

## Personalized system of longevity and wellbeing: Based on life style analysis with prediction, psychological shock, alimentary behavior change and remote physical activity monitoring

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By being born, the human spirit and the human body set off on a journey together. More often than not, along this journey and from childhood, humans start abusing and destroying their body through excessive eating, smoking, drinking (alcohol), and the lack of proper physical activity. Humankind has developed a host of technological skills, technical tools and devices in order to manage everything around them from an office or home. Nowadays many professionals do not need to exercise any physical activity. They work from a PC and are able to cover the whole world. In such a highly developed environment, one might presume the human being to be healthy and remain well-preserved in old age. Our study question was very simple: what kind of problems will arise in such a technologically and technically revolutionized era relating to people's health. Unfortunately, the same technological and technical revolution that create prosperity, also give rise to many adverse and unexpected issues. The most adverse impacts on our health can be attributed to fast food made by new technologies and to a sedentary lifestyle. The worldwide prevalence of obese and overweight people is rising as a consequence of this kind of lifestyle and other comorbidity factors. Therefore the aim of this study is to present a personalized system of longevity and wellbeing. This system involves the creation of a data base to collect information from individuals, including data monitored by means of remote healthcare devices. Then, a specialized program will predict the health condition of these individuals in 5, 10, 15, 20 years of time. In

some circumstances, those who eat excessively without engaging in proper physical activity could thus experience a psychological shock which might be the triggering factor to change their life style. The main goal of our system is to monitor the alimentary behavior of individuals in order to induce them to control and reduce their daily food intake. A personalized program of longevity and wellbeing will then be created for each participant in accordance with their specific genetic, constitutional, ethnic and metabolic factors. Physical and physiological conditions will be monitored. Environmental and other factors (weather, habitat, profession) will be taken into account. Special devices for remote electrophysiological monitoring to control health condition, including such cardio-vascular parameters as heartbeats, arterial pressure, EKG, respiratory rate and depth changes during exercises and physical activities are developed. Special casual wear is designed to be fitted on the backbone, hip and knee joints preserving devices. A special herbal compound to reduce craving is being tested as a food supplement. In our preliminary results, endemic herbal plants collected from the Kara Tau Mountains in the South Kazakhstan region were found to be extremely helpful in reducing food craving. In future this personalized system of longevity and wellbeing will be integrated into a new social network of people willing to keep their body in good and healthy condition as long as possible.

### Biography

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