CLAIMS

1. Use of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the manufacture of a medicament for preventing and/or treating insulin resistance and/or insulin resistance-related complications in a subject in need thereof, wherein the insulin resistance-related complications are selected from metabolic syndrome, dyslipidemia, type 2 diabetes mellitus, and insulin resistance in endocrine disease (e.g., obese subjects with type 1 diabetes mellitus, Cushing's disease and lipodystrophy syndromes), and wherein said medicament increases the level of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the small intestine.

2. The use according to claim1, wherein the level of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the small intestine is increased by a method selected from the group consisting of administration of an effective amount of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. to said subject, and administration of an effective amount of a compound capable of increasing the level of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the small intestine.

3. The use according to claim 2, wherein the effective amount of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. is an amount of between about 10^6 and about 10^{12} bacteria of the taxon *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel.

4. The use according to claim 2 or 3, wherein an effective amount of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. is administered to said subject in the form of a pharmaceutical, food or feed composition.

5. Pharmaceutical composition comprising bacteria of the taxon *Alcaligenes faecalis* et rel. and a pharmaceutically acceptable carrier.

6. Pharmaceutical, food, or feed composition comprising between about 10^6 and about 10^{12} bacteria of the taxon *Alcaligenes faecalis* et rel.

7. Composition according to any one of claims 5 or 6, which comprises a powder of lyophilized bacteria.

8. Composition according to any one of claims 5-7, which is in a form selected from the group consisting of capsules, tablets, powders, elixirs, syrups and suspensions.

9. Dairy product comprising *Alcaligenes faecalis* et rel.

10. Dairy product according to claim 9, which is a fermented dairy product.

11. Dairy product according to any one of claims 9 or 10, which is selected from the group of yoghurt, a yoghurt-based drink, and buttermilk.

12. Pharmaceutical, food, or feed composition comprising Alcaligenes faecalis et rel. for use as a medicament.

CLAIMS

1. *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. for use in preventing and/or treating insulin resistance and/or insulin resistance-related complications.

2. *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. for use according to claim 1, wherein the insulin resistance-related complications are selected from metabolic syndrome, dyslipidemia, and type 2 diabetes mellitus.

3. Pharmaceutical, food, or feed composition comprising *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. for use in preventing and/or treating insulin resistance and/or insulin resistance-related complications.

4. Pharmaceutical, food, or feed composition according to claim 3, wherein the insulin resistance-related conditions are selected from metabolic syndrome, dyslipidemia, and type 2 diabetes mellitus.

5. Use of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the manufacture of a medicament for preventing and/or treating insulin resistance and/or insulin resistance-related complications in a subject in need thereof, wherein said medicament increases the level of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the small intestine.

6. The use according to claim 5, wherein the level of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the small intestine is increased by a method selected from the group consisting of administration of an effective amount of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. to said subject, and administration of an effective amount of a compound capable of increasing the level of *Eubacterium hallii* et rel. and/or *Alcaligenes faecalis* et rel. in the small intestine.

7. The use according to any one of claims 5 or 6, wherein the insulin resistance-related conditions are selected from metabolic syndrome, dyslipidemia, and type 2 diabetes mellitus.

8. Pharmaceutical, food, or feed composition comprising *Alcaligenes faecalis* et rel.

9. Composition according to claim 8, which is a drink.

10. Pharmaceutical, food, or feed composition comprising *Alcaligenes faecalis* et rel. for use as a medicament.