

**INVESTIGATIONS AND RESEARCH ABOUT THE REFLECTION AND ECHO OF  
SCIENTIFIC PERSONALITY OF IMAM REZA (A.S.) IN HIS AGE AND FUTURE TIME,  
AND WHY HAZRAT WAS TITLED AS THE SCIENTIST (AALIM) OF  
AALE-MOHAMMAD**

**BACKGROUND TO HIS LIFE**

The Sixth Imam Ja'far Al Sadiq (a.s.) used to tell his son Imam Musa Al Kadhim (a.s.) that from his loins was to be borne a great scholar and scientist of Aale Mohammad(a.s.) - the progeny of the Holy Prophet Mohammad (s.a.w.) and that whilst he aspired to meet him, he was not destined to do so. (1)

And it happened so, as predicted by the Sixth Imam. Hardly had the kith and kin recovered from the shock of the sad demise of Imam Ja'far Al Sadiq (a.s.) on the 25th Shawwal 148 Hegira, when a son was born to the seventh Imam Musa Al-Kadhim (a.s.) on the 11th Zul Qada of the same year. He became known as Ali Bin Musa Al Rida(a.s) the eight Imam of the Shiites. (2)

The more his age advanced, the more his talents and supreme qualities came into open. He succeeded his father and attained Imamatus at the age of 35 years.

The life times of this Imam coincided with the unprecedented wide spread of the knowledge of various sciences and the Muslim civilization was at its peak. Research into various branches of science was then in advanced stage and pertinent questions on important topics were often being asked and discussed.

As such to meet the challenges of the time, there was a need of a profound scholar in all branches of Islamic learning as well as a perfect defender of the faith, on whose statements one and all could rely upon.

And this great mission fell upon the exalted personality of the eighth Imam who fulfilled this need with great satisfaction. Historical records on the numerous discourses and polemics led by him bear testimony to this fact. Even today they prove valuable scholarly assets for students and researchers of different sciences.

It is mentioned that for political reasons, the post of Wali-Ahad i.e. Heir-apparent to the then ruler of the Muslim Empire was thrust upon the Imam with coercion by Al-Mamoon the Abbasid king. (3) The Imam accepted this post reluctantly on condition that he would not be involved in and be responsible for the administration of the State. This obviously absolved him from any responsibility and sin of any anti-Islamic and unjust step taken by Al-Mamoon.

However the post turned out to become a platform and afforded a golden opportunity to the Imam to come into contact with erudite and men of learning of different schools of thought, who used to flock into the court of Al-Mamoon for discussion.

The Imam was able to proclaim the true and original message of Islam and disseminate the fabulous treasures of the knowledge of various sciences. In the course of this, it is mentioned that the Imam had the opportunity of uttering as many as 18,000 ahadith - traditions, which encompassed different topics and branches of science. (4)

Let us for example consider the Health and Medical science. When one researches into the countless traditions from the Imam on this subject, he becomes wonder-struck to learn so many things pertaining to almost every branch, which are usefully applicable even under modern times.

### RISALATU-AL-ZAHABIYYA

Al Mamoon had requested the Imam to advise him, in the light of the knowledge of his forefathers ( the Ahlul-Bait), what to eat and drink, so as to support normal virile physique and how to get rid of diseases and infirmities. In response, the Imam wrote him a long treatise giving details of the rules for sound health, when and what to eat and drink. Al Mamoon was so much impressed that he got this re-written in liquid gold, hence it is popularly known as 'Risalatul-Al-Zahabiyya' (a treatise as good and valuable as gold). And he gave instructions to preserve it in the royal treasures.

At the outset in this letter, the Imam conveyed the natural rule about diseases, and their cure in these words:

"Allah does not afflict any body with a single ailment for which a corresponding cure is not available. Therefore for every kind of disease, there is a medicine and cure". (5)

Obviously the laws created by Allah operate in a system, which when broken or disrupted they react. The reaction harmful to the one who breaks is also the will of Allah. This being the case, it is Allah's justice that He has created cure for every disease.

The foregoing assertion by the Imam that for every disease in existence there is a cure created by Allah, naturally aroused and encouraged scientific research and experiment in every age. It also portrays the fact that every disease and its cure is within the divine knowledge and control.

