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## New aspects to digestive process and importance of stomach as basic cause for disease

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Traditional Iranian medicine has a history of over one thousand years. Ibn-e-Sina also known as Avicenna, lived in time when the Islamic world was going through a scientific cataclysm, an unstinted academic and literary period this philosopher and scientist and renowned physician of his time. Ibn-e-Sina had contrasting opinions on the health and treatment of patients, far ahead of the common medical schools. In preserving the patient's well-being and treatment thereof, the school's philosophers believed in specific principles, one such crucial principle was the function of the "stomach". Their concept was, that the stomach was inter-connected and unified to other elements of the body, this amalgamation was called the "participation or organic relationship" (moshārekat) [1,2]. For a better understanding of this term, the following explanation is required:

According to Ibn-e-Sina, the Human body consisted of the four elements: earth, water, air, fire, and the four humors: blood, phlegm, yellow bile, and black bile, whose mixture determines the temperament of every individual, these mixtures are the digestive elements, which enter the stomach. The ingested food undergoes four stages of digestion, which is defined as, the act, or process of converting food into chemical substances that can be absorbed into the blood and utilized by the body tissue"[3,4].

In the stage of gastric digestion, the food is broken down and changed into an absorbable emulsion that is called chylos, is a milky bodily fluid. It is absorbed into the liver through mesenteric vessels. In the stage of liver digestion, the chyle changes into chymos, and the four humors of blood, phlegm, yellow bile, and black bile are produced during the chymification process. In this stage, the four humors are converted to a chemical substance (energy) and delivery of these nutrients from the digestive system to the body's bloodstream for the various tissues and the circulatory system (vascular digestion). In this stage, the nutrients within this vital fluid (energy) carried throughout the body for the purpose of creating and repairing the various cells and tissues (tissues digestion) [5,6].

With reference to the aforementioned subject matter, an argument can be made that the stomach "participates" with other limbs and tissues of the body, as the primary stage of digestion and the transformation of food into a usable energy for tissues occur in the digestive tract, all body tissue require the energy produce by the digested food. In this respect, any gastrointestinal dysfunction may cause a multiple array of diseases and bodily issues.

These philosophers believed that the nerves and muscles(stomach) work together to create a certain rhythm and when this sequence is altered in anyway, dysfunctional issues in the body could occur such as headache, insomnia, mood disorders, depression, palpitations, chest pain, leg pain, and low back pain, to name a few. Theorist of traditional medicine believed that special attention should be paid to the stomach; regulation of the gastric function

was the primary issue and treatment, this prior to treating the patient's secondary complaint, as the initial treatment of the gastric function may be the cause of the patient's secondary issue [7].

Modern medicine has also shown evidence that gastrointestinal disorders (stomach) may be associated to other diseases; there are published studies on the relationship of gastrointestinal dysfunction relating to heart disease [8,9,10], headache [11,12,13,14,15], mood disorders [16,17,18,19], and backache [20,21].

Moreover, philosophers of traditional medicine assumed that if the stomach was distressed that the occurrence of others diseases in the body would occur, as the nervous system is stimulated with this disturbance in the stomach, the gastrointestinal normal functioning process is not recovered until the stimulation ceases. Occasionally, fatigue, weakness, and mood disorders may cause various diseases, including multiple disorders and complications of the gastrointestinal system. In such situations, exhilarants and sedatives should be administered along with medical treatment of the stomach [7]. Today, studies have documented the effects of other diseases mood disorders linking this illness to secondary complications of the gastrointestinal system [22,23,24,25].

Philosophers of traditional medicine focused their primary attention on the stomach and its health and/or sickness in the patient. It could be argued that the examination of the gastrointestinal health should be a first priority in a working prognosis of the patient's medical issues, should there be any signs of gastrointestinal difficulties in the patient's history, this issue should be treated prior to the patient's primary complaint, as treatment of the gastrointestinal issue could alleviate the secondary physiological issue.

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