DIET IS DIVINE - PART 1

(MODERN, ÂYURVEDIC ANDSPIRITUAL CONCEPTS OF DIET)

Preface

Modern medicine has conducted an indepth study on the composition of practically all the food items and has derived the amount and percentage of proteins, fats, carbohydrates, vitamins and minerals in every food item. It describes in detail the functions of these components and the effects of their being deficient or in excess. It also gives guidelines to make one's diet a balanced one.

Âyurveda describes the effects of various biological properties of food like cold, hot, warm, heavy and light and their action on the human body. It elucidates the effect of the taste of food on the body and the mind. It gives guidelines to adjust one's diet as per one's constitution, season, age, etc. It gives in detail the effect of every food item on various tissues and organs of the body and describes dietetic incompatibilities. It also enlists in detail the list of food items which are beneficial or harmful in various diseases and how one should vary the diet in the different stages of the disease. Âyurveda emphasises on the importance of following the recommendations and restrictions of diet as advised by the physician in various diseases. Âyurveda gives details of the arrangement in the kitchen, the arrangement of food items in a dish and emphasises on the importance of hygiene. It also describes how one should serve the courses of food and the rituals one should follow before, during and after meals.

Âyurveda states that one should not indulge in eating tasty dishes. Food should be selected after considering its qualities and considering one's age, constitution, digestive power, the season, etc.

Based on the effects of food on the mind, Âyurveda classifies food into three types – sâttvik (sattva predominant) food which promotes good qualities, râjasik (raja predominant) food which stimulates emotions and tâmasik (tama predominant) food which results in laziness and lethargy.

Âyurveda emphasises that one should never criticise food and should eat it with respect by giving due attention to its taste and aroma. Our life activities as well as our energy, strength, intelligence, memory, lustre of the skin, etc. depend on food. It is important to maintain the body strong and healthy by consuming an appropriate diet so that one can enjoy worldly pleasures by following the rules of Righteousness (*Dharma*) and undertake spiritual practice to attain the Final Liberation (*Moksha*), which is the state of eternal Bliss. As food helps one to attain eternal Bliss, food itself is considered as '*Brahman*'.

This book will prove useful to everyone including students and physicians. By studying and following the guidelines given in this book, everyone can enjoy a long, healthy, useful and happy life.

Lord Vishnu is the deity which controls the production, digestion and utilisation of food. We pray unto Lord Vishnu to bless everyone with a divine life.

ॐ विष्णवे नमो, विष्णवे नमो, विष्णवे नमः ।

Dr. V. B. Athavale Dr. K.V. Athavale

Index

SECTION I FUNDAMENTAL PRINCIPLES OF DIETETICS

1. Food itself is Brahma (annam Brahma)	
1. Lord Vishnu - the deity of food	29
2. Importance of food as a vehicle for the subtle	
body (<i>linga deha</i>)	29
3. Food provides the structural components and energy	30
4. The body is derived from food	30
5. Definition of food	31
6. Properties of food	32
7. Importance of a beneficial diet	32
2. Constituents and classification of food	
1. What is the composition of the human body?	33
2. What are the functions of these basic elements?	33
3. How are these basic elements available ?	34
4. What are the basic elements and the biological	
elements of the human body according to Âyurveda?	34
5. How are the constituents of food classified?	34
6. How is food available in Nature?	34
7. What are the basic constituents of the human body?	36
8. What are the differences in the nutritive value of	
vegetarian and non-vegetarian food?	36
9. Best food items from various categories	37
10. Important functions and effect of various food items	
commonly used in our diet	39
3. Food processing	
1. What are the various methods of processing food?	40
2. What is the effect of cooking on the nutritive value	
of food ?	41
3. How can one preserve food?	43

