RELATIONSHIP BETWEEN FOOD, BODY AND HEALTH: SOME REPRESENTATIONS FROM BIHAR

KEY WORDS: FOOD, HEALTH, CULTURE SPECIFIC REPRESENTATIONS OF FOOD, BODY AND HEALTH

This study is part of an international project which aimed at providing a culture specific understanding to the universally popular concepts of food, body and health. The sample comprised of 35 English speaking, Patna based adults. Qualitative data were collected with the help of three Focus group discussions that were video recorded. Observations suggested that 'health' was a holistic concept characterized by sound mental state and the body's ability to execute its routine activities. The concept of 'food' had a contextual representation and showed intertwining of modern, scientific and traditional notions and words. The representations of 'body' were no match to the traditional view of soma. Biharis seemed to endorse a pleasure-orientation towards food and did not seem to relay on an individualistic philosophy in food choices. Food and health relationship was viewed in the backdrop of deficient social hygienic conditions of a developing country.

Ancient Indian Approach to Food, Body and Health: The *Ayurveda*

Ayurveda is an intricate system of healing that originated in India thousands of years ago. The name *Ayurveda* is made up of two Sanskrit words: *Ayu,* which means 'life' and *Veda,* which means 'the knowledge of'. Therefore, 'knowledge of life' is *Ayurveda*. *Ayurveda* is a system dedicated to maintaining good health by utilising the principles of nature for bringing the individual back into equilibrium with his/her true self. It is a holistic system of medicine from India that believes in a 'constitutional model' and provides guidance for healthy food and a healthy contended lifestyle.

The Principles of Ayurveda (*tridoshas*)

In the *Ayurvedic* system, the body is comprised of three (*tri*) primary forces or *doshas*. The state of equilibrium between the *dosha* is perceived as health, while the state of imbalance as disease. Once the aggravated *dosha* is known, it is brought into balance by using different kinds of therapies. The three *dosha* are called *Vata, Pitta* and *Kapha* and each one represents characteristics derived from the five primary elements namely, ether (space), air, fire, water and earth (known as *panchtatva*). Organisms too, are a composite of these five basic elements and are influenced by them. Furthermore, the basic elements have the ability to combine and create various physiological functions.

For example, *Vata* is responsible for breathing, brain activity, circulation and excretion. *Pitta* is responsible for vision, digestion, hunger, thirst and regulation of the body's temperature. *Kapha* represents solid structure of the body and lubricating mucus. The five elements are said to represent our five senses (i.e., ears, skin, eyes, tongue and nose).

In sum, *Ayurveda* gives a model to look at each individual as a unique makeup of the three *doshas* and designs treatment protocols that specifically address a person's health challenges. When any of the *doshas* (*Vata, Pitta or Kapha*) become accumulated, *Ayurveda* will suggest specific lifestyle and nutritional guidelines to assist the individual in reducing the *dosha* that has become excessive. Further, certain herbal supplements are suggested to hasten the healing process and in case of abundance of toxins in the body, a cleansing process known as *Pancha Karma* is recommended for purgation of the unwanted toxins. It may be concluded that a constitutional conceptualisation of the human body enables *Ayurveda* not only to address to specific health concerns but also, to offer explanation as to why one person responds differently than another.

Understanding the Relationship between Food, Body and Health through the Traditional Approach

In the Indian traditional approach, nutritional disorders, the concepts of taste (*rasa*), heating or cooling energy (*virya*), the post digestive effect (*vipak*) and the concepts of *satwik, rajsic* and *tamsik* foods, present a systematic thinking on the relationship between food, body and health. *Ayurveda* considers five types of 'nutritional disorders' as very basic behind health issues and as important for explaining the food, body and health relationship.

1. Quantitative dietary deficiency: This includes under-nutrition due to insufficient food, and even starvation.

2. Qualitative dietary deficiency: This is about wrong food combinations, which results in malnutrition, toxic condition and lack of essential nutrients.

3. Qualitative and quantitative over-nutrition: This classification is for emotional overeating that can result in obesity and problems associated with obesity.

4. Toxins in food: This is about certain foods and food combinations that lead to toxaemia and to certain digestive disorders.

5. Foods not suitable to one's constitution: This category includes foods that may affect natural body resistance and cause diseases. The mentioned nutritional disorders are closely connected to the strength of the four types of *agni* (gastric fire).

Taste (*rasa*), Heating or Cooling Energy (*virya*) and Post-Digestive Effect (*vipak*)

According to *Ayurveda*, each food has its own taste (*rasa*), heating or cooling energy (*virya*) and post-digestive effect (*vipak*). When two or three different food substances of different taste, energy and post-digestive effect combine, *agni* can become overloaded inhibiting the enzyme system and resulting in production of toxins in the system. While it is true that an individual's *agni* largely determines how well or poorly the food is digested, food combinations are also of great importance. When foods, (proteins, carbohydrates and fats) having different attributes, tastes, heating or cooling properties, and post-digestive effects are eaten together, *agni* will be slowed down.

Ayurveda, recommends eating according to one's constitution and taking fruits, starches, proteins and fats separately. Combining foods improperly can produce indigestion, fermentation, and gas formation. This condition, if prolonged, can lead to toxaemia and disease. For example, eating bananas with milk can diminish *agni,* change the intestinal flora producing toxins and may cause sinus congestion, cold, cough and allergies. Similarly, eating fruits together with starchy foods should be avoided because fructose (and other sugars) digested quickly whereas starch took more time in digestion. The molecules of cooked honey turned into non-homogenized glue which got stuck to the mucous membranes and clogged the subtle channels leading to production of toxins.

