

# **Abstract**

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## **GENETIC-BASED NUTRITION RECOMMENDATION MODEL**

Evolutionary computing is the collective name for a range of problem-solving techniques based on principles of biological evolution, such as natural selection and genetic inheritance. These techniques are being widely applied to a variety of problems in many vital fields. Also, Evolutionary Algorithms (EA) which applied the principles of Evolutionary computations, such as genetic algorithm, particle swarm, ant colony and bees algorithm and so on play an important role in decision making process. EAs serve a lot of fields which can affect our life directly, such as medicine, engineering, transportations, communications. One of these vital fields is Nutrition which can be viewed from several points of view as medical, physical, social, environmental and psychological point of view. This study, presents a proposed model that shows how evolutionary computing generally and genetic algorithm specifically-as a powerful algorithm of evolutionary algorithms-can be used to recommend an appropriate nutrition style in a medical and physical sides only to each person according to his/her personal and medical measurements.