4.	Meals
----	-------

3. Place for eating 4. Vastushastra and the arrangement in the kitchen 5. Utensils used for serving food 6. Arrangement of food items in a plate 7. When should a person dine? 8. Before meals 9. Is it advisable to take an appetiser before meals? 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	14 14 14 14 16 17 17 18 18 19 19 50 51 51 52 53
4. Vastushastra and the arrangement in the kitchen 5. Utensils used for serving food 6. Arrangement of food items in a plate 7. When should a person dine? 8. Before meals 9. Is it advisable to take an appetiser before meals? 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	14 14 14 14 17 14 18 18 19 19 50 51 51
5. Utensils used for serving food 6. Arrangement of food items in a plate 7. When should a person dine? 8. Before meals 9. Is it advisable to take an appetiser before meals? 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	146 147 147 148 148 149 149 150 151 152
6. Arrangement of food items in a plate 7. When should a person dine? 4. Before meals 9. Is it advisable to take an appetiser before meals? 4. 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 4. 11. Selection of food 4. 12. How should one serve the courses of food? 4. 13. When should one drink water during a meal? 4. Qualities of food and its effect on the body 4. 15. Eating slowly or eating fast 6. Avoid the following types of food items 6. 17. Dinner 6. 24. 24. 24. 25. 25. 25. 25. 25. 25. 25. 25. 25. 25	147 147 148 148 149 149 150 151 152
7. When should a person dine? 8. Before meals 9. Is it advisable to take an appetiser before meals? 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	147 148 148 149 149 150 151 152
8. Before meals 9. Is it advisable to take an appetiser before meals? 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	48 49 49 50 51 51
 9. Is it advisable to take an appetiser before meals? 10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food 	48 49 49 50 51 51
10. Is it advisable to have an alcoholic drink as an appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	19 19 50 51 51
appetiser before meals? 11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	19 50 51 51 52
11. Selection of food 12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food 55.	19 50 51 51 52
12. How should one serve the courses of food? 13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	50 51 51 52
13. When should one drink water during a meal? 14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food	51 51 52
14. Qualities of food and its effect on the body 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food 55	51 52
 15. Eating slowly or eating fast 16. Avoid the following types of food items 17. Dinner 18. Quantity of food 5 5 6 7 8 9 10 10	52
16. Avoid the following types of food items 17. Dinner 18. Quantity of food 5	
17. Dinner 18. Quantity of food 5	53
18. Quantity of food 5	
	53
19. Anupana 5	53
	54
20. Should one eat meals in solitude or in the company	
of family or friends?	58
5. Diet and the mind	
1. Concept of food according to the Vedâs 6	50
2. Diet of the sense organs, mind and intellect	50
3. Factors affecting the purity of food 6	50
4. Activation of the Sun channel (Sûrya nâdî) after meals 6	53
5. Diet and the mind	53
6. Classification of diet in relation with the mind	53
7. Examples of sâttvik, râjasik and tâmasik food items	54
8. Effect of the state of mind on digestion 6	
$oldsymbol{c}$	55
	-

	11. Diet with sanskars	66
	12. Effect of an evil eye being cast by animals and	
	people on the food served as a meal	67
6.	Qualities of food	
	1. The twenty biological qualities of food	68
	2. What is the scientific meaning of the words 'hot' and	
	'cold' with respect to food items and medicines?	69
	3. Hot and cold food items	71
	4. Who should eat hot food items and who should	
	avoid them ?	72
	5. Who should eat cold food items and who should	
	avoid them ?	73
	6. Heavy and light food items	73
	7. Heavy food items	73
	8. Light food items	74
	9. What is meant by oily and dry food items?	76
	10. Oily food items	76
	11. Dry food items	77
	12. Who should eat dry food items and who should	
	avoid them ?	77
7.	Taste	
	1. Six tastes	80
	2. Functions of sweet taste	80
	3. Side-effects of eating sweet food items in excess	81
	4. Functions of sour taste	82
	5. Side-effects of eating sour food items in excess	82
	6. Functions of salty taste	83
	7. Side-effects of excessive salt intake	83
	8. Functions of pungent taste	83
	9. Side-effects of eating pungent food items in excess	84
	10. Functions of bitter taste	84
	11. Side-effects of consuming bitter food items in excess	85
	12. Functions of astringent taste	85
	13. Side-effects of excessive intake of food with an	

astringent taste	85
8. Constitution (prakruti) and the diet	
1. Vâta, pitta, kapha and balanced constitution	
(sama prakruti)	87
2. Taste of food items and the humours (doshas)	87
3. Beneficial and harmful diet and activity for vâta	
constitution and vâtaja (vâta induced) diseases	88
4. Tonics for vâta constitution and vâtaja (vâta	
induced) diseases	89
5. Beneficial and harmful diet and activity for pitta	
constitution and pittaja (pitta induced) diseases	89
6. Tonics for pitta constitution and pittaja (pitta	
induced) diseases	91
7. Beneficial and harmful diet and activity for kapha	
constitution and kaphaja (pitta induced) diseases	91
8. Tonics for kapha constitution and kaphaja (kapha	
induced) diseases	92
9. Season and the diet	
1. Seasons in North and South India	93
2. Effect of seasons on man	94
3. Seasons and the three humours (doshas)	94
4. Seasons and <i>vâta</i>	95
5. Seasons and pitta	95
6. Seasons and kapha	96
7. Modification of diet in different seasons	97
8. Spring season (vasant rhutu)	98
9. Summer season (grîshma rhutu)	100
10. Pre-monsoon season (<i>pravrut rhutu</i>)	102
11. Monsoon season (<i>varshâ rhutu</i>)	103
12. Autumn season (sharad rhutu)	105
13. Early winter season (hemant rhutu)	108
14. Late winter season (shishîr rhutu)	109
15. Diet and activity in different seasons	111
16. Panchakarma treatment	112

