

P A R T - I

C R I T I C A L S T U D Y

CHAPTER - I: I N T R O D U C T I O N :INTRODUCTORY :

To whatever category one may belong to, the plant, the animal and the human being require food for growth and to sustain themselves¹. Considerable importance of the matter of food was accepted from the ancient times in India. In the Upaniṣadas, it is stated that everything that rests on the earth, movable or immovable is produced from food. Then they live with food. Food is the elderly born among the beings. Therefore it is the medicament for all.²

The ancient Indians attached great importance to proper diet of the people.³ It is believed that the food makes a man. Purity of thoughts depends upon the purity of food. Bhagavat Gītā classifies the food articles according to the mental make up of the people.⁴ The rules regarding what should be eaten and what should not be eaten are laid down elaborately.⁵

The Āyurveda deals with the healthy, happy and long life. The food is foremost of the three supporters of the life.⁶ As stated in the SS, " Life is impossible without food. Food is the source of the growth, strength and healthful glow of organic beings. It is the food that imparts strength to the

organs of sense and makes them operative in their respective fields of action. It is *Vaiṣṇya* (irregularity) of diet which brings about ill health⁷". Over and above this, " Food is the primary cause of the origin, continuance and dissolution even of such beings like the devine *Brahma* etc."⁸

The physical and mental happiness of individuals depends upon the food which they take.⁹ Moreover the food plays an important role in prevention as well as treatment of diseases. It is more important than medicine itself. It alone produces cure. That is why the KS calls the food as the *Mahābhaisajyam* (great medicine).¹⁰

The knowledge of scientific conceptions of the *Āyurveda* regarding the food must be studied by all physicians. " A physician who is ignorant of the food substances and their specific inherent properties (*rasas*), virtues (*gunas*), potencies (*vīrya*) and transformations or chemical reactions (*vipāka*) which constitute the daily food of human beings, is quite helpless in checking or curing any distemper and maintaining health in individuals. The food determines the origin of all created beings¹¹".

Thus food is one of the most considerable factors to be thought in views of human health and welfare.

The Āyurveda deals with all aspects of food in scientific ways. The Dietology, Nutrition and Culinary art now progressing as important sciences are discussed, as well as precious and invaluable truths are revealed. The various statements made by the ancient Āyurvedists have got a strong scientific basis. It is wrong to consider their observations merely empirical without understanding the scientific basis of the Āyurveda in its proper way. It may be that their observations may not be considered as analytical as to be.

Dietology, Nutrition and Cookery are inter-related according to the Āyurveda. So they are dealt with unanimously. Nutrition of the human body (even mind and soul) by proper diets is possible when the food is prepared or cooked properly. So cooking is very important.

Pākāśāstra which stands for cookery, as a science and an art had received sufficient attention even in ancient India.¹² It was considered as sacred knowledge and it was taught by special teachers in higher education.¹³ Dr. Jenne M. Harper, Professor in food and Nutrition, southern Illinois Uni., U.S.A. states that, 'India has a long tradition of excellent food. Most of the methods of food preparation have been handed down from generation to generation'¹⁴.

Indian cookery is highly praised by the experts. It is stated that, " Indian cookery really needs no introduction. To eat Indian food is to take a glimpse of heaven¹⁵".

Almost all Āyurvedic classics describe various food preparations with their properties and methods of cooking. The main object of cooking food is to render it more digestible and palatable. Undigested food does not nourish the body. So with scientific conceptions cooking is developed as a science since from the ancient times in India. It is known as Pākṣāstra". "Indian cookery dates centuries back and it is a combination of the cooking of many nationalities. The result is a complicated art dating back to the remote ages and dependent on religion, health, customs, taste and climatic conditions¹⁶".

Process of cooking makes the food very tasty. It improves its appearance and develops in it new flavours. So it is developed as an art in all provinces of India. It is an important and favourable hobby of the Indian women. There are thousands palatable and delicious dishes available in India.