Meat and milk proteins were not to be eaten together because meat created a heating effect and milk was cooling therefore, their counteracting effect was likely to disturb the *agni* and produce *ama* (mucus). Similarly, milk and melon (both cooling) were not a good combination as milk was a laxative and took time to get digested while melon being a diuretic got easily digested. Furthermore, the action of hydrochloric acid in the stomach caused the milk to curdle therefore, *Ayurveda* advises against taking milk with sour fruits, yoghurt, sour cream, cheese and fish.

Food, Body and Health Project in India

In today's developed countries, the idea that we need to learn or re-learn how to eat in order to have good health is being increasingly accepted. It is as if some 'natural' ability had been lost with the rise of contemporary abundance. In this context some issues of interest are: How do food cultures react to development, to the globalisation of modern day food production and distribution? Do individuals from different countries think about

their food, their bodies, their health, the effect of foods on their body, in the same manner? To what extent can we conceive of in a global fashion our strategies and discourses, be it in the domain of public health or the marketing of food products? Earlier, the relation of man to food had attracted researchers in some developed countries who gave a rich and insightful treatment to the subject from the point of view of other disciplines (see Fischler, 1990; Kass, 1994).

More recently, to help answer some of the above mentioned questions and those related to the pulse of the contemporary food cultures, Observatoire Cidil de L' Harmonie Alimentaire (OCHA) launched a cross-cultural research program led by Claude Fischler which was carried out over a two-year period (2000-2002) in seven countries and on three continents. The present study is a rejoinder to the initial attempt made by a group of social scientists from USA, France, and Japan (see Rozin, Fischler, Imada, Sarubin & Wrzesniwski, 1999) who tried to systematically understand the psychology of food with the help of their empirical work.

Rozin (1996) observes that surprisingly, the subject has received very little attention from psychologists. The empirical work of Rozin et al., (1999) supported the idea that there were substantial cultural differences in concern about diet and health. However, being one of the first studies in this line, their sample included only "prosperous, developed countries" (p. 176). In future, this group of researchers intended to include India and Mexico, which are less economically prosperous countries.

The present project entitled "Understanding Relationship between Food, Body and Health" was a sequel to the plan to include India in the international project on 'Food Body and Health' so that the ongoing work in this line got a broader cultural perspective. Inclusion of India in an international project on food, body and health is significant for at least a couple of more reasons. First, social reality of an economically not so prosperous country has some inbuilt disadvantages like illiteracy and poverty, which is likely to influence the representations of food, body and health and their relationship.

In case of the economically less advantaged countries, the question of ' what to eat' and 'how to eat' might not be as prominent, or identical to that of the economically advanced countries because fears and anxieties would perhaps be centred on issues like improper distribution of food, unhygienic conditions associated with food and adulteration. Therefore, the arresting issues might not be internationalisation of

production and distribution and thus, the problem in making the right choice of food but factors such as: Lack of proper education and information regarding proper diet and health, the social class and norms related to food culture and the ground realities like improper distribution of food, inflation, poverty and perhaps scarcity of food.

Second, India is a culturally very rich country having the backup of ancient wisdom containing a very rich and systematic material on 'knowledge of life,' which mixes religion with secular medicine and looks at food, body and health as means for physical well-being and self evolvement. There is everything in the Indian ancient literature, which can systematically explain the link between food, health, overall well being of the individual and his/her self-evolvement (i.e., *Ayurveda*). Perhaps, this gives a new dimension to the subject of food, body and health and their relationship.

The findings from the Bihari sample were expected to help arrive at a culture specific understanding of the popular concepts of food, body and health. Further, the observations from an economically disadvantaged but culturally rich and traditional society, undergoing enormous changes in the wake of massive influx of information from all the directions and from its own technological advancements, were likely to provide an interesting cultural context for a study on food, body and health. It was further hoped that the differential fears and concerns related to food and food choices in the Indian context would unveil an interesting canvas if not a completely contrasting scene. Similarly, it was hoped that the issue of continuity between food, health and medicine shall be attended in the backdrop of the ancient Indian wisdom on healing and knowledge of life. The Bihari sample was not likely to represent the views and opinion of the uneducated, rural masses nevertheless, it was likely to hold the general Indian view point and cultural orientation.

OBJECTIVES

The objective of the present focus group study was to arrive at people's beliefs, opinion, and views on some important issues related to food, body and health and the interest generally lay in knowing:

- What are the commonly shared representations for food, body and health?
- What does the commonly shared concern 'to eat well' entail?
- What are the concerns and fears, related to food in the present circumstances?
- Do the people see any continuity between food, health and medicine?
- How do we look at the relationship between food, body and health?

METHOD

Sample

Since the study was part of an international project, only English-speaking participants were selected for the Focus group discussions. Accordingly, the sample constituted of 35 educated adults, 18 males and 17 females between 30 to 55 years of age. Each group comprised of 12 persons (6 males and 6 females) however, there was only one drop out (female) in the second Focus group scheduled for 26th of January, 2002. The Focus group participants came from white collar jobs/professions of the following kinds: High school and middle school teachers (8), college and university teachers (6), lawyers (2), bankers (3), information technology counsellors (3), demographer (1), medical statician (1), doctor (1), bio-chemist (1), businessman (1), travel agent (1), house-maker (1), office in-charge of a High school (1), engineer (1), retired army personnel (1), Assistant Manager in a commercial company (1) and social scientists (2). Out of the group of 35, fourteen participants were either schoolteachers or college teachers.