### FUNCTION OF HUMAN BODY

Describing the structure and function of different organs of human body, the Imam then wrote:

"Human bodies are like a government. Soul is the ruling head of (the administrative machinery). The brain, nerves and joints are (central nervous acting) agents. Heart is

the seat of authority (the capital). Body is the territory. Hands, feet, lips, tongue, eyes and ears are the servants. Stomach and intestines are the storehouse. Chest is the chamber of a door keeper. Hands carry out orders, bring things near or throw away far as directed. Feet move and transport the ruler whenever he wants to go. Eyes make him see and take notice because the ruler is shut-out recluse, for whom everything is in darkness unless eyes through light clear the vision. Ears are like an ever-alert body guard. They bring to his notice what is agreeable to his temperament, or as ordered. So whenever he wants to listen, he beats the drums (inside the ears) through which he hears what he wants and gives answer.

Tongue is the medium to express his intentions. Its movement depends upon co-operation of many other agents like breath, excretions of the stomach and the lips. Lips have their faculty because of the tongue. Lip and tongue are correlated to each other (in making speech). Expression of the tongue, speech, cannot be clear and smoothly available unless it echoes through the nose. (Sinuses).

Nose is made to make distinct and clear the spoken words, speech, just like the sound of the flute player comes out from the flute, regular, measured and balanced. Nostrils not only act as the flute but also serve to use the sense of smell, the perfume and aroma he likes to exhale and inhale.

The stink and stench (offensive odours) disliked by him are stopped by the hand, by his orders, by closing the nostrils. (6)

The foregoing detailed description of the function of different body organs denotes how extensively conversant was the Imam with physiology-the science of normal working of living bodies.

The Imam then added by describing the sensitivity of some of the organs and how the feeling of sorrow and pleasure works and is reflected in the human body:

"For the ruler of the body (soul), reward and punishment have been ordained. The punishment for the soul is more severe than the penalties the rulers of 'people on land' will encounter. And also the rewards are more comforting and satisfying in quality and quantity.

Its punishment is sorrow. Its recompense is happiness. Spleen (milt) is the root of sorrow. Kidneys and stomach membrane are the source of happiness. Two veins from these organs travel up to the face, because of which the face betrays the effects of sorrow and happiness.

All such veins are the means of communication between the ruler and his governing agents. When medicine goes into the body, they carry it to the suffering centre. (7)

## MODERATE WAYS OF DIETING

Thereafter, comparing the human body with farmland and recommending moderate ways of dieting to promote good health, the Imam wrote:

"Beware that the frame of human body is like fertile soil. It operates in logical order. If properly prepared and correctly irrigated, neither over-flooded with water nor dried up arid and parched, the tilth ( the depth of soil turned up in cultivation) developed and operated carefully, gives high quality harvest, and therefore, the yield is more productive and profitable. If neglected, it goes barren, unable to grow even a blade of grass.

Remember that each man has a different natural disposition according to his shape, form and nature; and accepts only that which agrees and adjusts. Therefore eat and drink what goes well with your system. Overeating does not do good to you. Neither eat more nor less. It is the surest way to productive gains. So eat according to the needs of the body. When your appetite desires a little more, stop eating, it regulates digestive system, keeps the mind alert, and trims the body into shape agile and strong.

In summer eat things which have a cooling effect in their ingredients, in winter select food that excite sensation of warmth, in temperate season use stuff mixed in due proportion, neither hot nor cold.

At the time of meals, first eat the easily digestible food. What is easily digestible depends upon the habits, age, fitness, and urge of the eater and also on climate.

The Holy Prophet (s.a.w.), my great grandfather advised Ali b.Abi Talib (a.s.) also my great grandfather to take food thrice in 48 hours. On the first day, eat only once at 11 o'clock. Eat neither less nor more. When your appetite desires a little more, stop eating.

After meals, drink pure and seasoned syrups. I will tell you how to make it."(8)

Thereafter the Imam outlines the seasons month by month (twelve months) according to the then ruling Persian calendar, describing the changing nature of soil, weather and its effect on human body. Accordingly, he advised what sorts of food to take and what to avoid, to suit the different seasons.

Briefly, the detailed description of the changing weather and seasons during the 12 months of the year denotes how the Imam had a full hold over the science of meteorology during those old times when the modern weather measuring and forecast instruments were not in existence.

SHARABU-S-SALEHEEN AL-RAZAWI  
(The Wholesome syrup - a sweet health drink)

The Imam then recommended the drinking of pure and seasoned syrup after meals, to be made according to the following formula and instructions:

" Wash and clean 10 Rat'al (3732.48 grams) high quality black raisin (dried black grapes out of which the stones have been taken out) and put them 4 fingers (nearly.3 inches) deep into clean water, preferably rain water, or water taken from a stream flowing eastward because usually it is clear and soft, easily absorbs heat or cold, a quality no other water has.

