CLAIMS

What is claimed is:

1. A supplement in form of an effervescent tablet for treating a symptom or disorder associated with calcium imbalance comprising an effective amount of apoaequorin and an effervescent couple, the couple comprising an acidic component and an alkaline component.

2. The supplement of claim 1 wherein the supplement further includes at least one stimulant.

3. The supplement of claim 2 wherein the at least one stimulant is selected from caffeine, yerba maté, ephedrine, guarana, or ginseng.

4. The supplement of any one of claims 1-3 wherein the acidic component is selected from citric acid, tartaric acid, malic acid, fumaric acid, adipic acid, succinic acids, or their salts.

5. The supplement of any one of claims 1-4 wherein the alkaline component is selected from sodium carbonate, sodium bicarbonate, sodium sesquicarbonate, potassium carbonate, potassium bicarbonate, potassium sesquicarbonate, magnesium carbonate, sodium glycine carbonate, L-lysine carbonate, arginine carbonate, amorphous calcium carbonate, ammonium carbonate, or ammonium bicarbonate.

6. The supplement of any one of claims 1-5 wherein the supplement further includes vitamin D.

7. The supplement of claim 6 wherein the vitamin D is in the form of D3 cholecalciferol.

8. A therapeutic effervescent composition for treating a symptom or disorder associated with calcium imbalance comprising:

an effective amount of apoaequorin;

an effective amount of vitamin D;

at least one stimulant; and

an effervescent system including at least one acid and at least one alkali compound.

9. The therapeutic effervescent composition of claim 8 wherein the at least one acidic component is selected from citric acid, tartaric acid, malic acid, fumaric acid, adipic acid, succinic acids, or their salts.

10. The therapeutic effervescent composition of any one of claims 8 or 9 wherein the at least one alkaline component is selected from sodium carbonate, sodium bicarbonate, sodium sesquicarbonate, potassium carbonate, potassium bicarbonate, potassium sesquicarbonate, magnesium carbonate, sodium glycine carbonate, L-lysine carbonate, arginine carbonate, amorphous calcium carbonate, ammonium carbonate, or ammonium bicarbonate.

11. The therapeutic effervescent composition of any one of claims 8-10 wherein the at least one stimulant is selected from caffeine, yerba maté, ephedrine, guarana, or ginseng.

12. The therapeutic effervescent composition of any one of claims 8-11 wherein the vitamin D is in the form of D3 cholecalciferol.

13. ~~A method for treating a symptom or disorder associated with calcium imbalance, comprising administering to a subject in need of such treatment~~ Use of a therapeutic effervescent composition or supplement containing apoaequorin according to any one of claims 1-12~~,~~ in the manufacture of a medicament for treating a symptom or disorder associated with calcium imbalance; wherein the medicament is to be administered to a subject in need of such treatment; and wherein said apoaequorin is not to be administered with its cofactor, coelenterazine.

14. The ~~method~~ use according to claim 13, wherein the symptom or disorder associated with calcium imbalance is sleep-related and the ~~administration of~~ apoaequorin to be administered to said subject improves sleep quality in the subject.

15. The ~~method~~ use according to claim 13, wherein the symptom or disorder associated with calcium imbalance is energy-related and ~~administration of~~the apoaequorin to be administered to said subject improves energy quality in the subject.

16. The ~~method~~ use according to claim 13, wherein the symptom or disorder associated with calcium imbalance is mood-related and ~~administration of~~the apoaequorin to be administered to said subject improves mood quality in the subject.

17. The ~~method~~ use according to claim 13, wherein the symptom or disorder associated with calcium imbalance is pain-related and ~~administration of~~ the apoaequorin to be administered to said subject alleviates pain in the subject.

18. The ~~method~~ use according to claim 13, wherein the symptom or disorder associated with calcium imbalance is memory-related and ~~administration of~~the apoaequorin to be administered to said subject improves memory, as indicated by improved scores on a standardized cognitive assessment.

19. The ~~method~~ use according to claim 13, wherein the symptom or disorder associated with calcium imbalance is related to neuronal excitability, muscle contraction, membrane permeability, cell division, hormone secretion, bone mineralization, or cell death following ischemia.

~~20. A supplement according to any one of claims 1-7 for use in treating sleep quality in the subject, energy quality in the subject, mood quality in the subject, alleviates pain in the subject, improves memory in the subject, or symptom or disorder associated with calcium imbalance related to neuronal excitability, muscle contraction, membrane permeability, cell division, hormone secretion, bone mineralization, or cell death following ischemia.~~

~~21. An effervescent composition according to any one of claims 8-12 for use in treating sleep quality in the subject, energy quality in the subject, mood quality in the subject, alleviates pain in the subject, improves memory in the subject, or symptom or disorder associated with calcium imbalance related to neuronal excitability, muscle contraction, membrane permeability, cell division, hormone secretion, bone mineralization, or cell death following ischemia.~~

2~~2~~0. A supplement according to any one of claims 1-7 for use as a medicament.

213. An effervescent composition according to any one of claims 8-12 for use as a medicament.