bound is called β-cyclodextrin, and a cyclodextrin in which 8 glucose molecules are bound is called γ-cyclodextrin. α-cyclodextrin has a characteristic (inclusion effect) of taking another molecule in a hollow portion inside, and is generally utilized for foods as a stabilizer or an emulsifier by utilizing this characteristic. Regarding α-cyclodextrin, Non Patent Literature 1 recently reported that by feeding α-cyclodextrin to obese mice which have been given high-fat diets, it is possible to suppress decreases in total bacterial cell numbers of *Bacteroides, Bifidobacterium*, and *Lactobacillus* in the intestinal tracts of the mice to maintain the gut microbiota, resulting in reductions in accumulation of fat. However, Non Patent Literature 1 does not mention species and strains, which are taxonomic subdivisions of the genus, at all.

Citation List

Patent Literatures

[0005]

Patent Literature 1: Japanese Patent Application Publication No. 2007-131609

Patent Literature 2: Japanese Patent Application Publication No. 2007-308468

Non Patent Literature

[0006]

Non Patent Literature 1: BioFactors 2018, Volume 44, Issue 4, 336-347

Summary

[0006a] In a first aspect, the present disclosure refers to a composition for athletic ability enhancement, comprising α-cyclodextrin as an active ingredient, wherein α-cyclodextrin is to be administered in an amount from 0.01 mg/kg body weight to 200 mg/kg body weight per day.

[0006b] In another aspect, the present disclosure refers to a composition for proliferation of *Bacteroides uniformis* in the intestinal tract, comprising α-cyclodextrin as an active ingredient, wherein α-cyclodextrin is to be administered in an amount from 0.01 mg/kg body weight to 200 mg/kg body weight per day.

[0006c] In a further aspect, the present disclosure refers to a method for enhancing athletic ability in a subject comprising administering a composition comprising α-cyclodextrin as an active ingredient to a subject, wherein α-cyclodextrin is administered in an amount from 0.01 mg/kg body weight to 200 mg/kg body weight per day.

Problems to be solved by the invention

[0007] An object of the present invention is to provide a novel composition that can contribute to athletic ability enhancement.

Means for solution of the problems

[0008] The present inventors found that the intake of *Bacteroides uniformis* continuously exhibits a physical strength enhancing effect and/or anti-fatigue effect (see International Publication No. 2019/069735 (PCT/JP2018/035295) (which is an international publication that had not been published at the time of the application of the basic application (Japanese Patent Application No. 2019-067, 505) of the present International Application)). The present inventors then considered based on this finding

What is claimed is:

1. A composition for athletic ability enhancement, comprising α-cyclodextrin as an active ingredient, wherein α-cyclodextrin is to be administered in an amount from 0.01 mg/kg body weight to 200 mg/kg body weight per day.

2. The composition according to claim 1, wherein the athletic ability enhancement includes at least one effect selected from physical strength enhancement, anti-fatigue, and fatigue feeling mitigation.

3. The composition according to claim 1, wherein the athletic ability enhancement includes suppression of increase in heart rate during exercise.

4. A composition for proliferation of *Bacteroides uniformis* in the intestinal tract, comprising α-cyclodextrin as an active ingredient, wherein α-cyclodextrin is to be administered in an amount from 0.01 mg/kg body weight to 200 mg/kg body weight per day.

5. The composition according to any one of claims 1 to 4, for oral intake.

6. The composition according to any one of claims 1 to 4, that is an additive for foods and beverages, a pharmaceutical composition, a feed composition, or a feed additive.

7. The composition according to any one of claims 1 to 6, wherein the composition is to be administered for at least 7 days.

8. A method for enhancing athletic ability in a subject comprising administering a composition comprising α-cyclodextrin as an active ingredient to a subject, wherein α-cyclodextrin is administered in an amount from 0.01 mg/kg body weight to 200 mg/kg body weight per day.

9. The method of claim 8, wherein the athletic ability enhancement includes at least one effect selected from physical strength enhancement, anti-fatigue, and fatigue feeling mitigation.

10. The method of claim 8 or 9, wherein the athletic ability enhancement includes suppression of increase in heart rate during exercise.

11. The method of any one of claims 8-10, wherein the composition is administered orally.

12. The method of any one of claims 8-11, wherein the composition is an additive for foods and beverages, a pharmaceutical composition, a feed composition, or a feed additive.

13. The method of any one of claims 8-12, wherein the composition is administered for at least 7 days.