Keep it three days in winter or one day of summer, then boil it in a clean cooking vessel until the raisin puff out and become unstuck (But do not break up). After cooling the raisin, squeeze them and draw out the juice. Again put the juice in the pot, measure it and cook on a slow fire till two thirds evaporates. Add one Rat'al (373.248 grams) pure honey.

Also add to the liquid, the following herbs thoroughly ground and impurities removed, each separately weighed and packed in fine thin cloth packets, tightly tied and closed in one cotton bag.

(1)Ginger (zajabeel).	1diram =3.888 gramm
(2)Clove (Qaranmful).	1/2 diram= 1.944 gramm
(3)Cinnamon (Darcheenee)	1/2 diram= 1.944 gramm
(4)Saffron (Za'faraan)	1diram =3.888 gramm
(5)Spikenard (Sumbul Tayeb)	1/2 diram= 1.944 gramm
(6)Wild chicory (Hindiba).	1/2 diram= 1.944 gramm
(7)Mastic (musta'kee)	1/2 diram= 1.944 gramm

Measure the liquid and put it on fire and boil. While heating, keep pressing the cotton bag to squeeze out juice from the herbs till the liquid evaporates to the level of honey.

Put out the fire, cool the vessel. Pour the juice into glass or porcelain jars. To allow the ingredients to set, react and blend together, leave this jar for a period of three months, after which it can be used as drinking syrup.

After the meals take 31.104 grams liquid from the jar and 62.208 grams pure water and drink this syrup. It will keep you safe, for 24 hours, from the following ailments:

- (1) Chronic indigestion
- (2) Arthritis

- (3) Mucous discharge
- (4) Flatulence ( gases generated in the stomach and Intestines)
- (5) Ailments, pains and aches of brain, stomach, muscles, nerves, liver, spleen, intestines and bowels.

Take half of the water normally taken if thirst is not quenched. It will keep the body fit in trim and stimulate potency and energy." (9)

In modern times, we come across numerous types of syrups made from fruit juice concentrates added with some vitamins as well as advertised as refreshing and energy producing. But the fact is that having personally used and benefitted from Sharabu-s-saleheen in the past, I am convinced that none can beat it not only as a good source of energy but as the one which regularizes the working of human body and acting as immunity against ailments mentioned above.

This reminds me of the years 1930-50s when a prominent pharmacy dealing in indigenous medicines by the name Dawakhan Ma'adanul Advia in Lucknow, UP, India used to regularly make Sharabu-s-saleheen and export in tins of 2lbs each. Many tonics and syrups were not easily available. In fact, when supply from India due to political upheavals and other restrictions came to a halt, some of us even ventured to manufacture locally out of faith for the prescription and recommendation of the Eight Imam.

In order to perpetuate the memory of the Eight Imam and spread the benefit practically from the scientific treasures left behind, I would like to suggest that the A'astane Quds Razavi in Mashed undertake to manufacture Sharabu-s-saleheen on commercial basis under reliable supervision. In view of the cheap availability in Iran of most of the ingredients of this syrup, the cost can be reasonable enough to attract consumers particularly from the regular visitors to the shrine of the Imam.

### ANATOMY - STRUCTURE OF THE HUMAN BODY

Describing the factors connected with the structure of human body and what affects his health, the Imam wrote:

"Food, we eat and drink, is directly and indirectly connected with our anatomy. What and how we eat and drink take effect on our health, both ways, good and bad. Vitality of spirit follows up the blend, temper, disposition and constitution of the body, which, in turn, depend upon and are under the control of climatic conditions. They alter and adjust to the degree of change in the atmosphere of one's habitation.

The climate is cool or hot, the body reacts accordingly, If the climate is mild, pleasant and moderate, it keeps the temper, disposition and constitution of the body in equilibrium. Nature sets aright the activity and behaviour of the physique."

### SOUND WAYS OF SLEEPING

"Sleep affects the brain. It keeps the body firm and well ordered, in right measure. Lie down on the right side (on the bed) then turn to the left. During the sleep position may be changed from left to right, and vice versa, but at the time of coming out sleep, you must be lying on the right side.

Train your mind to have restful sleep and make a habit of getting up from the bed 2 hours before the daybreak. Go to lavatory for urination, defecation and washing but do not stay long (therein) for it causes elephantiasis."