Method of Data Collection: The Focus Group Discussion

The methodology used for collecting the qualitative data was Focus group discussion. Focus-group discussion is a qualitative method in which the facilitator uses a pre-tested line of questioning to stimulate discussion on the subject of inquiry with the primary aim of describing and understanding perceptions, interpretations and beliefs of a selected population. The objective is to gain understanding of a particular issue from the perspective of the group's participants.

Focus group discussions appeared to be a suitable methodology for the 'Food, Body and Health' project because it assured idea-generation. Furthermore, the discussions were likely to provide possibilities to ensure that the words and concepts correspond to those commonly used by the target group. Focus group discussion also provides a wealth of insight into motivation, attitudes, feelings and behaviour that cannot easily be obtained by quantitative methods alone and enables participants to elaborate on ideas and stimulate memories and feelings. The moderator's role is crucial in Focus-group research. He/she keeps the group focused on the topic at hand, encourages the members to speak freely, ensures that no group member dominates the conversation, creates a supportive atmosphere, probes when necessary and listens carefully. The Focus group is conducted with the help of a **moderator's guide.** The moderator's guide used in

Patna, was the same as used by Professor Claude Fischler in England. However, a few culture specific questions were added.

Procedure

A list of participants was prepared with the help of some persons whom the researcher and her assistants knew. This was necessary for initiating the selection process. Thereafter, effort was made to include persons who were not acquainted with each other or to the researcher. Each participant was contacted by telephone for assuring his/her participation. Remuneration for participation along with working lunch was assured and this greatly facilitated them to spare about 3 to 4 hours on a holiday. The researcher reserved a convention centre namely, Scada Business Centre in Patna for the scheduled dates for running the Focus groups. All the necessary equipments for video and audio recording were also hired. The present researcher facilitated the group discussions and two postgraduate students of psychology of Patna University took detailed notes of the entire proceedings. The entire focus group discussions were video graphed.

THE OBSERVATIONS

The observations and inputs from all the three Focus group discussions were utilised to examine the relationship between food, body and health under two broad themes namely: 'Relationship between food and health' and 'Relationship between body and health.' Further, each theme was elaborated under 3 to 4 sub-headings. A brief note entitled, 'Relationship between food, body and health: Some observations in the context of disadvantaged socio-economic conditions' was added to indicate how the participants looked at the food, body and health relationship in the context of the social reality of their state and country namely, Bihar, India.

1. Relationship between Food and Health

- Representations of health
- Food and health
- *Satwik, rajsic* and t*amsik* foods
- Overindulgence, v*irudha ahar*, and health

2. Relationship between Body and Health

- Body functioning and health
- The body's fight against illness causing agents and allergens
- Body's addictions

3. Relationship between Food, Body and Health: Some Observations in the Context of Disadvantaged Socio-Economic Conditions

1. Relationship between Food and Health

Representations of Health

It appeared that health was perceived holistically and was characterized by the body's ability to function properly, having sound mental state and positive attitude towards life. People used a common sense definition and a scientific one for conceptualising health. According to the former approach, 'health' was the condition, which enabled a person to complete his/her assigned work and perform routine activities without facing impediments from the body. It was impressed that unless there was manifestation of some pathology, the person was considered healthy. So much so, that those who were able to carry on their professional responsibilities despite being 'unfit' in the clinical sense of the term were considered healthy. Criteria of good health and features of a functioning body were interlinked.

The second approach seemed to adopt a clinical orientation. In that sense, good health referred to having a 'clinically fit' body. However, it was argued that no one would perhaps be found 'clinically fit' if the health statuses were to be based on clinical tests. More specifically, good health was to be ascertained on medical parameters and a person of a particular height and weight was to be considered 'healthy' if his/her food intake included the necessary caloric values of carbohydrate, protein, lipid, vitamin, and mineral and he/she presented a composite picture of mental and physical fitness that a doctor would like to label as 'clinically fit'. Members observed further, that healthy people were likely to show consistently balanced behaviour across situations.

Eating balanced food and taking care of the body when it was tired and sick were considered to be some fundamental requirements for keeping the body functional. Moreover, discipline in life and exercise were very important for the proper functioning and health of the body. It was observed that an unhealthy person was not able to function in a normal way (socially and professionally) and suffered from diseases. In one of the Focus groups, 'poor health' was represented as a psychological condition characterized by feelings of unhappiness and indecision. Otherwise, a person in poor health could still carry on all the routine activities of life.

Though health was perceived holistically, and included both physical and mental health, in exceptional cases, the body could be grown up but the mind being retarded was unable to work. Similarly, though the body remained normal, a child could develop abnormalities due to improper socialization during formative years. It was observed that body functioning remained a physiological concept until it was linked with performance. The consensus seemed to be that the body's functioning should be perceived in a totality. With this argument even a physically handicapped person was healthy if he/she was able to do what he/she wished, felt satisfied and contributed to the society.

Furthermore, it got represented in the discussions that health was an **internally experienced** feeling of well-being. It was said that positive thinking assured good health and remaining cheerful and happy helped in experiencing psychological well-being. Practices like yoga and meditation were efforts aimed at acquiring physical and mental health. Satisfaction and contentment with life experiences were considered directly related to health. It was observed that spiritually evolved persons cared for an entirely different kind of pleasure and experienced health from 'within.'

