CLAIMS

1. Use of a pharmaceutically effective amount of dihydroberberine in the manufacture of a medicament for managing glucose tolerance in an individual, wherein the medicament is to be administered to an individual.

2. The use of claim 1 wherein the administration of the medicament reduces fasting glucose levels.

3. The use of claim 1 wherein the dihydroberberine is to be administered as a complexed composition, and wherein the complexed composition further comprises at least one of complexed phytosomes or liposomes.

4. The use of claim 1 wherein the dihydroberberine is a microemulsion including dihydroberberine.

5. The use of claim 1 wherein the pharmaceutically effective amount of dihydroberberine comprises approximately 25 mg to approximately 800 mg of dihydroberberine.

6. The use of claim 1 wherein the dihydroberberine is to be orally administered as a capsule or tablet.

7. The use of claim 1 wherein the dihydroberberine is to be orally administered as at least one of a food product or beverage product.

8. The use of claim 1 wherein the dihydroberberine is to be administered at least once daily.

9. The use of claim 1 further comprising administrating a Cytochrome P450 inhibitor, wherein administration of the Cyctochrome P450 inhibitor allows decreasing of the amount of dihydroberberine administered to be sufficient to achieve the desired results.

10. Use of a pharmaceutically effective amount of dihydroberberine in the manufacture of a medicament for increasing blood ketone levels in an individual.

11. The use of claim 10 wherein the dihydroberberine is to be administered approximately concurrently with meals.

12. The use of claim 10 further comprising administrating, to the individual, a pharmaceutically effective amount of one or more additional compounds capable of independently increasing blood ketone levels.

13. The use of claim 12 wherein the dihydroberberine and at least one of the additional compounds are to be administered approximately concurrently.

14. The use of claim 12 wherein the dihydroberberine and one or more of the additional compounds are to be administered at least one time daily.

15. A composition to maintaining ketosis in an individual, the composition comprising:

a pharmaceutically effective amount of dihydroberberine; and

at least one additional compound capable of independently increasing blood ketone levels;

wherein the amount of dihydroberberine administered to be pharmaceutically effective is less than the amount of dihydroberberine administered to be pharmaceutically effective when the dihydroberberine is administered without at least one of the additional compounds.

16. The composition of claim 15 wherein one or more of the additional compounds comprises at least one of a beta-hydroxybutyrate, butyrate, a fatty acid, or ester of fatty acid.

17. The composition of claim 15 wherein at least one of the additional compounds comprises a R-beta-hydroxybutyrate compound.

18. The composition of claim 15 wherein one or more of the additional compounds comprises at least one of a beta-hydroxybutyrate salt or beta-hydroxybutyrate polymer.

19. The composition of claim 15 wherein the dihydroberberine and at least one of the additional compounds are administered approximately concurrently.

20. The composition of claim 15 wherein the composition comprises at least two of the additional compounds, and wherein two or more of the additional compounds comprises a beta-hydroxybutyrate and at least one of a fatty acid or ester of a fatty acid.