CLAIMS

1. A plant-based component having trace element content that is reduced than its content in the corresponding natural occurring plant-based component; wherein said trace element is Manganese (Mn) and/or Magnesium (Mg).

2. A plant-based component according to claims 1, wherein said reduction is by at least 20% than its content in the corresponding natural occurring nut.

3. A plant-based component according to claims 1 or 2, being at least one nut.

~~4. A plant-based component according to claim 3, wherein said at least one nut is selected from almond, brazil nut, candlenut, cashew, chestnut, filbert, hazelnut, Chilean hazelnut, hickory nut, macadamia nut, pecan, Malabar chestnut, mongongo, peanut, pine nut, pistachio, walnut yeheb nut and any combination thereof.~~

~~5.~~4. A plant-based component according to claims 1 to ~~4~~3, being selected from at least one of grain, pseudo grain, nut, pulse, legume, oilseed, cereal, fruit, vegetable, and any combinations thereof.

~~6.~~5. A plant-based component according to claims 1 to ~~4~~3, being selected from buckwheat, barley, rice, maize, corn, millet, oats, rye, pea, chickpea, lentils, quinoa, teff, chia, bean, fava bean, sunflower, safflower, flax, rapeseed, wheat, sorghum, millet, oats, triticale, fonio, mung bean, pumpkin, amaranth and any combinations thereof.

~~7.~~6. A plant-based component according to any one of the preceding claims, wherein Manganese (Mn) content is between 0 to 20ppm.

~~8. A plant-based component according to any one of the preceding claims, wherein Manganese (Mn) content is between 0 to 10ppm.~~

~~9. A plant-based component according to any one of the preceding claims, wherein Manganese (Mn) content is between 0 to 8ppm.~~

~~10. A plant-based component according to any one of the preceding claims, wherein Manganese (Mn) content is between 0 to 5ppm.~~

~~11. A plant-based component according to any one of the preceding claims, wherein Manganese (Mn) content is between 0 to 3ppm.~~

~~12.~~7. A plant-based component according to any one of the preceding claims, wherein Magnesium (Mg) content is between 0 to 1500ppm.

~~13. A plant-based component according to any one of the preceding claims, wherein Magnesium (Mg) content is between 0 to 1200ppm.~~

~~14. A plant-based component according to any one of the preceding claims, wherein Magnesium (Mg) content is between 0 to 1000ppm.~~

~~15. A plant-based component according to any one of the preceding claims, wherein Magnesium (Mg) content is between 0 to 500ppm.~~

~~16. A plant-based component according to any one of the preceding claims, wherein the content of Arsenic (As) is between 0 to 1ppm.~~

~~17. A plant-based component according to any one of the preceding claims, wherein the content of Cadmium (Cd) is between 0 to 0.05ppm.~~

~~18. A plant-based component according to any one of the preceding claims, wherein the content of Lead (Pb) is between 0 to 0.05ppm.~~

~~19. A plant-based component according to any one of the preceding claims, wherein the content of Mercury (Hg) is between 0 to 1ppm.~~

~~20. A plant-based component according to any one of the preceding claims, wherein the content of Copper (Cu) is between 0 to 1ppm.~~

~~21.~~8. A plant-based component having a protein to Mg ratio of at least 100.

~~22.~~9. A plant-based component having a protein to Mn ratio of at least 15,000.

~~23.~~10. A composition comprising at least one plant-based component having reduced trace element content, as defined in any of claims 1 to ~~22~~9.

~~24. A composition comprising at least one nut having reduced trace element content, as defined in any one of claims 1 to 22.~~

~~25. A composition comprising at least one grain having reduced trace element content, as defined in any one of claims 1 to 22.~~

~~26.~~11. A composition according to ~~any one of~~ claim 10~~s 23 to 25~~, being a non-dairy composition.