It appeared that good health referred to looking and feeling fit, being active and capable of performing one's duties and work, enjoying a positive state of mind and being free of diseases. While experiencing health, the mind and the body were at ease and in harmony with each other and with the environment. Health meant being mentally alert, bodily active, 'being at peace with oneself and others,' 'being happy,' and 'sturdy.'

Food and Health

Food, comprising of life sustaining elements like carbohydrates, proteins and fats was deeply related to health, energy, activity and body functioning and was considered the basic requirement of all living beings. Nutritious and balanced food was said to be good for health. According to the members, balanced diet comprised of proper quantities of vitamins, minerals and nutrients etc. The term 'food' was used in a broader sense and it was more of a utilitarian concept aimed at satisfying the physiological need. In the 'free association game,' food was freely associated with words that showed concern for health, taste and looks. Though used synonymously, food and diet could be differentiated.

Diet had a restricted meaning and referred to desirable amounts of vitamins, minerals, fruits and vegetables in a menu. A diet chart was for keeping watch on the

calories that had to be differentially decided on the basis of a person's age, health status and degree of physical labour. Balanced diet meant counting the calories intake and taking food that was suitable for the body. Diet was associated with health concerns more obviously and people often meant 'balanced food' by the term diet. Interestingly, 'dieting' was not the most practiced or preferred means for maintaining good health in the Bihari scenario and in reality not much attention was paid to this. Often people ate whatever was prepared at home and tasted good. Normally, it was not always feasible to make calculations for balanced food but people agreed that it was still possible to choose a healthy diet from the things one liked.

Some participants were of the view that the internal biological functions were different for men and women and thus were their food requirements. For example, the menstruating women and the lactating mothers needed plenty of iron and calcium respectively; a child needed lots of nutrients for the growing body while a manual worker needed more of carbohydrates. The basal metabolic rate varied for males and females of comparable age, height and weight and on the whole, males needed more calories.

Health was related to **healthy and unhealthy food.** A diet low in fat, having lots of fruits and little alcohol was better than a heavy diet. Easily digestible, natural, fresh warm, clean, safely kept, and properly cooked food suitable for the individual body were healthy foods. On the contrary, overcooked, stale, fatty and spicy foods were unhealthy. Junk food and processed foods were not healthy either. Foods had hot and cold potentials and foods could be heavy and light. All the mentioned categories had implications for health. Fatty and spicy foods were heavy while natural fruits and vegetables were light and digestible. Ginger, garlic and dry fruits had a hot effect whereas curd, cucumber and coriander had a cold effect. Some Indian spices and herbs presented a combination of medicinal values and hot or cold potentials. These could be recommended for maintaining good health and treating or preventing minor maladies.

The healthiest foods were grains and vegetables. Milk was represented in a very positive light, as it was perceived as healthy, good, fresh, wholesome, nourishing, calcium rich and a complete food. Vegetables were generally represented as fresh and healthy but meat was fatty and unhealthy according to the majority of the group members. The most serious objection against the processed food was its being treated by artificial colours and preservatives and not being 'fresh'. The highest danger level was ascribed to fat followed by sugar and meat. Vegetables were harmless by all means.

The participants were well informed that food that was prepared produced and marketed without taking proper care of hygiene, became the source of illness. For example, eating infested animal meat allowed tapeworms to enter the human body. Similarly, presence of pesticides and insecticides on the agricultural produce, made a portal of entry of toxins and harmful chemicals into the body. On the other hand, fat could get accumulated in the body due to unrestricted rich diet leading to blood pressure and heart problems. Other risks to health included use of artificial colours in eatables, food poisoning due to adulterated food and adulterated milk There was health risk also involved in consuming large quantities of certain foreign ingredients (i.e., Chinese salt).

Control on Eating for Health

Any attempt aimed at relating food and health must incorporate some thinking on 'control on eating' and efforts to burn excess calories. Therefore, the participants related exercise, dieting and fasting to food and health. Interestingly, everybody believed that exercise was important for burning extra calories, keeping fit and energetic but fasting had very few takers. Dieting however was considered important by quite a few.

It may be mentioned that for some members of the third Focus group, 'eating well' did not refer predominantly to 'stuffing one self with food'. For them 'eating well' referred to eating a balanced diet, eating delicious, well-cooked, good, healthy and nutritious food. Therefore, 'eating well' had also to do with healthy disciplined eating, and providing a 'time perspective' to the eating behaviour. It was pointed out that when to eat like a 'beggar' and when like a 'king' ought to be determined by the body's need for energy and the metabolic rate required for digesting the food. Still for the majority of the people, 'eating good food full stomach' was the meaning of 'eating well.' For the group members the idea of 'control' existed but in practice it did not show up so much. As a health-promoting event, 'eating well,' referred to eating according to a time schedule, taking balanced diet, eating the right quality food only when hungry.

Feelings of 'sin' and 'guilt' however, did not seem to have any significant effect on the Bihari people in general. Generally, control came into practice either with advancing age associated with health problems or due to the messages pressing the youth to keep the body fit and attractive. It might be said that there was more 'thinking' and less of practice of 'control'.

It might be concluded, that the body's health depended upon the kind of food intake. Foods that made the body feel fresh and light; functional and energetic were considered good for health. A balanced food took care of vitamin supplement and diminished the chances of falling sick. The body gave signals and cautioned the body against foods that could make it fall sick but often people chose not to follow the body's signals and developed such food habits and addictions that adversely affected their health. Control on eating assured both better health and external appearance.

