CLAIMS

1. Use of a composition comprising a bacterial strain of the genus *Bariatricus* in the manufacture of a medicament for the treatment or prevention of a disease or condition mediated by elevated histone deacetylase (HDAC) activity.

2. The use according to claim 1 wherein the medicament is for the treatment or prevention of a disease or condition mediated by elevated Class I HDAC activity.

3. The use according to claim 1 or claim 2, wherein the medicament selectively inhibits Class I HDAC activity in a condition mediated by elevated Class I HDAC activity.

4. The use according to any preceding claim, wherein the medicament selectively inhibits HDAC1, HDAC2 or HDAC3 in a disease or condition mediated by elevated HDAC1, HDAC2 or HDAC3 activity.

5. The use according to any preceding claim, wherein the medicament is to be administered to a patient with elevated HDAC activity.

6. The use according to any preceding claim, wherein the treatment or prevention of a disease or condition is selected from the group consisting of: a neurodegenerative disease, such as Alzheimer's disease, Huntington's disease or Parkinson's disease; brain injury, such as stroke; a behavioural or psychiatric disorder, such as attention deficit hyperactivity disorder, obsessive compulsive disorder, anxiety disorder, biopolar disorder, or post-traumatic stress disorder; an inflammatory or autoimmune disease, such as asthma, arthritis, psoriasis, multiple sclerosis, diabetes, allograft rejection, graft-versus-host disease, or an inflammatory bowel disease, such as Crohn's disease; or cancer, such as prostate cancer, colorectal cancer, breast cancer, lung cancer, liver cancer and gastric cancer.

7. The use according to any preceding claim, wherein the bacterial strain is of the species *Bariatricus massiliensis*.

8. The use according to any preceding claim, wherein the bacterial strain has a 16s rRNA gene sequence that is at least 95%, 96%, 97%, 98%, 99%, 99.5% or 99.9% identical to SEQ ID NO:1 or SEQ ID NO:2, or wherein the bacterial strain has the 16s rRNA gene sequence represented by SEQ ID NO:1 or SEQ ID NO:2.

9. The use according to any preceding claim, wherein the medicament is for oral administration.

10. The use according to any preceding claim, wherein the bacterial strain is lyophilised.

11. The use according to any preceding claim, wherein the medicament is incorporated into a food product.

12. A cell of the *Bariatricus massiliensis* strain deposited under accession number NCIMB 43042 for use in therapy.

13. A cell of the *Bariatricus massiliensis* strain deposited under accession number NCIMB 43171 for use in therapy.

14. A composition comprising a bacterial strain of the genus *Bariatricus*, for use in therapy.

15. The composition of Claim 14 wherein the bacterial strain is of the species *Bariatricus massiliensis*.