

MICROBIOTA AND NUTRITIONAL THERAPY

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Background:

Nutrition affects the state of health and wellness of humans to such an extent that food, in line with the latest scientific findings, can, as a drug, condition both the health of individuals and the well-being of the planet.

All this also takes place through the gut microbiota, which is basically characteristic of each individual but can be largely influenced by food choices.

Methods and Results:

There are many environmental variables that condition the taxonomic diversity and the richness, even functional, of the individual microbiome, but undoubtedly eating habits coincide with characteristics of the microbiota that are associated with the host's state of health or specific pathological states. Nowadays a diet can be considered healthy if it conditions the microbiota in a sense that is considered to promote a state of health.

The literature currently describes in detail the negative or positive effects on the intestinal microbiota of numerous dietary habits such as the Western diet, the Mediterranean diet, vegetarianism, intermittent fasting or the ketogenic diet.

Conclusions and Significance:

The ketogenic diet, based on clinical and experimental evidence, significantly interferes with the composition of the microbiota and, through it, with the monitoring and management of numerous pathologies, especially in the metabolic area such as diabetes and obesity.

The assessment of the gut microbiome as part of a protocol that uses the induction of ketosis for the treatment of T2DM and obesity, can be proposed as an example of personalized nutritional therapy, especially for the most critical phase which consists in maintaining the results over the long term.

Keywords:

microbiome, gut microbiota, human health, obesity, ketogenic diet

References:

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Thematic Area:

Frontiers in microbiome research