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, and wherein the pharmaceutically effective amount of dihydroberberine comprises 25 mg to 800 mg of dihydroberberine.

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 dihydroberberine is to be orally administered as a capsule or tablet.

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

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

8. The use of claim 1 wherein the medicament further comprisesa Cytochrome P450 inhibitor.

9. Use of a composition comprising 25 mg to 800 mg of dihydroberberine in the manufacture of a medicament for treating diabetes.

10. The use of claim 9 wherein the dihydroberberine is to be administered approximately concurrently with meals.

11. The use of claim 9 wherein said medicament is to be administered in combination with a pharmaceutically effective amount of one or more additional compounds capable of independently increasing blood ketone levels, wherein the one or more additional compounds comprise beta-hydroxybutyrate salt, beta-hydroxybutyrate polymer, and/or a combination thereof.

12. The use of claim 11 wherein the dihydroberberine and the one or more additional compounds are to be administered approximately concurrently.

13. The use of claim 11 wherein the dihydroberberine and the one or more additional compounds are to be administered at least one time daily.

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

25 mg to 800 mg of dihydroberberine; and

one or more additional compounds capable of independently increasing blood ketone levels, wherein the one or more additional compounds comprise a beta-hydroxybutyrate salt, a beta-hydroxybutyrate polymer, an ester of beta-hydroxybutyrate, a beta-hydroxybutyrate complex, a beta-hydroxybutyrate derivative, a butyrate, a fatty acid, ester of a fatty acid, an amino acid, and/or a combination thereof.

15. The composition of claim 14 wherein the one or more additional compounds comprise at least one of the beta-hydroxybutyrate salt, the beta-hydroxybutyrate polymer, or a combination thereof.

16. The composition of claim 14 wherein the one or more additional compounds comprise a R-beta-hydroxybutyrate salt, a R-beta-hydroxybutyrate polymer, a R-beta-hydroxybutyrate complex, and/or a combination thereof.

17. The composition of claim 14 wherein the composition comprises at least two additional compounds capable of independently increasing blood ketone levels, and wherein the first additional compound comprises the beta-hydroxybutyrate salt or the beta-hydroxybutyrate polymer, and the second additional compound comprises the fatty acid or the ester of a fatty acid.

18. The composition of claim 17 wherein the second additional compound comprises a medium chain fatty acid.