~~27. A composition according to any one of claims 23 to 25, being a dairy composition.~~

~~28. A composition according to any one of claims 23 to 25, being a non-soy composition.~~

~~29. A method of preparing at least one plant-based component having reduced trace element content as disclosed herein above and below comprising the steps of: (a) providing at least one plant-based ingredient; (b) exposing said at least one plant-based ingredient to at least one of: (i) electrodialysis of said trace element content of said at least one plant-based ingredient; (ii) water extraction of said trace element content of said at least one plant-based ingredient; (iii) IOX-exchange resins; (iv) chelating said trace element content with at least one trace element chelating agent to form a chelate; and filtering said chelate; (v) membrane filtration (vi) air classification ; thereby forming said at least one plant based component having reduced trace element content.~~

~~30. A method according to claim 29, comprising the steps of: (a) providing at least one plant-based ingredient; (b) reacting said at least one plant-based ingredient to at least one trace element chelating agent thereby forming a chelate of said trace element content; (c) filtering said chelate of said trace element content from said at least one plant-based ingredient; thereby forming said at least one plant-based component having reduced trace element content.~~

~~31.~~12. A composition comprising at least one nut lipid component and/or at least one non-dairy component comprising all essential amino acids, wherein said at least one nut component or at least one non-dairy component contains reduced levels of at least one trace element.

~~32.~~13. A composition comprising at least one nut protein component and/or at least one non-dairy component comprising all essential amino acids, wherein said at least one nut component or at least one non-dairy component contains reduced levels of at least one trace element.

~~33. A composition according to claims 31 or 32, wherein said nut component contains reduced levels of at least one trace element.~~

~~34. A composition according to claims 31 or 32, wherein said at least one non-dairy component contains reduced levels of at least one trace element.~~

~~35.~~14. A composition according to ~~any one of~~ claims ~~31 to 34~~ 12 or 13, wherein the ratio between said at least one nut component and said at least one non-dairy component is from about 10:90 to about 90:10.

~~36.~~15. A composition according to ~~any one of~~ claims ~~31 to 35~~12 or 13, wherein said at least one nut component is present in an amount of at least 10% by weight from the total weight of the composition.

~~37.~~16. A composition according to any one of claims ~~31~~12 to ~~36~~15, wherein said at least one non-dairy component is present in an amount of at least 5% by weight from the total weight of the composition.

~~38. A composition according to any one of claims 31 to 37, being in the form of a dry composition.~~

~~39. A composition according to any one of claims 31 to 38, being in the form of a water-soluble dry powder.~~

~~40. A composition according to any one of claims 31 to 39, further comprising water.~~

~~41. A composition according to any one of claims 31 to 40, wherein said at least one nut component is selected from almond, brazil nut, candlenut, cashew, chestnut, filbert, hazelnut, Chilean hazelnut, hickory nut, macadamia nut, pecan, Malabar chestnut, mongongo, peanut, pine nut, pistachio, walnut yeheb nut and any combination thereof.~~

~~42. A composition according to any one of claims 31 to 41, wherein said at least one nut component is almond.~~

~~43. A composition according to any one of claims 31 to 42, wherein at least one non-dairy component is a type of grain selected from buckwheat, barley, rice, maize, corn, millet, oats, rye, pea, chickpea, lentils, quinoa, teff, chia, bean, fava bean, sunflower, safflower, flax, rapeseed, wheat, sorghum, millet, oats, triticale, fonio, mung bean, pumpkin, amaranth and any combinations thereof.~~

~~44. A composition according to any one of claims 31 to 43, wherein at least one non-dairy component is type of pseudocereal grain selected from buckwheat, amaranth or quinoa.~~

~~45. A composition according to any one of claims 31 to 44, wherein said at least one type of non-dairy component is buckwheat.~~

~~46. A composition according to any one of claims 31 to 45, wherein at least one type of non-dairy component is a whole grain.~~

~~47. A composition according to any one of claims 31 to 46, further comprising at least one additive selected from vitamins, minerals, trace elements, carbohydrates, lipids, proteins, amino acids and any combinations thereof.~~

~~48. A composition according to any one of claims 31 to 47, further comprising at least one additive selected from nucleotides, poly-unsaturated fatty acids, fluoride, choline, a probiotic agent, prebiotic agent, and any combinations thereof.~~

~~49. A composition according to any one of claims 31 to 48, further comprising at least one additive selected from a flavoring agent, an oil protective colloid, a plasticizer, an antioxidant, an emulsifier, a thickener, an acidity regulator, a packaging gas and any combinations thereof.~~

~~50.~~17. A composition according to any one of claims ~~31~~ 12 to ~~49~~16, wherein said subject is an infant and/or toddler.

~~51.~~18. A composition according to any one of claims ~~31~~12 to ~~50~~16, wherein said subject is an adult.