[Non-Patent Document 5] Gut 55, 681-688, 2005

Summary

[Problems to be Solved]

An objective of the present disclosure is to provide an intestinal regulator with little physical burden, which is highly safe, fast-acting, and persistent.

[Means for Solving the Problems]

The present disclosure is based on novel findings of fast-acting and persistent intestine-regulating effects of Profec, which were previously unknown.

Until now, the present inventors conducted many evaluations on Profec with regard to its intestine-regulating effects when Profec was taken for only several weeks at a time. As a result, intake of Profec for two to four weeks was shown to provide a certain effect of improving bowel movement (for example, Non-Patent Documents 3 and 4). In contrast, the present inventors evaluated for the first time, the intestine-regulating effects of Profec over time on subjects of a wide range of ages who are suffering from constipation. Surprisingly, the inventors discovered that significant bowel movement-improving effects were seen one day after initiating Profec intake, and more remarkable bowel movement-improving effects were seen two days after intake. The inventors also found out that during the two-week period of Profec intake, this bowel movement-improving effects did not weaken, and these effects were maintained for at least two weeks after stopping Profec intake.

In one aspect, the present invention refers to the use of an intestinal regulator comprising a collagen peptide and a culture of propionic acid bacteria or a collagen peptide and DHNA in the manufacture of a medicament for improving constipation in patients of ages 18 to 64, wherein the propionic acid bacteria is selected from the group consisting of *Propionibacterium freudenreichii*, *Propionibacterium acidipropionici*, and *Propionibacterium jensenii*, wherein improvement of constipatio is obtained within 7 days of administration of the medicament and maintained for at least two weeks from after stopping administration of the medicament, and wherein the content of DHNA in the

medicament is 5 μg to 100 μg per day or the content of the culture of propionic acid bacteria in the medicament is 0.001 to 20wt%.

In another asepect, the present invention refers to the use of an intestinal regulator comprising a collagen peptide and a culture of propionic acid bacteria or a collagen peptide and DHNA in the manufacture of a medicament for improving mild constipation in patients of ages 18 to 64, wherein the propionic acid bacteria is selected from the group consisting of *Propionibacterium freudenreichii*, *Propionibacterium acidipropionici*, and *Propionibacterium jensenii*, wherein improvement of mild constipation is obtained within 7 days of administration of the medicament and maintained for at least two weeks from after stopping administration of the medicament, and wherein the content of DHNA in the medicament is 5 μg to 100 μg per day or the content of the culture of propionic acid bacteria in the medicament is 0.001 to 20wt%.

Basic characteristics and various embodiments of the present disclosure are provided below:

[1] A fast-acting intestinal regulator comprising at least one component from among a culture of propionic acid bacteria, DHNA, or an analog thereof.

[2] The fast-acting intestinal regulator of [1], wherein the propionic acid bacteria is *Propionibacterium freudenreichii*.

[3] The fast-acting intestinal regulator of [1] or [2], which is a fast-acting bowel movement-improving agent.

[4] the fast-acting intestinal regulator of any one of [1] to [3], wherein an intestine-regulating effect is obtained within seven days, preferably within two days, more preferably within one day after its intake (administration);

[5] the fast-acting intestinal regulator of any one of [1] to [4], which maintains an intestine-regulating effect for (at least) one week, preferably 1.5 weeks, more preferably two weeks from after stopping its intake (administration);

[6] the fast-acting intestinal regulator of any one of [1] to [5], wherein the intake (dose) per day

CLAIMS

1. Use of an intestinal regulator comprising a collagen peptide and a culture of propionic acid bacteria or a collagen peptide and DHNA in the manufacture of a medicament for improving constipation in patients of ages 18 to 64,

wherein the propionic acid bacteria is selected from the group consisting of *Propionibacterium freudenreichii*, *Propionibacterium acidipropionici*, and *Propionibacterium jensenii*,

wherein improvement of constipation is obtained within 7 days of administration of the medicament and maintained for at least two weeks from after stopping administration of the medicament, and

wherein the content of DHNA in the medicament is 5 μg to 100 μg per day or the content of the culture of propionic acid bacteria in the medicament is 0.001 to 20wt%.

2. Use of an intestinal regulator comprising a collagen peptide and a culture of propionic acid bacteria or a collagen peptide and DHNA in the manufacture of a medicament for improving mild constipation in patients of ages 18 to 64,

wherein the propionic acid bacteria is selected from the group consisting of *Propionibacterium freudenreichii*, *Propionibacterium acidipropionici*, and *Propionibacterium jensenii*,

wherein improvement of mild constipation is obtained within 7 days of administration of the medicament and maintained for at least two weeks from after stopping administration of the medicament, and

wherein the content of DHNA in the medicament is 5 μg to 100 μg per day or the content of the culture of propionic acid bacteria in the medicament is 0.001 to 20wt%.

3. The use of claim 1 or 2, wherein the propionic acid bacteria is *Propionibacterium freudenreichii*.

4. The use of any one of claims 1 to 3, wherein improvement of constipation is characterized by any one or more of increase in stool count, increase in stool amount, improvement of difficulty in defecation, shortening of time taken for defecation, improvement of sensation during defecation, improvement of stool frequency, improvement of stool properties, and improvement of stool habits.

5. The use of any one of claims 1 to 4, wherein improvement of constipation is obtained within 2 days of administration of the medicament.

6. The use of any one of claims 1 to 4, wherein improvement of constipation is obtained within 1 day of administration of the medicament.