**Supplementary Material**

**Table 2.** Methods for the Identification of Gut Biotics

|  |  |
| --- | --- |
| **Type of gut biotic** | **Method of identification** |
| Prebiotics | Fecal pH, feces humidity and SCFAs production, which is related to the bacterial fermentation of probiotics [219] |
| Probiotics | Cell culture of gut microbiota [220] |
| Paraprobiotics  | Flow cytometry [221] |
| Postbiotics | GC to detect short- chain fatty acids [48]Mass spectrometry to detect LTAs [48, 222] |
| Proteobiotics  | Mass spectroscopy [223] |

SCFAs: short-chain fatty acids; GC: gas chromatography; LTAs: lipoteichoic acids.

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