CLAIMS

1. A composition comprising a bacterial strain of the species *Eubacterium contortum*, for use in a method of treating or preventing an inflammatory or autoimmune disease, or cancer.

2. The composition of claim 1, wherein the composition is for use in a method of treating or preventing a disease or condition selected from the group consisting of uveitis; cancer, such as breast cancer, lung cancer, liver cancer, colon cancer, or ovarian cancer; multiple sclerosis; arthritis, such as rheumatoid arthritis, osteoarthritis, psoriatic arthritis, or juvenile idiopathic arthritis; neuromyelitis optica (Devic's disease); ankylosing spondylitis; spondyloarthritis; psoriasis; systemic lupus erythematosus; inflammatory bowel disease, such as Crohn's disease or ulcerative colitis; celiac disease; asthma, such as allergic asthma or neutrophilic asthma; chronic obstructive pulmonary disease (COPD); scleritis; vasculitis; Behcet's disease; atherosclerosis; atopic dermatitis; emphysema; periodontitis; allergic rhinitis; and allograft rejection.

3. The composition of claim 2, wherein the composition is for use in a method of treating or preventing uveitis, and

wherein the composition is for use in a method of reducing or preventing retinal damage in uveitis.

4. The composition of claim 2, wherein the composition is for use in a method of treating or preventing cancer, such as lung cancer, breast cancer or liver cancer, and

wherein the composition is for use in a method of reducing tumour size, reducing tumour growth, preventing metastasis or preventing angiogenesis.

5. The composition of claim 2, wherein the composition is for use in in a method of treating or preventing asthma, such as neutrophilic asthma or allergic asthma, and

wherein the composition is for use in a method of reducing neutrophilia or eosinophilia in the treatment of asthma.

6. The composition of claim 2, wherein the composition is for use in in a method of treating or preventing rheumatoid arthritis, and wherein the composition is for use in a method of reducing joint swelling in rheumatoid arthritis.

7. The composition of claim 2, wherein the composition is for use in in a method of treating or preventing multiple sclerosis, and wherein the composition is for use in a method of reducing disease incidence or disease severity.

8. The composition of any preceding claim, wherein the composition is for use in a method of reducing IL-17 production or reducing Th17 cell differentiation in the treatment or prevention of the inflammatory or autoimmune disease, or cancer.

9. The composition of any preceding claim, wherein the composition is for use in a patient with elevated IL-17 levels or Th17 cells.

10. The composition of any of claims 1-9, for the use of any of claims 1-9, wherein the bacterial strain has a 16s rRNA sequence that is at least 95%, 96%, 97%, 98%, 99%, 99.5% or

99.9% identical to the 16s rRNA sequence of a bacterial strain of *Eubacterium contortum* or SEQ ID NO:1, 2, 3 or 4.

11. The composition of any preceding claim, for the use of any preceding claim, wherein the composition is for oral administration, wherein the composition comprises one or more pharmaceutically acceptable excipients or carriers and/or wherein the bacterial strain is lyophilised.

12. The composition of any preceding claim, for the use of any preceding claim, wherein the bacterial strain is viable and capable of partially or totally colonising the intestine.

13. The composition of any preceding claim, for the use of any preceding claim, wherein the composition comprises a single strain of the species *Eubacterium contortum*.

14. The composition of any preceding claim, for the use of any preceding claim, which comprises the *Eubacterium contortum* bacterial strain as part of a microbial consortium.

15. A food product or a vaccine comprising the composition of any preceding claim, for the use of any preceding claim.

16. A cell or a biologically pure culture of *Eubacterium contortum* strain MRX050 deposited as NCIMB 42689, optionally for use in therapy, further optionally wherein the cell is for use in a method defined in any of claims 1-9.

17. A composition comprising the cell of claim 16, optionally comprising a pharmaceutically acceptable carrier or excipient.

18. A composition comprising one or more bacterial strains of the species *Eubacterium contortum*, for use in therapy.