Satwik, Rajsik and Tamsik Foods

In the opinion of the participants, 'we are what we eat and we need food for thought' therefore, food determined our thinking and spiritual thinking both. The group members were aware of the *satwik, rajsic* and *tamsik* concepts of food and knew that they belonged to the traditional Indian approach to food and health. It was said that *satwik, rajsic* and *tamsik* foods left an impact on the person's general health, metabolism and temperament. Since, *rajsic* food generated more heat and energy so; overindulgence with *rajsic* food could make a person temperamentally violent. However, *rajsic* food gave energy and strength to those who needed it for a specific purpose. On the other hand, *satwik* food was helpful in removing dangerous toxins from the body and increasing longevity. It was reiterated that *satwik* food helped in remaining cool-headed while *rajsic* food made the mind restless, and the person hot-headed.

Rajsic food was heavy and hot in character therefore, not easily digestible. Indulgence with such foods resulted into obesity, enhanced blood pressure, high cholesterol and heart problem. Often tasty and rich ceremonial foods were *rajsic* in character and hence very inviting but an indiscriminate intake of such foods could be dangerous for health especially if followed by a sedentary lifestyle. Many processed foods and foods served at eating-places were *rajsic*. People ate *rajsic* food for taste and pleasure and often ignored their effect on digestion, health and general well-being. *Tamsik* food was stale, adulterated, polluted, fermented, burnt, half-cooked and unfit for consumption. All the drugs and intoxicants came under this category. It was observed by the participants that rotten vegetables and infected meats invited toxin-producing pathogens and were harmful for health.

Some foods were categorized as ***pavitra*** (pious and sacred) and carried a culture specific meaning. According to the traditional Indian thinking, 'pure and natural' was

‘pious and sacred.’ Natural produce like fruits were pure and pious but not all the vegetables and cereals belonged to this category (i.e., onions and garlic). *Pavitra* or scared foods were often offered to the deities. Basically, fruits and some sweets prepared with milk, sugar, clarified butter and cereals were pious or *pavitra* foods. One of the participant explained that foods that increased the metabolic rate or excited the body were not considered to be pious. On the contrary, foods that soothed the temperament and helped in thinking normally were pious. Milk belonged to the category of pious (*pavitra*) food. It might be said that ‘pure, pious or sacred food’ had *satwik* qualities therefore; food that could rejuvenate the mind and the body was sacred.

Overindulgence, *Virudh Ahar* and Health

The participants pointed out on a number of occasions that overindulgence with heavy, fatty and spicy food led to obesity, increased cholesterol level in the body and heart problem. Similarly, it could lead to bad digestion and stomach problems. Often *Pitta* and *Vaat dosha* had to do with overindulgence with food and improper eating habit. One of the concerns shown by the urban mothers seemed to be that their children were overindulgent with processed or ready to eat noodles (popularly known as Maggi). Since, children preferred it and it was easy to cook, such foods were often used in the place of a proper meal, which was not considered to be a healthy practice.

It was indicated that often Indians succumbed to their ‘temptations’ and were not careful about eating. Generally, Indians were not ‘health freaks’ and practically speaking, ‘control’ was not part of their lifestyle and practiced conditionally when there was a health crisis. Indians were guided by ‘taste’ while choosing their food and they loved to eat and found eating as one of the most ‘interesting’ things in life. The words of a participant said it all, “Indians don’t eat to live but live to eat.”

Overindulgence with Alcohol and Health

Though moderate amount of social drinking was acceptable, one member cautioned that ‘Persons addicted to alcohol were not drinking alcohol but alcohol was drinking them. It was added that a restricted amount of alcohol acted as medicine and in cold countries alcohol helped the body keep warm. Nevertheless, overindulgence with alcohol was especially harmful for the liver. In cities like Patna and in some others too, it was not uncommon to come across local news of mass deaths due to consumption of

spurious alcohol locally produced and sold to the poor alcohol addicts (*Times of India*, Patna Daily, April 2, 2002).

Virudha Ahar

The relationship between food and health has been systematically explained with the concept of *virudha ahar* (opposite foods) in *Ayurveda*. Though heard from the word of mouth, hardly any Focus group member had much personal experience in this regards. However, they had heard that spinach in monsoon season was not good because it had insects in that particular time and curd in July was not good for some reason. Some eatables having cold potentials like curd, guavas and cucumber were to be avoided especially in winter evenings to save children from catching cold.

The participants showed mixed reaction towards the harmful effects of using certain foods in combination. A couple of group members had suffered some kind of allergy after eating fish and milk in close contiguity. Some forbidden combinations known to the group members were honey and *ghee,* rice and watermelon, ripe jackfruit and beetle leaves, etc. Similarly, milk was not supposed to be added to salty foods. It appeared that the members were not willing to take unnecessary risks with the opposite combinations of food and therefore, let the knowledge about *virudh ahar* live as a belief.

2. Relationship between Body and Health

The representations of 'body' were no match to the traditional view of the 'soma' nor its relationship with health seen as mediated through the *tridoshas*. A few members indicated that body was a 'complex machine' whose various organs functioned in a co-ordinated manner controlled by the mind for the purpose of adjusting with the environment.

