

TOOL FOR THE PREVENTION OF CERTAIN DISEASES BASED ON THE MEDITERRANEAN DIET

DESCRIPTION OF THE INVENTION

The origin of pathologies such as cardiovascular diseases and obesity is complex, playing a role a variety of factors, among them the individual genetics. This makes that the treatment of these diseases also involves great difficulty, being prevention a key factor in this type of pathologies.

Although there are suitable pharmacological therapies for the treatment of these diseases, primary prevention is essential to avoid the side effects of pharmacological therapies as well as to reduce the health costs they represent.

EPIGEM research group at the University of Valencia, has developed a new tool for the prevention and treatment of the aforementioned pathologies, based on the Mediterranean diet and genetics.

We have identified several gene-diet interactions in

the field of nutrigenomics in cardiovascular disease and obesity. The new tool developed is based on a personalized nutrition which takes into account the genetic characteristics of the patient. This allows recommend the best diet tailored to the genetic characteristics of the patient, which allows primary prevention of these diseases and treating them once they have appeared. It is has been found that in people who have a genetically higher risk of suffering a stroke due to the presence of mutations in the gene TCF7L2, this risk is reduced when a Mediterranean diet is followed. Customizing the diet has the added advantage of increasing the motivation of the person to follow it, motivation which is increased in the case of high-risk conditions such as stroke.

BUSINESS APPLICATION SECTORS

The invention is applicable in the health sector, being particularly aimed at:

- Medical personnel of hospitals, primary health care and specialty centers

TECHNICAL ADVANTAGES AND BUSINESS BENEFITS

The new developed tool has the following advantages:

- Personalized diet: the diet is customized to the needs of each patient and his genetic profile
- Primary prevention: prevention of diseases to avoid their occurrence; and it has been shown that with this new tool a reduction in the incidence of cardiovascular diseases is achieved by 30%
- High rate of adherence: a result of increased motivation of patients to follow the diet

DEVELOPMENT STATUS OF TECHNOLOGY

The necessary tools for their immediate application are available. The new tool is developed and validated on a population sample of thousands of patients.

INTELLECTUAL PROPERTY RIGHTS

The technology is protected by intellectual property rights associated with the software.

SOUGHT COLLABORATION

Indicate the type of collaboration sought:

- R & D project to complete development or apply it to other sectors

RELATED IMAGES

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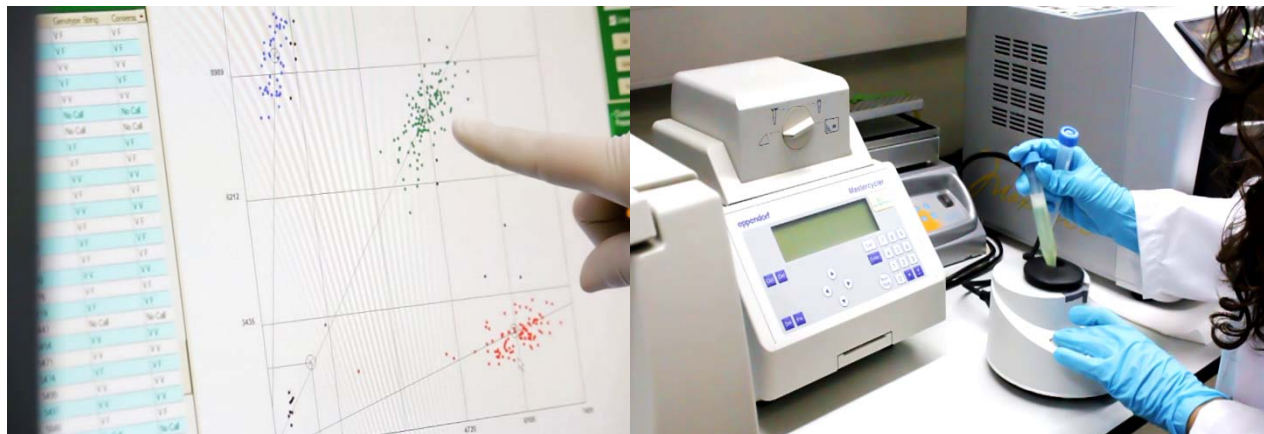


Image 1: Genetic profiles of a population

Image 2: devices for the genetic analysis

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