

Responses of intestinal microflora diversity and lipid metabolism in human flora associated C57BL/6J mice to a tea polyphenols diet

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Abstract: Diet is one of the most important factors to determine intestinal flora diversity and its functional genomics. Dietary regulation of the intestinal microbiota to promote human health and its mechanism are becoming a hot research point. Diet polyphenols, an essential component in the dietary structure, which has a most complicated interaction with the human intestinal flora, has an important influence on the structure and function of the intestinal flora. Here we discussed the responses of colon flora diver-

sity and lipid metabolism to the tea polyphenols by using DGGE and RT-qPCR, body weight, fat tissue weight, glycemic index, blood lipid levels, insulin levels, size of fat cells. There has a significant impact when presents a certain dose of tea polyphenols in the diet. These findings, which preliminary revealed the relationship of polyphenols diet-colonic microflora-lipid metabolism, laid a foundation for further exploration of dietary regulation of intestinal flora to promote human health.

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