Body Functioning and Health

Body and health were associated in a very special manner. It appeared that the participants were referring to the activities and behaviour of the outer physical structure when asked to discuss about the body functioning. At the first instance, body functioning did not seem to refer pointedly to the functioning of an organic or anatomical system or a machine that was unparallel in its intricacies and possibilities. It was not often heard that

body functioning was a physiological concept. However, a few First focus group members had indicated that body was a complex machine whose organs functioned in co-ordination controlled by the mind for the purpose of adjusting with the environment.

The *Ayurvedic* conceptualisation that the organism's body and senses were a composite of the five basic primary elements (i.e., air, ether, fire, water and earth) and were influenced 14by them was not represented. No one seemed to have the idea that the five elements represent the five sense organs (known as *panchindriyan*). Similarly, the proposition that the basic elements had the ability to combine and create various physiological functions hardly got any mention. In other words, the participants had no systematic idea that *Vata* was responsible for breathing, brain activity, circulation and excretion; *Pitta* for vision, digestion, hunger, thirst, and body temperature and *Kapha*, represented solid structure of the body and lubricating mucous. There was mention of the *tridoshas* once or twice but there was hardy any effort to explain or describe the process which linked the *tridoshas* with the body's health.

However, it gradually emerged from the discussions that the outward observable functioning of the body depended on the functioning of the brain, food intake, childhood experiences and education in the family regarding body and its fitness. Normally people did not care about their body functioning so much and the body was made to work in a habitual (mechanical) way. It was observed that individuals did not bother about their bodies until one of its parts was in pain or incapacitated partially.

It appeared from the discussions that body functioning and characteristics of a healthy body were often presented interchangeably. Accordingly, body functioning was about 'adjustment with the environment' therefore 'adaptability with the surroundings' was the objective and indicator of proper functioning of the body and health. Body functioning also referred to 'being totally at ease with the self' both physically and mentally. A functioning body was 'disease free' and 'could do whatever it wanted to do'. The last two features were perhaps closest to the description of a clinically healthy body.

It was told that the body's health was affected by intrinsic and extrinsic factors. Intrinsic factors referred to illness causing conditions present inside the body and extrinsic factors were those that were present outside the body. In case of food poisoning the microbes attacked the body through an outside source namely, food. Therefore, microbes like bacteria and viruses caused the body to fall sick. The intrinsic illness

causing factors were often inside the body and their examples were genetic diseases and hormonal problems. An example in this regard would be a person who did not inherit the right number of chromosomes, and became susceptible to congenital diseases.

It was pointed out that in the case of serious illnesses like AIDS, viruses lowered the body's resistance to such an extent that it lost its fighting capacity (immunity) and the patient could die of minor illnesses. Further, radiation was health hazardous as it caused unwanted cell division and mutational changes. Finally, some social hygiene related factors were also responsible for affecting the body's functioning and caused illnesses. It might be concluded that primarily, microbes were the root cause of illness and when they entered the system toxins were released. Therefore, toxins were the secondary cause of illness. Fat, alcohol, meat and vegetables were the accessories for illness and provided better conditions for pathogens to grow and make the body sick and incapacitated.

Body's Symptoms of Health and Poor Health

The participants felt that health status of a person could be inferred through physical and mental symptoms and to some extent from the **physical appearance**. Sudden loss or gains of weight was one of the clinical symptoms of sickness. Medically, weight and skin colour presented a clinical picture that was of interest to the doctors. For example, in the disease of 'Kaala-Azar' there was black pigmentation of the body, in jaundice the body became yellow and an anaemic person looked pale. Similarly, a person suffering from poor health looked, frail, underweight and sick.

The participants observed that symptoms and feelings of depression, unhappiness and anxiety were mirrored from the facial expressions, behaviour and behavioural postures. Overeating could be a sign of the body's 'malfunctioning' or a symptom of depression. A depressed person's shabby looks, upkeep and emaciated body were reflections of his/her mental condition. The degree and intensity of non-functionality increased with the seriousness of the sickness and a sick person often showed irritability and eccentric behaviour. On the other hand, a healthy person radiated glow on his/her faces, was active and energetic, and felt fresh and light.

Some distinction could be made between those suffering from 'poor health' and those 'very sick'. It was contended that individual who was unable to perform his/her duties and daily chores was perhaps sick but one who could still manage to do his/her

routine work with fatigue was probably suffering from poor health. However, a very sick person was absolutely unable to perform his/her essential functions, was dependent on somebody and was bedridden. In other words, a sick person's external body and internal system failed to help him/her to be on his/her own.

Body's Effort to Fight against Illness Causing Agents and Allergens

It was generally believed that the body (in fact the brain) knew what was good for the body and 'reacted' against unacceptable situations. A diabetic patient's body reacted against sugar by showing some symptoms. The participants knew that our body produced ***antibodies*** to fight invading foreign agents. In diseases caused by microbes and bacteria a healthy person's body would fight the invading agents with its self-produced antibodies. That is, the body's immune system kept a watch and control on the illness causing alien agents. In viral diseases such as AIDS, dangerous viruses affected the body's immunity system rendering it weak and incapable of protecting itself from disease.

Allergic reactions of the body cautioned the person against foodstuffs and other things to which he/she was allergic. For example, some people were hypersensitive to pollen grains similarly; asthma and bronchitis could be caused by allergies. Especially in the cases of 'allergies' or food poisoning (when one might have the vomiting tendency) the body cautioned us very promptly by showing symptoms, which were also the body's mechanism to fight the allergens. It was the nature of the body to protect itself from diseases and remain healthy but often, the individual's unhealthy habits made him/her fall sick. The general consensus was that our bodies knew what was good for them.

