pesticide-contaminated well water may provoke Parkinson's disease. Other studies demonstrated that drinking 1.5 L of excessive water can assist weight reduction in patients with common multifactorial disorders, like obesity.

**Conclusions.** The research has demonstrated that the water role is immense, and in many cases can delay or accelerate different human multifactorial conditions, depending on its quality and quantity.

## WBAN (WIRELESS BODY ACCESS NETWORK): MANAGING ILLNESS FOR MANAGING WELLNESS BY FOCUSING ON PREVENTION AND EARLY DETECTION

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**Introduction.** Definition by IEEE 802.15.6 is a communication standard optimized for low power devices for their operation on, in or around the human body (but not limited to humans) to serve a variety of applications including medical, consumer electronics or personal entertainment and other. How they addressed the need? A wireless body area network (WBAN) is a collection of wireless sensor nodes that are situated either inside or outside the human body for monitoring the outside environment and functions of the body.

Aim. This study was related to realize WBAN strategy.

Materials and methods. Analysis of scientific sources was done concerning the problem.

**Results and discussion.** Wireless Body Area Network allows the integration of intelligent, miniaturized, low power sensor node in, on or around a human body to monitoring body function. WBAN is a network around the human body. It senses biological, physical, chemical changes of our body and alarms the person who wears it. It also helps in automedication in case of emergency; it sends the information throughout the world through internet.

Sensors-biodegradable device is constituted by: transceivers – devices transmit and receives data; processors – master the functioning of all components in the WBAN; battery – supplies power. WBAN Sensor consists of an intelligent node which is capable of sensing, sampling, processing, communicating. Below are some example of WBAN sensors: ECG (electrocardiogram) sensor for monitoring heart activity; EMB (electromyography) sensor for monitoring muscle activity etc. WBAN is easily accessible by in or out body it saves a lot of time and has a bio-feedback: for example if high sugar level, a device triggers an insulin pump to also inject a dose of insulin (artificial pancreas). The solutions should be efficient in such a way that the low-energy sensor devices can be able for functioning the entire implementation. As well as data security and data confidentiality must be maintained and unauthorized accesses should be prohibited.

**Conclusion.** WBAN has benefits to patients, medical personnel and society by continuous monitoring and early detection of possible problems, also improving the quality of life and collected multidifferent parameters from body.

## LEAKY GUT SYNDROME AND ITS GENETIC PREDISPOSITION

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**Introduction.** The body has more bacterial cells in the gut than is found in the entire human body. most of the chronic diseases our society faces today is linked to deregulated gut flora or dysfunctional gastrointestinal system such as Celiac disease, Crohn's disease and irritable bowel syndrome, autoimmune diseases of type 2 diabetes, multiple sclerosis,

**Aim.** This study is targeted at investigating the predisposing factors and impacts of leaky gut on human and ways of maintaining a healthy gut.

Materials and methods. Descriptive method was used based on the analysis of over 17 recent scientific journals, articles and reviews.