### CARE FOR TEETH

"Best tooth brush (miswak) for rubbing the teeth is the twig of a tree, usually eaten by camels (Aaraak). It cleanses and disinfects the teeth, perfumes the smell of the breath, makes firm the gums, and prevents tooth decay.

To keep the teeth clean and white use the powder of rock salt mixed with the foam of sea water (zabadul Baha'r)."

The Imam even prescribed a formula how to make tooth powder from some herbs, red roses and rock salt. Today the most effective and expensive tooth paste on the market will be found to contain rich kinds of salts useful in keeping the teeth clean and healthy.

### FOOD NOT TO EAT

"Do not eat eggs and fish at the same time. You may, more often than not, suffer from arthritis, colic, piles or tooth-ache.

Consumption of too many eggs frequently will crease the face with wrinkles and create disease of the milt (spleen). Half boiled eggs develop asthma.

Salted dried meat and fish, if eaten frequently, will expose you to skin diseases. Kidneys, belly and intestine (of goat and sheep) if used as regular food, will waste away the (functions of) the bladder and womb. You will have sore eyes in the morning if citric fruits are eaten after nightfall. Half cooked, underdone or almost raw meat give birth to worms in the stomach. Drinking cold water after eating sweets or hot food, as a regular habit, destroys the teeth. Absent-mindedness, confusion, careless stupidity and forgetfulness and lethargy follow as consequence, if now and then, flesh of wild birds or beef is taken as food.

To develop the faculties of the body, one must eat 37 grams dried grapes (raisins) every morning. To get rid of absent-mindedness and have a sharp ready memory, one must eat every day 3 pieces of ginger with honey, and make sure that he or she consumes enough of mustard every day.

To prevent accumulation of dirt or anything settling into the ears, block them with cotton wool at the time of going to bed. To keep off cold, rheumatism or catarrh (cold in the head and discharge of fluid) in the winter, eat every day 3 spoonfuls of honey.

Whosoever is fond of a trim, lithe and sound body, must eat very little quantity of food at dinner (in the night).

Whosoever desires not to fall victim to jaundice, should not enter a (close) house at once in summer, as soon as the door is opened, nor step out of the house immediately after opening the door, in winter.

To avoid attack of flatulence (gases generated in the stomach) should eat garlic once in a week. To keep safe teeth from decay, eat a small loaf of bread before consuming any kind of sugared sweets. Whosoever wants to digest the food, he or she has eaten should rest a while, lying first on the side flank and then on the left. (10)

There is cure (medicinal value) in honey; so if someone presents it to you, do not refuse it. Circumcise your (newly born) sons on the seventh day of their birth. This improves their general health and increase their weight.

Always begin your meals with salt because it (helps to) cure as many as seventy diseases, leprosy being one of them. Meals should be taken when they are less hot.(11)

### UNSEEN MICROBES

In the course of his advices on precautions against ailments, the Imam

had indicated the existence of harmful tiny but unseen creatures - microbes.

"Over every nostril of an animal (living body) satan exists".

The word Satan has been used in many traditions of the progeny of the Holy prophet metaphorically to indicate the existence of harmful but unseen creatures during those ancient times when microscopic instruments did not exist.

But for his divinely inspired and bestowed knowledge, how could then the Imam point to the existence of the unseen creatures?

### SUMMARY

On in-depth study of the foregoing pages consisting of the background of the life of Imam Ali b. Musa Al-Reza (A.S.), his invaluable teachings and advice, it should convince us of the fact that the Imam was fully conversant and had a full hold over a number of sciences, some of which are:

(1) PHYSIOLOGY - The science of normal working bodies



- (2) ANATOMY - Structure of human body
- (3) METEOROLOGY - Weather changes and their effect on human health
- (4) HEALTH - Beneficial and harmful things to human health
- (5) MICROBIOLOGY - science of microbes

Many of the formulas and theories today will be found to concur with the lasting rules of nature as expounded by the Imam some 1200 years ago. It can rightly be argued that these rules and scientific facts have acted as the basis of subsequent researches and ultimately leading to the modern sciences.

So rich are the treasures of knowledge left behind by members of the Holy House of the Prophet (S.A.W.) that the more the research, the more facts beneficial to mankind are divulged.

The Astane-e-Quds Razavi - Religious Sciences - University of Razavi of Mashad, Islamic Republic of Iran, is indeed to be congratulated for initiating and encouraging research into the characters and vast treasures of knowledge expounded by the Imam.

#### References

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- (6)Ibid
- (7)Ibid
- (8)Ibid
- (9)Ibid
- (10)Ibid
- (11)Ibid