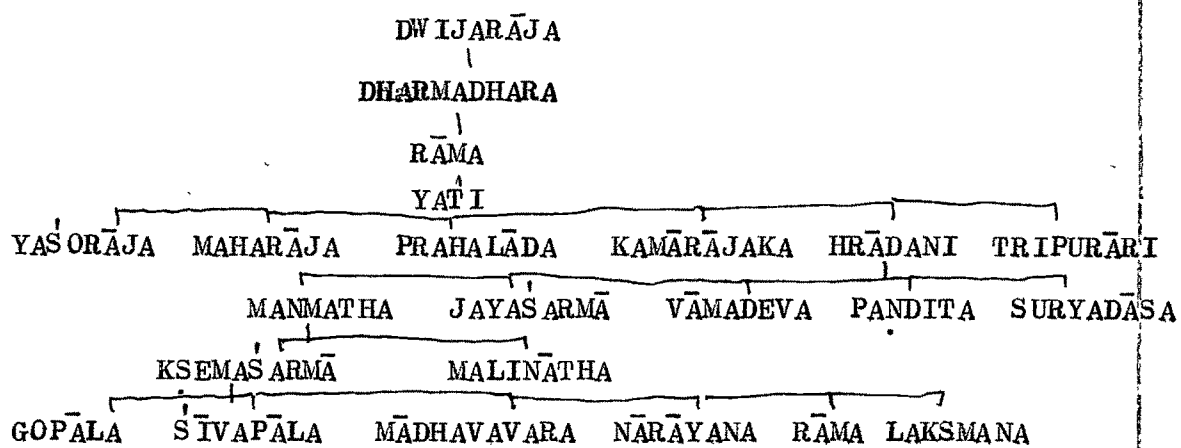
Thus Pākṣāstra is a science as well as an art in India. It deals with the methods of preparing different food items. It explains dietetics, nutrition as well as the rules of preservation of health based on the Āyurvedic scientific conceptions.

The Paksāstra as a separate and important science was developed and many treatises were composed in India. But they are not available in recent time, however they have been cited. Nala's Pakadarpana is available and is published by the CSS. The Supasāstra of Bhīma which is said to be old and still is in a manuscript form.¹⁷

The Ksemakutūhalā written by Vaidya Ksemasarma in 1548 A.D. is also one of the important works on Paksāstra. It is published by Vaidya Jadavaji Trikamaji Acharya in 1920 and then Vaidya Indradev Tripathi prepared it with Hindi translation which is published by the CSS. in 1933. Our work is an effort to furnish a critical study and editing of this good work.

AUTHOR'S PERSONAL LIFE AND FAMILY HISTORY :

The author describes his genealogy in details with pride and admiration (I - 3 to 18, XII - 122). The genealogical tree is as follows:



This family was Sanādhyā Brahmin belonged to Bhardwāja Gotra. They were from Mārvaḍa of Rajasthan.¹⁸

Dwijarāja who was free from any blames and was a great physician. He treated Lakṣmaṇa and Vibhiṣaṇa in Lanka. This statement seems to be exaggerated. KK states that a physician of his family received the well known city named Ālokapurī as a gift from king Rāma (XX -122). His name is not mentioned, but the name might be Dwijarāja about whom he stated as above.

Dharmadhara was Suśrta's companion and he treated patients in his company.

Rāma was a great scholar of the Āyurveda. He was also a religious minded gentleman. He used to pass his time in good activities with good friends. His son, Yati was also a brilliant physician. He won Hṛsīkacakra. He had six sons.

Among them Mahārāja was very famous. He won the favour of a king belonging to Śaka country. He was also a statesman. He freed ten prisoners from Delhi by his tact. It pleased the king and ten villages including village Gaḍājara were given to him.

His brother Hṛadani studied Caraka, Suśrta and Vāgbhaṭṭa. He became an authority of Āyurveda. He had five sons.

Gaurī

Caraka

Susr̥ta

Vāgbhaṭṭa

Hār̥ita

Bhīma

Sūrya

Majority of the verses being the composition of others, it is difficult to estimate the contribution of the author himself. As a good compiler, he has brought out a valuable work on Pākṣāstra. He does not refer to any other book written by him.

ARRANGEMENT OF THE CHAPTERS :

The KK is divided in twelve chapters (Utsavas). The contents of each chapter is given in the first chapter in the form of index as follows: (I - 23 to 33).

Ist Chapter

1. Invocation
2. The genealogical description
3. Arrangement of the chapters
4. Types of food and methods of cooking
5. General hints for cooking
6. Weight and Measurements

IIInd Chapter:

1. Eulogy
2. Royal kitchen
3. Utensils
4. Implements
5. Inspection of poisoned food.

IIIrd Chapter:

1. Physician
2. Cook
3. Food handler
4. Serving of meal
5. Theory of Mātrā (Proper quantity)
6. Rules of Drinking water
7. Timings of taking meals
8. Adhyāsana, Viśamāsana and Viruddhāhāra
9. Dietectic regimens

IVth Chapter :

1. Natural features of the seasons
2. Seasonal regimens

Vth Chapter :

