and Kannada), formal cross-cultural validation has not been carried out in other regional and linguistic groups. This study primarily based on self-reported responses, so social desirability and response bias could have been introduced.

**Implications:** Despite above limitations, validated KAP questionnaire on *Ahara Vidhi Vidhana* has important theoretical as well as practical implications. This questionnaire serves as a standardized tool to assess dietary KAP in different population groups. KAP questionnaire on *Ahara Vidhi Vidhana* may be utilized

by health educators for training students, researchers for KAP-based community surveys as well as policymakers to measure the gaps in dietary KAP in order to plan preventive health programs targeting traditional Ayurvedic dietary principles. In clinical practice, the KAP on *Ahara Vidhi Vidhana* tool may be helpful for lifestyle modification and dietary educational intervention targeting the prevention of non-communicable diseases by identifying gaps in dietary awareness.

**Future Research:** Future research should target large-scale validation with other population groups to ensure generalizability. Additional cross-cultural adaptation and translation into various Indian languages can increase representation to wider societies. Further psychometric testing such as test-retest reliability, construct validity, evaluation of responsiveness also should be done to prove temporal stability and sensitivity to change.

## 5. CONCLUSION

This study established 57 item knowledge, attitude and practice questionnaire on *Ahara Vidhi Vidhana*. It is considered to be a valid tool that allows assessment and evaluation of Knowledge, Attitude and Practice levels contributing to adherence to *Ahara Vidhi Vidhana*. It gives a preventive approach towards Non-Communicable Diseases and enhances quality of life. The findings of research indicate the tool has satisfactory reliability and validity. Considering the above-mentioned limitations the newly developed tool could be valuable for utilizing this tool to assist health educators, researchers, dietitians and clinicians in specific populations for prevention of various lifestyle

related disorders by promoting education on *Ahara Vidhi Vidhana*

**List of Abbreviations used:**

KAP: Knowledge, Attitude and Practice

COSMIN: Consensus-based Standards for the selection of health Measurement Instruments

CROSS: Consensus-based Checklist for Reporting of Survey Studies

I-CVI: Item-level Content Validity Index

S-CVI: Scale-level Content Validity Index

IEC: Institutional Ethics Committee

RCT: Randomized Controlled Trial

$\alpha$  (Alpha): Cronbach's alpha

r: Pearson's correlation coefficient

NCDs: Non-Communicable Diseases

KAP COVID-19: Knowledge, Attitude and Practice questionnaire related to COVID-19

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**Declaration of Generative AI**

The authors declare this manuscript was written without the use of generative artificial intelligence tools. All the content, including text generation, data analysis and references was developed and reviewed by the author without assistance from AI technologies.

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### SUPPLEMENTARY

#### AHARA VIDHI VIDHANA (Dietary Guidelines) QUESTIONNAIRE

SN	Ss	Domain-I GENERAL	Options
1.	K 01	Do you know about the Ayurvedic concept of Ahara Vidhi Vidhana (Dietary Guidelines)?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
2.	A 01	Do you agree that adopting dietary guidelines ( <i>Ahara Vidhi Vidhana</i> ) will improve your overall health?	Not at all (0)
			Somewhat (1)
			Completely (2)
3.	P 01	How often do you try to follow dietary guidelines ( <i>Ahara Vidhi Vidhana</i> )?	Never (0)
			Sometimes (1)
			Always (2)
Domain-II <b><i>Ushnamashniyat</i></b>			
4.	K 02	Do you know that warm food enhances its taste?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
5.	K 03	Do you know that warm food enhances your digestive capacity?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
6.	K 04	Do you know that consuming warm food helps in proper digestion?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
7.	K 05	Did you know that the Ayurvedic concept states consuming warm food helps properly balance the	I don't know (0)
			I know a little bit (1)
			I know about it (2)

		Kapha and Vata doshas?	
8.	A 02	Do you believe incorporating warm food into your diet can improve your health?	Not at all (0)
			Somewhat (1)
			Completely (2)
9.	A 03	Are you willing to make changes in your diet to include more warm and fresh food?	Not at all (0)
			Somewhat (1)
			Completely (2)
10.	P 02	How often do you make an effort to consume warm food regularly?	Never (0)
			Sometimes (1)
			Always (2)
11.	P 03	How often do you consume warm food items rather than cold items?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain III</b> <b><i>Sneegdheashniyat</i></b>			
12.	K 06	Do you know what comes under unctuous food?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
13.	K 07	Do you know unctuous food enhances the restrained power of digestion?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
14.	K 08	Do you know unctuous food is responsible for your bodybuilding?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
15.	K 09	Do you know unctuous food will strengthen your sense organs?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
16.	K 10	Do you know unctuous food enhances your skin complexion?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
17.	A 04	Do you pay attention to the quality and source of unctuous food?	Not at all (0)
			Somewhat (1)
			Completely (2)
18.	A 05	Do you consider portion size and quantity of unctuous food to be important?	Not at all (0)
			Somewhat (1)
			Completely (2)
19.	P 04	How often do you consume unctuous food as part of your	Never (0)
			Sometimes (1)

