CLAIMS

1. A fermented food comprising a lycopene-containing vegetable and lactic acid bacteria,

wherein the vegetable is a Chinese cabbage; and

wherein the lactic acid bacteria is selected from *Leuconostoc mesenteroides*, *Lactobacillus plantarum* or a combination thereof.

2. The fermented food of claim 1, wherein the Chinese cabbage is The Han 1ho Chinese cabbage.

3. The fermented food of claim 1, wherein the *Leuconostoc mesenteroides* is *Leuconostoc mesenteroides* CJLM119, and the *Lactobacillus plantarum* is *Lactobacillus plantarum* CJLP133.

4. The fermented food of claim 1, wherein a decrease in a lycopene content of the vegetable is inhibited in the fermented food.

5. The fermented food of claim 1, wherein a lycopene content of the fermented food is in the range of 50% to 99% relative to a lycopene content of the vegetable.

6. The fermented food of claim 1, wherein a lycopene content (concentration) of the fermented food is in the range of 0.6 mg/g to 0.98 mg/g.

7. The fermented food of claim 1, wherein a lycopene content of the fermented food after 6 months of storage is in the range of 50% to 99% relative to a lycopene content of the fermented food after 7 days of storage.

8. The fermented food of claim 1, wherein the fermented food is for preventing or treating cancer, hypertension, inflammation, skin aging, or erythema.

9. The fermented food of claim8, wherein the cancer is colorectal cancer or gastric cancer.

10. A method of manufacturing a fermented food, the method comprising:

preparing a salted lycopene-containing vegetable and seasoning ingredients comprising lactic acid bacteria; and

mixing the seasoning ingredients with the salted vegetable,

wherein the vegetable is the Chinese cabbage; and

wherein the lactic acid bacteria is selected from *Leuconostoc mesenteroides*, *Lactobacillus plantarum* or a combination thereof.

11. A method of inhibiting a decrease in a lycopene content of a fermented food, the method comprising preparing a fermented food by mixing a lycopene-containing vegetable with lactic acid bacteria,

wherein the vegetable is the Chinese cabbage; and

wherein the lactic acid bacteria is selected from *Leuconostoc mesenteroides*, *Lactobacillus plantarum* or a combination thereof.