CLAIMS

1. The use of milk in the manufacture of a composition for reducing the risk of diseases or disorders associated with oxidative stress in an animal by increasing the level of glutathione in the blood or tissue of the animal, wherein the milk contains beta-casein, and wherein the beta-casein comprises at least 75% by weight of one or more beta-caseins selected from the A2 type beta-caseins.

2. The use as claimed in claim 1 wherein the diseases or disorders associated with oxidative stress are selected from the group comprising cancer, inflammation, kwashiorkor (protein deficiency), seizure, autism, Down's syndrome, chronic fatigue syndrome, Alzheimer's disease, Parkinson's disease, sickle cell anaemia, liver disease, cystic fibrosis, AIDS, infection, heart attack, stroke, and diabetes.

3. The use as claimed in claim 1 or claim 2 wherein the composition reduces the effects of aging, promotes the recovery of tissue following physical exercise, or promotes fertility.

4. The use as claimed in any one of claims 1 to 3 wherein the animal is a human, a dog, or a cat.

5. The use as claimed in any one of claims 1 to 4 wherein the beta-casein comprises at least 90% by weight A2 beta-casein.

6. The use as claimed in any one of claims 1 to 5 wherein the beta-casein comprises 100% by weight A2 beta-casein.

7. The use as claimed in anyone of claims 1 to 6 wherein the composition is milk powder, liquid milk reconstituted from powder, skim milk, homogenised milk, condensed milk, evaporated milk, pasteurised milk, or non-pasteurised milk, cream, yoghurt, quark, cheese, butter, ice cream, infant formula, an adult nutritional product, a protein supplement, or a petfood.

8. The use as claimed in any one of claims 1 to 7 wherein the milk is obtained by genotype testing or phenotype testing of bovine cows, and milking only those cows which have been determined to produce only the A2 type of beta-casein in their milk.

9. The use as claimed in claim 8 wherein a herd of cows is formed comprising only those cows which have been determined to produce only the A2 type of beta-casein A2 in their milk and then milking one or more cows of the herd.

10. A non-therapeutic method for improving the level of glutathione in the blood or tissue of an animal by providing milk or a milk product to the animal for consumption, wherein the milk or milk product contains beta-casein, and wherein the beta-casein comprises at least 75% by weight of one or more beta-caseins selected from the A2 type beta-caseins.

11. A non-therapeutic method for improving the antioxidant capacity of an animal by providing milk or a milk product to the animal for consumption, wherein the milk or milk product contains beta-casein, and wherein the beta-casein comprises at least 75% by weight of one or more beta-caseins selected from the A2 type beta-caseins.

12. A non-therapeutic method for improving the antioxidant capacity of an animal by increasing the level of glutathione in the blood or tissue of an animal by providing milk or a milk product to the animal for consumption, wherein the milk or milk product contains beta-casein, and wherein the beta-casein comprises at least 75% by weight of one or more beta-caseins selected from the A2 type beta-caseins.