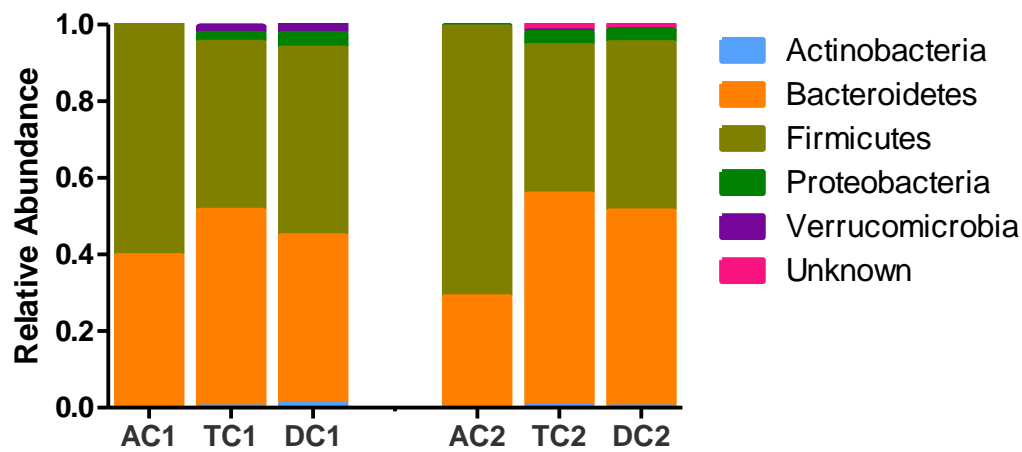


## Supporting information

**Table S1.** HRMS performances. RT (retention time, min); TM (theoretical mass); EM (experimental mass,  $[M+H]^+$ ); error ( $\Delta$  ppm). The following compounds were quantified using chemical similarities toward the analytes in parenthesis (SciFinder, ACS 2018): 3-(2-hydroxyethyl)indole (indole-acetic acid), oxindole (indole), 3-methyl indole (indole), indole-3-acetaldehyde (indole-3-aldehyde).

| <b>Compound Name</b>                    | <b>RT</b> | <b>Elemental Composition</b>                                  | <b>TM</b> | <b>EM</b> | <b><math>\Delta</math> ppm</b> |
|---|-----------|---|-----------|-----------|--------------------------------|
| L-kynurenine                            | 2.3       | C <sub>10</sub> H <sub>12</sub> N <sub>2</sub> O <sub>3</sub> | 209.09207 | 209.09275 | 3.3                            |
| indole-3-acetaldehyde                   | 2.6       | C <sub>10</sub> H <sub>9</sub> NO                             | 160.07569 | 160.07549 | -1.2                           |
| 3-hydroxyanthranilic acid               | 3.2       | C <sub>7</sub> H <sub>7</sub> NO <sub>3</sub>                 | 154.04987 | 154.04991 | 0.3                            |
| tryptophan                              | 4.1       | C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>2</sub> | 205.09715 | 205.09754 | 1.9                            |
| 3-methyl indole                         | 4.3       | C <sub>9</sub> H <sub>9</sub> N                               | 132.08078 | 132.08028 | -3.8                           |
| tryptamine                              | 4.4       | C <sub>10</sub> H <sub>12</sub> N <sub>2</sub>                | 161.10732 | 161.10719 | -0.8                           |
| kynurenic acid                          | 4.6       | C <sub>10</sub> H <sub>7</sub> NO <sub>3</sub>                | 190.04987 | 190.04963 | -1.3                           |
| anthranilic acid                        | 4.9       | C <sub>7</sub> H <sub>7</sub> NO <sub>2</sub>                 | 138.05496 | 138.05490 | -0.4                           |
| indole-3-aldehyde                       | 5.5       | C <sub>9</sub> H <sub>7</sub> NO                              | 146.06004 | 146.05990 | -1.0                           |
| indole-3-acetic acid                    | 5.6       | C <sub>10</sub> H <sub>9</sub> NO <sub>2</sub>                | 176.07061 | 176.07021 | -2.3                           |
| 3-(2-hydroxyethyl)indole                | 5.8       | C <sub>10</sub> H <sub>11</sub> NO                            | 162.09134 | 162.09155 | 1.3                            |
| indole-3-propionic acid                 | 6.2       | C <sub>11</sub> H <sub>11</sub> NO <sub>2</sub>               | 190.08626 | 190.08611 | -0.8                           |
| indole                                  | 6.7       | C <sub>8</sub> H <sub>7</sub> N                               | 118.06513 | 118.06509 | -0.3                           |
| oxindole                                | 6.8       | C <sub>8</sub> H <sub>7</sub> NO                              | 134.06004 | 134.06022 | 1.3                            |
| 6-formylindolo(3,2- <i>b</i> )carbazole | 8.6       | C <sub>19</sub> H <sub>12</sub> N <sub>2</sub> O              | 285.10224 | 285.10199 | -0.9                           |



**Figure S1.** Relative abundance of microbiota used in the TWINSHIME® fermentation of 2 different donors before oregano treatment given in phylum level, analyzed by 16S sequencing. AC1/AC2 represents ascending colon donor 1/2; TC1/TC2 represents transverse colon donor 1/2; DC1/DC2 represents descending colon donor 1/2.

**Figure S2.** Concentration of tryptophan and tryptophan derivatives in ascending (AC), transverse (TC) and descending (DC) colon, n=2 donors.