17. Exercise	112
18. Afternoon nap	112
10. Digestion	
1. Digestion of food	113
2. Digestion in the stomach and the intestines	113
3. Digestive power	114
4. Factors affecting the digestive power	115
5. What is the effect of diet on the qualities of the mind	116
6. Guidelines to maintain the digestive organs healthy	117
11. Dietetic incompatibility (viruddha anna)	
1. Incompatibility of food items with one another	118
2. Incompatibility due to various conditioning factors	120
a. Nisargattaha viruddha (naturally incompatible)	120
b. Desh viruddha (regionwise incompatibility)	120
c. Kâla viruddha (timewise incompatibility)	120
d. Agni viruddha (digestion power incompatibility)	120
e. Koshtha viruddha (digestive capacity	
incompatibility)	121
f. Parimana viruddha (fixed proportion of two	
food items)	121
g. Satmaya viruddha (habituation incompatibility)	121
h. Dosha viruddha (constitution incompatibility)	121
i. Increase in the same humour (dosha) caused by	
two or more food items	121
j. Sanskar viruddha (mode of preparation)	122
k. Incompatibility between a food item and	
the cooking utensil	122
1. Vîrya viruddha (combination of food items with	
opposing action)	122
m. Avastha viruddha (mental state of an individual) 122
n. Krama viruddha (prescribed course)	122
o. <i>Pâka viruddha</i> (degree of cooking)	122
p. Sampat viruddha (quality of food)	122
q. Sanyoga viruddha (way of combination of	

food items)	122
r. Vidhî viruddha (breaking of dietetic rules)	122
s. Parikar viruddha (order of food)	123
t. <i>Manâ viruddha</i> (against one's liking)	123
3. Diseases resulting from dietetic incompatibilities	123
4. Treatment	123
12. Place and food	
1. Effect of place on the quality and digestibility of food	124
a. Place where the food is grown	124
b. Place where a person has spent his childhood	124
c. Place where the food is eaten	124
2. Time (<i>kâl</i>)	124
a. Effect of time on food	125
b. Natural time for eating food	125
c. Time of the day for eating food	125
d. Season and food	126
e. Stage of a disease and food	126
f. Effects of food eaten at an inappropriate time	126
g. <i>Upayukta</i>	126
13. Tolerance and intolerance (sâtmya and asâtmya)	
1. Tolerance (sâtmya)	127
a. Pravara sâtmya (good tolerance)	127
b. Avara sâtmya (poor tolerance)	127
c. Madhyama sâtmya (moderate tolerance)	127
d. Oakasâtmya (tolerance after constant use)	127
e. <i>Jâtisâtmya</i> (tolerance in a species)	127
f. Deshasatmya (tolerance according to the place	
or region)	127
g. Rhutusatmya (tolerance according to the season)	128
h. Prakrutisâtmya (tolerance according to the	
constitution)	128
i. Vayasâtmya (tolerance according to the age)	128
j. <i>Vyâdhîsâtmya</i> (tolerance in a disease)	128
2. Intolerance (asâtmya)	128

SECTION II DIETARY COMPONENTS AND THEIR FUNCTIONS

14.	Calories	
	1. How does food supply energy?	130
	2. What is a calorie in the context of food? How does	
	food supply energy to sustain all the body activities?	130
	3. How many calories are supplied by common food	
	items?	131
	4. Which factors affect one's food requirements?	132
	5. How many calories and proteins do children and	
	adults normally require ?	132
	6. How does one's activity affect the caloric and protein	
	requirements of one's body?	133
	7. What are the manifestations of deficiency in calories ?	134
	8. What are the manifestations of taking food, i.e.	
	calories in excess ?	134
	9. How is it that some people eat a lot and yet are thin	
	whereas others may eat very little and yet gain	
	weight?	135
	10. What is the percentage of fat in the human body?	135
15.	Proteins	
	1. What are proteins?	136
	2. What are the functions of proteins?	136
	3. Why do children require more proteins?	136
	4. What are the sources of proteins?	137
	5. Why are animal proteins rated as first class proteins	
	and vegetable proteins as second class proteins?	137
	6. Can vegetable proteins replace animal proteins?	138
	7. What are the symptoms of protein deficiency?	138
	8. Is it risky to consume proteins in excess?	139
16.	Fats	

