CLAIMS

1. Use of a composition comprising *Eubacterium hallii* and/or *Intestinimonas butyriciproducens* and a physiologically acceptable carrier in the manufacture of a medicament for treating and/or preventing vitamin B12 deficiency in a subject.

2. The use according to claim 1, wherein the vitamin B12 deficiency in said subject is derived from metformin treatment for type-2 diabetes, pernicious anemia, atrophic gastritis, chronic inflammation of the pancreas, surgical procedure where part of the stomach and/or small intestine are removed, weight loss (bariatric) surgery, inflammatory bowel disease, such as Crohn's disease, ulcerative colitis, celiac disease, bacterial growth, heavy drinking, Graves' disease, lupus, long-term use of acid-reducing drugs, malnutrition, bulimia, and anorexia nervosa, HIV/AIDS, obesity, high body mass index, pre-diabetes state, insulin resistance, or a vegetarian or vegan diet.

3. The use according to any of claims 1 or 2, wherein the composition further comprises a propionate-producing bacterium, such as *Akkermansia muciniphila*.

4. The use according to any of claims 1-3, wherein the medicament is in a form selected from the group of capsule, tablet, and powder.

5. The use according to any of the preceding claims, wherein said *I. butyriciproducens* and/or *E. hallii* and, optionally, said propionate-producing bacterium, is present in lyophilized or microencapsulated form.

6. The use according to any one of the preceding claims, wherein *I. butyriciproducens* and/or *E. hallii* is present in an amount ranging from 10^4 to 10^{15} cells.

7. The use according to any of claims 3-6, wherein said propionate-producing bacterium such as *A. muciniphila* is present in an amount ranging from 10^4 to 10^{15} cells.

8. The use according to any one of the preceding claims, wherein the composition further comprises a mucosal binding agent.

9. The use according to any of the preceding claims, wherein the composition further comprises cobalt ions, for example, in the form of a cobalt salt such as cobalt chloride, cobalt sulphate, cobalt acetate, or cobalt nitrate.

10. The use according to claim 1, wherein the composition is for increasing the production of pseudovitamin B12 in the intestine of a subject.

11. The use according to claim 1, wherein the composition is for increasing the production of propionate in the intestine of a subject.

12. The use according to any one of claims 10 or 11, wherein the subject suffers from vitamin B12 deficiency.

13. The use according to any of claims 10-12, wherein the vitamin B12 deficiency in said subject is derived from metformin treatment for type-2 diabetes, pernicious anemia, atrophic gastritis, chronic inflammation of the pancreas, surgical procedure where part of the stomach and/or small intestine are removed, weight loss surgery, inflammatory bowel disease, such as Crohn's disease, ulcerative colitis, celiac disease, bacterial growth, heavy drinking, Graves' disease, lupus, long-term use of acid-reducing drugs, malnutrition, bulimia, and anorexia nervosa, HIV/AIDS, obesity, high body mass index, pre-diabetes state, insulin resistance, or a vegetarian or vegan diet.

14. Use *of I. butyriciproducens* and/or *E. hallii* in the manufacture of a medicament for treating and/or preventing vitamin B12 deficiency in a subject.

15. The use of *I. butyriciproducens* and/or *E. hallii* according to claim 14, wherein the vitamin B12 deficiency in said subject is derived from metformin treatment for type-2 diabetes, pernicious anemia, atrophic gastritis, chronic inflammation of the pancreas, surgical procedure where part of the stomach and/or small intestine are removed, weight loss surgery, inflammatory bowel disease, such as Crohn's disease, ulcerative colitis, celiac disease, bacterial growth, heavy drinking, Graves' disease, lupus, long-term use of acid-reducing drugs, malnutrition, bulimia, and anorexia nervosa, HIV/AIDS, obesity, high body mass index, pre-diabetes state, insulin resistance, or a vegetarian or vegan diet.

16. The use according to claim 14, wherein the medicament is for increasing the production of pseudovitamin B12 in the intestine of a subject.

17. The use according to claim 14, wherein the medicament is for increasing the production of propionate in the intestine of a subject.

18. The use according to claim 17, wherein the subject suffers from vitamin B12 deficiency.

19. The use according to any one of claims 17 or 18, wherein the vitamin B12 deficiency in said subject is derived from metformin treatment for type-2 diabetes, pernicious anemia, atrophic gastritis, chronic inflammation of the pancreas, surgical procedure where part of the stomach and/or small intestine are removed, weight loss surgery, inflammatory bowel disease, such as Crohn's disease, ulcerative colitis, celiac disease, bacterial growth, heavy drinking, Graves' disease, lupus, long-term use of acid-reducing drugs, malnutrition, bulimia, and anorexia nervosa, HIV/AIDS, obesity, high body mass index, pre-diabetes state, insulin resistance, or a vegetarian or vegan diet.