There was some discussion on the body's 'reflex actions'. The participants pointed out that in an emergency, the body's feedback mechanisms stood at its highest alert and during the time of acute need epinephrine travelled to the hypothalamus and received the needed feedback very swiftly. Consequently, the body's outer action followed and saved the body from dangerous eventualities. The emergency reflex action was one of the most important defensive mechanisms of the body.

Body's Addictions and Cravings

The participants admitted that often we ignored the dangers of certain consumable items because they gave us pleasure (i.e., smoking cigarettes and drinking alcohol). In

case of drugs, the body accepted the substance for 'some reaction'. Furthermore, individuals were tempted by the taste of foods and it was also true that 'mentally we desired.' When body was allowed to consume undesirable substances on regular basis, it became addicted to it and failed to differentiate between harmful and healthy stuffs. Therefore, in case of addiction to substances like nicotine or alcohol the body's cravings ultimately made the body and the mind to suffer.

Sometimes the body 'craved' especially in case of vitamin deficiency or during pregnancy when it needed something extra. Body's craving was often condition dependent. For example, some pregnant women showed a very peculiar craving for sweets and experienced heightened appetite, which was the need of the growing foetus. Similarly, with the advancing age, (i.e., 60-65 years), a vegetarian person could develop craving for non-vegetarian food probably due to loss of some nutrients from the body. Vitamin deficiency could instigate cravings for foods that probably supplemented the needed vitamin and the climatic conditions initiated the craving for hot or cold foodstuffs.

3. Relationship between Food, Body and Health: Some Observations in the Context of Disadvantaged Conditions

In a disadvantaged situation, which could be created by scarcity of food, mismanagement at the levels of distribution and stocking of consumable commodities or lack of purchasing power of the people, the food options became limited. This was likely to affect peoples' health in the long run. Moreover, the quality of food eaten by the people of rich and poor countries and within rich and poor classes of the same society also differed. Malnutrition was one of the problems of the Indian sub continent. It was mentioned that a malnourished person was not physically fit and could not do much academically. Certain diseases related to malnutrition were culture specific problems of a poor country. For example, Kaala-Azar a disease known to be the 'poor man's disease' affected 99 to 100% of patients who were malnourished. Moreover, most of the tropical diseases (caused by microbes) were also related to malnutrition.

In the opinion of the group members' poverty and illiteracy affected the perception of food, body and health relationship. In Bihar, a large majority of the people were illiterate and had no systematic idea about food and nutrition and for them food was just for 'filling up the belly'. One of the real issues for the health of the poor and the illiterates was lack of knowledge about the nutritional value of cheaper food. Any

awareness-building program was likely to be more successful with people who could somewhat rationally associate concepts of nutrition, vitamins, minerals and balanced diet etc. with health. This process of awareness building could be facilitated by literacy, which the state of Bihar lacked substantially among its poor rural masses. On the other hand, those who were educated and could afford rich food, were often not disciplined eaters. Their problem was obesity due to overindulgence with food and diseases related to obesity and high cholesterol.

When food was prepared, produced and marketed without taking proper care of hygiene, it often became the source of illness. Eating unsafe meat and vegetables could make the body sick or very sick. In India the infra-structural facilities are poor and unsafe especially in villages and small towns for marketing meats, fast foods and raw consumable items. Further, inadequate or virtually no control on marketing of adulterated food was one of the biggest health hazards for this country. People belonging to low socio-economic groups were the worst sufferers because they could not be selective and buy items that were relatively safer and carried trusted brand names.

The group members observed that social hygiene related factors like, noise and air pollution were responsible for hypertension and hearing maladies. Persons working in coal, silicon and asbestos mines fell prey to diseases of lungs and eyes while tuberculosis and rheumatic heart disease were common among people living in crowded conditions. In a poor country, the work environment was unsafe and people had no freedom to be in preferable jobs in face of poverty, job scarcity, lack of skill and education.

A question linked to poverty and health was, 'how long a poor person could enjoy good health?' Unfortunately, poverty, poor social hygiene, unsafe drinking water, low quality food and sickness were the circumstances in which many people of economically disadvantaged societies lived forever.

Cross-Culturally Interesting Highlights from the Discussions in Patna

The content of the discussions provided access to some culture specific understanding of the universally known concepts of food, body and health and their relationship. To begin with, food was given a **'contextual meaning'**. Accordingly, for the richer class, "Food could be nutritious and something special, for the middle class, it was part of the daily chores however, for the poor, food meant survival". Other contexts were gender and age. It was said, "In the middle and poor class families, men were given

better and more quantity of food while women ate what was left over. However, children were offered more and quality food".

It was noted that **representations of body were no match to the traditional view of 'soma'** nor its relationship with health seen as mediated through the *tridoshas*. In other words, there was no description of the five elements that constituted the 'soma' and affected the *tridosha's* balance leading to pathology of the body and the psyche. Similarly, the respondents had only a superficial knowledge that *satwik, rajsic* and *tamsik* foods had an overall effect on the well being of the mind and the health of the body. Some other interesting highlights are as follows:

1. The content of the discussions impressed a **co-existence of the traditional (*Ayurvedic)* and the "western" medicinal systems.** Accordingly, "During the monsoon season, blisters and boils could be treated by *neem* ointment and by swallowing small *neem* balls that was actually very scientific". "Periwinkle juice is given to diabetic patients" and "wood apple is prescribed for stomach problems". Garlic and ginger were 'hot' and recommended for winter season problems. Dry ginger and herbs having medicinal properties were good for pregnant women and after childbirth. Participants believed strongly that 'basal leaves' (tulsi) had "preventive and healing properties".