	1. Components of fats	140
	2. Circulating lipoproteins	141
	3. What are the functions of fat ?	141
	4. What are the dietary sources of fat ?	142
	5. What are the differences between fat from animal	
	source and that from vegetable source?	142
	6. What are essential fatty acids?	143
	7. What are the symptoms of fat deficiency?	143
	8. What are the symptoms of excessive intake of fat ?	144
17.	Carbohydrates	
	1. What are carbohydrates?	145
	2. What are the sources of carbohydrates?	145
	3. What are the functions of carbohydrates?	145
	4. Types of carbohydrates	146
	5. What are the symptoms of deficiency of carbohydrates?	147
	6. What are the symptoms of consuming carbohydrates	
	in excess ?	147
18.	Minerals	
	1. What are the functions of minerals in general?	148
	2. Iron	148
	a. What are the dietary sources of iron?	148
	b. What are the functions of iron in our body?	148
	c. How can one recognise iron deficiency?	148
	d. What are the daily requirements of iron and	
	calcium in children and adults ?	149
	3. Calcium	149
	a. What are the functions of calcium in the body?	149
	b. What are the sources of calcium in our diet?	149
	c. What are the symptoms of calcium deficiency?	150
	4. What are the sources and functions of other minerals	
	in the body ?	150
	5. Harmful effects of some minerals when absorbed	
	into the body in excess	152
	6. Salt (lavan)	153

a. Saindhav	153
b. Sauvarchala (sanchala or padelona)	153
c. Bidalavan (bida salt)	153
d. Samudra lavan [common salt (salt from the sea)]	154
e. <i>Oudbhida</i> salt	154
f. Krushna lavan (black salt)	154
g. Romak	154
7. Caustic salts (kshâras)	155
a. Yavakshâra	155
b. <i>Svarjîkâkshâra</i> or <i>sajjîkshâra</i>	155
c. Tankanakshara (borax)	155
19. Vitamins	
1. What are vitamins ?	156
2. What are the daily requirements of various vitamins?	156
3. Can vitamins be stored in the body?	157
4. Vitamin A	158
a. What are the functions of vitamin A?	158
b. What are the sources of vitamin A?	158
c. When should we suspect vitamin A deficiency?	159
d. What are the symptoms of excessive intake of	
vitamin A ?	160
5. B-Complex	160
A. What are B-complex vitamins?	160
B. Thiamine (vitamin B1)	161
a. What are the functions of vitamin B1	161
b. What are the sources of vitamin B1?	161
c. What is beriberi?	162
C. Riboflavin (vitamin B2)	162
a. What are the functions of riboflavin, i.e.	
vitamin B2 ?	162
b. What are the sources of riboflavin?	162
c. How can we recognise riboflavin deficiency?	162
D. Nicotinic acid	163
a. What are the functions of nicotinic acid?	163

b. What are the sources of nicotinic acid?	163
c. What is pellagra?	163
E. Pyridoxine (vitamin B6)	163
a. What are the functions of pyridoxine?	163
b. What are the sources of pyridoxine?	163
c. How can we recognise pyridoxine deficiency?	164
F. Folic acid	164
a. What are the functions of folic acid and	
vitamin B12 ?	164
b. What are the sources of folic acid and	
vitamin B12 ?	164
c. How can we recognise folic acid and	
vitamin B12 deficiency ?	164
6. Vitamin C	165
a. What are the functions of vitamin C?	165
b. What are the sources of vitamin C?	165
c. What is scurvy?	165
7. Vitamin D	166
a. What are the functions of vitamin D?	166
b. What are the sources of vitamin D?	166
c. What is rickets?	167
d. What are the side-effects due to excess of	
vitamin D ?	167
8. Vitamin E	167
a. What are the sources of vitamin E?	168
b. What are the symptoms of vitamin E deficiency?	168
9. Vitamin K	168
a. What are the functions of vitamin K?	168
b. What are the sources of vitamin K?	168
20. Water	
1. What are the functions of water ?	169
2. How much water should one drink daily?	169
3. When should one drink water ?	170
4. Rain water (<i>divya jal</i>)	170

5. Properties of water according to the soil	171
6. Sources of water	171
7. Water during the day and night	172
8. Testing water	173
9. Purification of water	173
10. Boiling of water	173
11. Who should drink water which is cooled after boiling?	174
12. What are the indications to drink less water?	174
13. What are the symptoms of drinking excessive water ?	174
14. What are the symptoms of deficiency of water in	
the body?	174
15. What are the indications to drink warm water?	175
16. What are the indications to drink cold water?	175
21. Balanced diet	
1. What is good nutrition?	176
2. How much food should one eat ?	176
3. Food exchanges	177
4. Principles for calculating calories in the diet	181
5. Principles for selection of diet	181
6. Outline of food exchanges	182
7. What are the differences in the nutritive value of	
vegetarian and non-vegetarian food?	183
8. Is it possible for poor families to have a well balanced	
and nutritious diet?	185