1. Daily regimens
2. Rules of good conduct

VIth Chapter :

1. Meal planning and service
2. Presentation of food articles
3. Some vegetarian items and food articles
4. Meat cooking
5. Meat preparations

VIIth Chapter :

1. Fish cookery

VIIIth Chapter :

1. Vegetables
2. Fruits
3. Leaves
4. Flowers
5. Tumours

IXth Chapter:

1. Preparations of cereals and pulses
2. Mixed preparations

Xth Chapter :

1. Milk products
2. Sweet balls
3. Some preparations of flour

XIth Chapter :

1. Appetisers

XII
Xth Chapter :

1. Beverages

2. Curds

3. Butter-milk

4. Ācamana (Sipping water)

The above-mentioned topics in each chapter as stated in the first chapter can be said as an outline of this work. It is not an exact index. In fact the author mixes up these topics in some chapters, but they are few. On the whole it is composed in systematic sections. The Author covers almost all important aspects of Pākāśāstra.

TYPES OF COOKED FOOD :

All preparations of cooked food are classified in four groups (I - 36 ²⁰). They are as follows :

1. Bhaksya - Eatable. Food that requires more mastication viz. bread, cakes etc. It is also called khādita²¹.
2. Bhojya - To be eaten Food that requires no much more mastication.viz. rice, sweet balls etc. It is also called Asīta²².

3. Lehya - To be eaten by licking. viz. Śrīkhaṇḍa, Syrups etc.
4. Peya - Drinks. Food that can be drunk.

The Pākadarpaṇa enumerates five types of the preparations.²³

1. Bhakṣya
2. Bhojya
3. Lehya
4. Coṣya (To be sucked)
5. Dugdhagatapeya (Milk products in liquid-form)

METHODS OF COOKING :

The application of heat to animal and vegetable substances to make them more palatable and more easily digestible constitutes the science and art of cookery. The KK states the methods of cooking (I. 37, 38). They are ^{also} described in Pākaraśārnava as follows:²⁴

- i) Bhañjana - Broiling or baking or roasting. It is cooking by direct heat.
- ii) Talana - Fry in oil or ghee. It is of three kinds.
(VI - 64): Pan-frying, Sautering and deep fat frying.
- iii) Sveda - Cooking in steam. It may result from added water or from water present in the food itself.

- iv) Pācana - Act of cooking.
- v) Kvathana - Boiling and Simmering. Water is the principal cooking medium in boiling and Simmering.
- vi) Tāndūra - Cook in a Tāndūra, a kind of oven.
- vii) Puṭapāka - A particular method of preparing food or drugs, in which the various ingredients are wrapped up in leaves and being covered with clay are roasted in the fire.²⁵

Generally all processes of cooking are included in above mentioned seven methods. In modern times, a new method is used. It is Electronic Cooking. Radiant energy in the form of high frequency radio waves causes molecular activity which generates heat within the food.²⁶

GENERAL HINTS FOR COOKING :

The KK suggests following hints to be considered and to be paid thorough attention ~~to~~ while cooking food (I. 41 to 58).

1. The food stuffs are mixed with ingredients such as asafoedita, oil, water, salt etc. as per requirement while preparing food. Their proportion is fixed by the experts in cooking.

2. Kuṁkuma(saffron), Rakta candana (Red Sandal) and Tāmbūla (betel-leaf) are used as colouring agents.
3. Vesavāra is generally used in most of the food preparations. It is also called Kāsamarda (I.44). It is a particular condiment consisting of following ground spices in the proportion shown against each of them (I. 42 to 44).²⁷

Asafoetida	one part
Wet ginger	two parts
Black pepper	four parts
Cumin seeds	eight parts
Turmeric	sixteen parts
Coriander seeds	thirty two parts

Vesavāra begins to smell strongly while it is frying in ghee or oil, is considered the best Vesavāra according to expert opinion (I. 45).

Vesavāra is prepared also in many ways :

i) A mixture of ground spices as under :

White leadwort
 Roots of piper longum
 Piper longum
 Piper chaba

Ginger

Coriander seeds

Turmeric

All spices should be mixed in equal part. This preparation is described in Ātreya Saṁhitā.²⁸

ii) Following mixture of ground spices is also used as Vesavara.²⁹

Turmeric	Two parts
Coriander seeds	One part
Cumin seeds	$\frac{1}{2}$ part
Fenugreek	$\frac{1}{4}$ part

Mix them and roast the mixture slightly. Add the powder of black piper and asofoetida in a small quantity.

iii) Vesavara is also prepared using meat. It is called Upaskara.³⁰

Take fresh meat and remove bones. Crush it well on a wide stone. Add following spices while crushing it.