2. Similarly, representations of 'food' suggested **intertwining of different sets of knowledge.** For example in the representations of 'food' we saw intertwining of different sets of knowledge or beliefs: modern, scientific notions and words (carbohydrates, proteins, etc.) and traditional ones: *satwik*, *rajsic* and *tamsik*", 'heavy', and 'light' or foods having 'hot' and 'cold' potentials.

It was heard, "Food is the basic source of nutrition required for the "maintenance and survival of the biological body", "any bio-chemical reaction" and for "health". Food was associated with expressions such as health, energy and nutrition. Moreover, a distinction was made between 'food' and 'diet'. Food was more of a "utilitarian" term and individuals had a "natural approach" towards food while, 'diet' had to do with "balanced food and calories that did not necessarily satisfy us". 'Eating well' as a health-promoting event, referred to, "eating according to a regular time schedule" and "only when hungry". It may be said that 'diet' referred to eating balanced, delicious, well-cooked, healthy and nutritious food that had obvious implications for health.

On the other hand, examples of intertwining of traditional concepts showed in expressions such as, "We are what we eat and we need food for thought". It was said that a vegetarian's thoughts were somewhat different than that of a non-vegetarian's. The *Veda's* classification of food as *satwik, rajasic* and *tamsik,* was projected to support the traditionally believed concept of food as a 'holistic nutrient' important for the biological and mental growth of human beings.

Similarly, the representations of 'healthy food' showed a combination of modern thinking and traditional knowledge whose examples are: "A diet low in fat, having lots of fruits and a little alcohol" was better for health and "Food which is easily digestible and does not make you fall sick or gives nauseating feeling is healthy". Furthermore, "Healthy food should be clean, properly cooked and fresh" and "Junk or fast food" was unhealthy. On the other hand, the participants had also heard from the word of mouth about the traditionally known 'opposite foods' that were dangerous for health.

Interestingly, presence of **modern/scientific explanation** for why it is not advised to indulge into *virudh ahar* was also noted. Accordingly, it was heard that eating spinach in monsoon season was forbidden because it gets insects in it and cold foods like curd, guava and cucumber were not to be eaten in the winter evenings lest children catch cold by doing so. Although, the participants hardly subscribed to these beliefs fully, they did not mind avoiding undue risks attached with opposite foods. There was however, a general consensus that light foods made one feel light and energetic while heavy ones were difficult to digest and made one feel lethargic. Traditionally speaking heavy and hot foods (i.e., *rajsic*) excited the mind and made the person violent the scientific explanation was that such foods aggravated the metabolic process.

3. Biharis seemed to endorse a **pleasure-orientation towards food.** It was said, "Indians live to eat and don't eat to live" or "Eating was one of the most interesting things in life". When 'eating well' referred to "eating good food full stomach", "stuffing oneself", or eating for the "satisfaction of the mind and the palate", than perhaps, the participants were referring to the **pleasure** part of eating. It may be said that for the Patna participants, 'eating well' at the first instant referred to pleasure of eating. However, mention was also made to a qualitative dimension of 'eating well' which referred to 'eating right, nutritious and healthy things', (i.e., fruits, and green vegetables). This qualitative dimension had perhaps to do with 'healthiness' of the diet.

Discussion on 'control on eating' also threw some light on "temptation and taste" that overpowered Indians. However, the respondents had no feeling of 'sin' related to eating. Conceptually 'control on eating' was considered a good idea. but food tempted and taste mattered therefore, control often took a back seat. It was pointed out that when to eat like a 'beggar' and when like a 'king,' ought to be determined by the need for energy and the metabolic rate required for digestion. Dieting and exercise were considered important for health but 'fasting' being painful had few supporters.

4. As one of the highlights of the study, the researcher would like to mention the **pleasure versus the contextual meaning given to food and eating** by the participants. In comparison to the French attitude of a "relaxed pleasure-orientation" the Indian orientation was much more diluted. However, it was hard to say how much of the "relaxed" part was intact in the stated 'pleasure-orientation' of Indians. Since, 'eating well' was given a **contextual** meaning too, for the elite class, "variety" and "tasty food" was important (which basically had to do with pleasure of eating) while for the poor, "large quantity of cheaper quality food" was needed for survival. The idea of conviviality, was represented in observations that linked food with national and regional festivals and ceremonies for which India is well known.

5. While looking into the question of **individual choice and responsibility in food choices,** our observations suggested that the present Patna group, perhaps subscribed to the 'general principle' when it came to 'food and health'. And we cannot say that there was much reliance on an **'individualistic philosophy'**. Someone said, "We eat what mother cooks". While selecting food, the parameters applied were "physical appearance" (for freshness) and "taste". "Brand", "personal preference" and "nutritional value' mattered in selection of processed food. Baby food was certainly chosen with caution. It may be said that factors other than 'individualistic philosophy' determined the food choices. The consumer organizations were not active therefore; the 'individualistic preferences' were not fully safe. Poor could not choose expensive processed food items. Children could often afford to make 'individualistic choices by dictating their parents.

6. The harsh social reality factors of a majority world country pursued under the last theme namely, 'Relationship between food, body and health: Some observations in the context of disadvantaged conditions', need to be incorporated at this point and treated as cross-culturally useful observations of the present study.

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