		diet?	Always (2)
20.	P 05	How often do you consume sweet items including unctuous food?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain-IV</b> <b><i>Matravataashniyat</i></b>			
21.	K 11	Do you know that consuming a proper quantity of food intake will maintain the balance of Tridosha?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
22.	K 12	Do you know proper quantity of food helps in the evacuation of waste products?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
23.	K 13	Do you know the proper quantity of food is important for proper digestion and improving digestive power?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
24.	A 06	How mindful are you of portion sizes when serving or consuming meals?	Not at all (0)
			Somewhat (1)
			Completely (2)
25.	A 07	Would you be open to learning and implementing knowledge regarding portion control in your diet?	Not at all (0)
			Somewhat (1)
			Completely (2)
26.	P 06	How often do you eat more even when you're full, just because there's food left?	Never (0)
			Sometimes (1)
			Always (2)
27.	P 07	How often do you measure or estimate portion sizes when preparing or consuming meals?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain-V</b> <b><i>Jeerneaashniyat</i></b>			
28.	K 14	Do you know that one should consume food only when the previous meal is digested?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
29.	K 15	Do you know the signs of proper digestion of the food?	I don't know (0)
			I know a little bit (1)
			I know about it (2)

30.	A 08	Are you willing to know about the signs of proper digestion?	Not at all (0)
			Somewhat (1)
			Completely (2)
31.	A 09	Do you think consuming food only after properly digesting a previous meal is important to balance dosha and dhatu states?	Not at all (0)
			Somewhat (1)
			Completely (2)
32.	P 08	How often do you eat in between the meals?	Never (0)
			Sometimes (1)
			Always (2)
33.	P 09	How often do you eat before the digestion of previous meals?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain-VI</b> <b>Veeryaavirudhhashniyat</b>			
34.	K 16	Are you aware of the potential health effects of consuming substances with contradictory potencies?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
35.	A 10	Do you think it's important to avoid consuming foods with contradictory potencies to maintain good health?	Not at all (0)
			Somewhat (1)
			Completely (2)
36.	A 11	Would you be open to learning more about the effects of contradictory food combinations on health?	Not at all (0)
			Somewhat (1)
			Completely (2)
37.	P 10	How often do you drink warm water with honey?	Never (0)
			Sometimes (1)
			Always (2)
38.	P 11	How often do you drink milkshakes including fruits?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain-VII</b> <b>Ishtadesheishtasarvapakramane</b>			
39.	K 17	Are you aware of the necessity of using all the required utensils for food consumption?	I don't know (0)
			I know a little bit (1)
			I know about it (2)

40.	K 18	Do you know how the place in which you consume food affects your psychological well-being?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
41.	A 12	How motivated are you to ensure a clean and hygienic environment while eating?	Not at all (0)
			Somewhat (1)
			Completely (2)
42.	A 13	Do you believe that the utensils used for preparing and serving food play an important role in maintaining health?	Not at all (0)
			Somewhat (1)
			Completely (2)
43.	P 12	How often do you make efforts to clean the necessary utensils used for cooking?	Never (0)
			Sometimes (1)
			Always (2)
44.	P 13	How often do you use separate utensils for raw and cooked food preparations?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain-VIII</b> <b>Naatidrutamaashniyat</b>			
45.	K 19	Do you know that eating in a hurry can lead to unpredictable variations in taste and quality of food?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
46.	K 20	Do you know that hurried eating can lead to choking?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
47.	A 14	How concerned are you about the importance of chewing food thoroughly before swallowing?	Not at all (0)
			Somewhat (1)
			Completely (2)
48.	P 14	How often do you rush through meals without chewing food properly?	Never (0)
			Sometimes (1)
			Always (2)
<b>Domain-IX</b> <b>Naativilambitamaashniyat</b>			
49.	K 21	Do you know that eating too slowly can hamper digestion?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
50.	A 15	Do you believe that eating too slowly will cause more	Not at all (0)
			Somewhat (1)

		consumption of food?	Completely (2)
51.	P 15	How often do you eat your meals too slowly or too quickly?	Never (0)
			Sometimes (1)
			Always (2)
Domain-X <b><i>Ajalpaahasa tanmana bhunjeet aashniyat</i></b>			
52.	K 22	Do you know the principles of mindful eating including focusing on the sensory experience of food?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
53.	A 16	How important do you think it is to practice mindful eating?	Not at all (0)
			Somewhat (1)
			Completely (2)
54.	P 16	How often do you laugh or speak while eating?	Never (0)
			Sometimes (1)
			Always (2)
Domain-XI <b><i>Atmanamabhisamikshya</i></b>			
55.	K 23	Do you know the importance of digestion capacity while consuming the food?	I don't know (0)
			I know a little bit (1)
			I know about it (2)
56.	A 17	Do you think whether the food is healthy or unhealthy for you before consuming it?	Not at all (0)
			Somewhat (1)
			Completely (2)
57.	P 17	How often do you consume food with due regard to yourself?	Never (0)
			Sometimes (1)
			Always (2)

\*Footnotes: K= Knowledge, A= Attitude, P= Practice, SN= Serial Number, SS= Sub-Scale,

\*Note: P05, P06, P07, P08, P09, P10, P11, P14, P15 and P16 should be reversely coded for evaluation.