CLAIMS

1. An agent for preventing or treating a fat-associated disease and/or inflammation, the agent comprising a *Faecalibacterium* bacterium or a processed product thereof.

2. The agent according to claim 1, wherein the fat-associated disease is a metabolic syndrome-associated disease or non-alcoholic fatty liver disease (NAFLD).

3. The agent according to claim 1 or 2, wherein the *Faecalibacterium* bacterium is *Faecalibacterium prausnitzii* ATCC 27768, *Faecalibacterium prausnitzii* ATCC 27766, or *Faecalibacterium prausnitzii* TY-2 (Accession No. NITE ABP-02743).

4. A composition for preventing or treating a fat-associated disease and/or inflammation, the composition comprising the agent according to any one of claims 1 to 3.

5. The composition according to claim 4, which is any of a pharmaceutical composition, a food composition and a cosmetic composition.

6. Use of a *Faecalibacterium* bacterium or a processed product thereof for production of the agent or composition according to any one of claims 1 to 5.

7. *Faecalibacterium prausnitzii* TY-2 (Accession No. NITE ABP-02743) or a processed product thereof.

8. Use of a *Faecalibacterium* bacterium or a processed product thereof for the preparation of an agent or composition for prevention or treatment of a fat-associated disease and/or inflammation.

9. A *Faecalibacterium* bacterium or a processed product thereof for use in medicine.

10. A *Faecalibacterium* bacterium or a processed product thereof for use in prevention or treatment of a fat-associated disease and/or inflammation.

11. The use according to claim 8 or the *Faecalibacterium* bacterium or a processed product thereof for the use according to claim 10, wherein the fat-associated disease is a metabolic syndrome-associated disease or non-alcoholic fatty liver disease (NAFLD).

12. The use according to claim 8 or the *Faecalibacterium* bacterium or a processed product thereof for the use according to any one of claims 9 to 11, wherein the *Faecalibacterium* bacterium is *Faecalibacterium prausnitzii* ATCC 27768, *Faecalibacterium prausnitzii* ATCC 27766, or *Faecalibacterium prausnitzii* TY-2 (Accession No. NITE ABP-02743).

13. The use according to claim 8 or the *Faecalibacterium* bacterium or a processed product thereof for the use according to any one of claims 9 to 11, wherein the *Faecalibacterium* bacterium *Faecalibacterium prausnitzii* TY-2 (Accession No. NITE ABP-02743.