Ginger root

Coriander seeds

Cumin seeds

Red or green chillies

Tamarind

Suśrta also describes two types of Vesavāra with their specific properties.³¹

4. Powders of cardamoms, cloves, campher, musk, black pepper and cinnamon are called Uddhūlana. They are to be sprinkled on the articles made from sugar-cane, milk, vegetables, cereals, meat, fish etc.
5. General method of cooking meat, fish etc. is as follows:
Heat oil or ghee first.
Fry as foedita or another suitable spice with it.
Put the article and mix vesavāra and salt.
When it is semi-cooked, put butter-milk or Dādimīrasa in it.
Take it down from the fire and sprinkle Uddhūlana on that well cooked article.
6. All articles except rice and decoctions are cooked on slow fire. Milk is never heated on strong fire.
7. Water is a principal medium of cooking food. Quantity of water varies according to the food articles to be cooked. Hard articles require big quantity of water and soft articles require small quantity. A general outline of the quantity is said as follows :

<u>Food article</u>	<u>Quantity of water</u>
Rice	Four times
Soup of Maḍga pulse	Three times
Soup of Maṣa pulse	A little more than three times.
Kṛsāra	Less than three times.

8. Quantity of ingredients in cooking various preparations is as follows :

	<u>Oil or Ghee</u>	<u>Salt</u>	<u>Vesavāra</u>	<u>Uddhūlana</u>
Meat (10 palas)	1 pala	$\frac{1}{2}$ pala	1 picu	1 taṅka
Fish (10 palas)	$\frac{1}{4}$ pala	pala	$\frac{1}{4}$ picu	$\frac{1}{4}$ taṅka
Vegetables (10 palas)	1 pala	$\frac{1}{2}$ pala	1 picu	1 taṅka
Bakṣya (10 palas)	less than 1 pala	Less than $\frac{1}{2}$ pala	less than 1 picu	less than 1 taṅka

9. Quantity of sugar to be added in preparing bavarages depends upon sourness of fruits.
10. Quantity of ingredients to be used in cooking any food preparation depends upon liking of taste of the eater.
11. One should learn an art of cooking under the guidance of an expert and experienced cook.

WEIGHT AND MEASUREMENT :

The common ways to measure substances are by weight and by volume were known Kāliṅga and Māgadha.³² These two systems were present in ancient India. The KK mentions following measurements of Māgadhy³-system (I. 50-51).

1. Māsaka	= 730 mg.
2. Śanaka	= 2.916 gm.
3. Picu	= 11.664 gm.
4. Pala	= 46.665 gm.
5. Kaḍava	= 166.620 gm.
6. Prastha	= 746.480 gm.
7. Ādhaka	= 2 kg. 985 gm. 930 mg.
8. Droṇa	= 11 Kg. 860 gm. 387 mg.
9. Droṇis	= 47 kg. 561 gm. 548 mg.

Above mentioned gm - equivalents are stated in the edition of the KK published by Vaidya Indradeva Tripathi.³³

DĀDIMĪRASA AND ŚIKHARINĪ :

Dādimīrasa : It is used generally as a cooking medium. Method of preparation is as follows :

Saunter pomegranate seeds in ghee
Mix butter-milk and cook properly.

Sikharinī - It is one of the most famous milk products. Method of preparation is as follows :

Squeeze curd and remove water.

Take powdered sugar in one part and the curd in two parts. Mix them.

Place a fine strainer over a pot.

Rub the mixture through it till it is used up.

If Sikharanī is sprinkled with Uddhūlana, it is called Rasāla.

In modern times this preparation is called Srikhaṇḍa. It is very popular and favourite in India's cookery. Its method of preparation remains almost the same as described in the KK.³⁴

It should not be taken in spring season. It promotes strength as well as semen. It nourishes the body which is emaciated due to long journey. It is appetiser, unctuous, cooling, sweet in vipāka and laxative. It stimulates the power of digestion and alleviates vāta. It cures Raktapitta, morbid thirst, burning sensation and coryza. It is said that Rasāla was prepared by Bhīma who was an expert cook too. Lord Kṛṣṇa loved this Rasāla (XX 31 to 34).

CHAPTER - I: R E F E R E N C E S :

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^{Khadyo} ~~and Drinks~~ (Gujarati), p.113.
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33. Tripathi Indradeva, Op.Cit., p. 11, 12.
34. Cf. Ambegaokar Vatsala, Indian Cookery, p. 51.