CLAIMS:

1. A process for producing an extract derived from sugar cane, the process comprising:

i) mixing a sugar cane derived product with ethanol to produce an extraction mixture comprising at least about 50% v/v ethanol;

ii) allowing a precipitate to form in the extraction mixture;

iii) removing the precipitate from the extraction mixture to obtain a supernatant; and

iv) removing ethanol from the supernatant to produce the extract derived from sugar cane.

2. The process of claim 1, wherein the process further comprises removing water from the extract to produce an aqueous extract having about 65° Bx (Brix).

3. The process of claim 1 or claim 2, wherein the sugar cane derived product is selected from molasses, bagasse, first expressed juice, mill mud, clarified sugar juice, clarified syrup, treacle, golden syrup, field trash, cane strippings and/or dunder.

4. The process of any one of the preceding claims, wherein the process further comprises subjecting the supernatant to ion exchange chromatography, hydrophobic interaction chromatography, liquid LCMS and/or MALDI-TOF to produce the extract.

5. The process of any one of the preceding claims, wherein the extraction mixture comprises about 70% to about 85% ethanol.

6. The process of any one of the preceding claims, wherein the process further comprises a preliminary extraction.

7. The process of claim 6, wherein the preliminary extraction comprises:

i) mixing a sugar cane derived product with ethanol to produce a preliminary extraction mixture;

ii) allowing a precipitate to form in the preliminary extraction mixture;

iii) removing the precipitate from the preliminary extraction mixture to obtain a preliminary supernatant; and

iv) subjecting the preliminary supernatant to the process described in any one of claims 1 to 5.

8. The process of claim 7, wherein the preliminary extraction mixture comprises at least about 25% v/v ethanol.

9. An extract produced by the process of any one of the preceding claims.

10. The extract of claim 9, wherein the extract comprises at least 25 mg/ml flavonoids, and/or at least 25 mg/ml polyphenols.

11. The extract of claim 9 or 10 which comprises one or more of tricin, apigenin, luteolin, caffeic acid, hydroxycinnamic acids, sinapic acid, and derivatives thereof.

12. The extract of any one of claims 9 to 11, wherein the extract has α-glucosidase inhibitory activity and/or α-amylase inhibitory activity.

13. The extract of any one of claims 9 to 12, wherein the extract has anti-inflammatory activity.

14. A composition comprising the extract of any one of claims 9 to 13 which is a nutritional supplement, dietary supplement, sports nutrition product, food coating or pharmaceutical composition.

15. A food or beverage comprising the extract of any one of claims 9 to 13 or the composition of claim 14.

16. A method of lowering the available calorific value of a food or beverage, the method comprising adding the extract of any one of claims 9 to 13, and/or the composition of claim 14, to the food or beverage.

17. A method of treating or preventing disease in a subject, the method comprising administering to the subject the extract of any one of claims 9 to 13, the composition of claim 14, and/or the food or beverage of claim 15.

18. The extract of any one of claims 9 to 13, the composition of claim 14, and/or the food or beverage of claim 15, for use in the treatment or prevention of disease.

19. Use of the extract of any one of claims 9 to 13, the composition of claim 14 , and/or the food or beverage of claim 15 in the manufacture of a medicament for the treatment or prevention of disease.

CLAIMS:

1. A process for producing an extract derived from sugar cane, the process comprising:

   i) mixing a sugar cane derived product with ethanol to produce an extraction mixture comprising at least about 50% v/v ethanol;

   ii) allowing a precipitate to form in the extraction mixture;

   iii) removing the precipitate from the extraction mixture to obtain a supernatant; and

   iv) removing ethanol from the supernatant to produce the extract derived from sugar cane.

2. The process of claim 1, wherein the process further comprises removing water from the extract to produce an aqueous extract having about 65° Bx (Brix).

3. The process of claim 1 or claim 2, wherein the sugar cane derived product is selected from molasses, bagasse, first expressed juice, mill mud, clarified sugar juice, clarified syrup, treacle, golden syrup, field trash, cane strippings and/or dunder.

4. The process of any one of the preceding claims, wherein the process further comprises subjecting the supernatant to ion exchange chromatography, hydrophobic interaction chromatography, liquid LCMS and/or MALDI-TOF to produce the extract.

5. The process of any one of the preceding claims, wherein the extraction mixture comprises about 70% to about 85% ethanol.

6. The process of any one of the preceding claims, wherein the process further comprises a preliminary extraction.

7. The process of claim 6, wherein the preliminary extraction comprises:

   i) mixing a sugar cane derived product with ethanol to produce a preliminary extraction mixture;

   ii) allowing a precipitate to form in the preliminary extraction mixture;

iii) removing the precipitate from the preliminary extraction mixture to obtain a preliminary supernatant; and

iv) subjecting the preliminary supernatant to the process described in any one of claims 1 to 5.

8. The process of claim 7, wherein the preliminary extraction mixture comprises at least about 25% v/v ethanol.

9. An extract produced by the process of any one of the preceding claims.

10. The extract of claim 9, wherein the extract comprises at least 25 mg/ml flavonoids, and/or at least 25 mg/ml polyphenols.

11. The extract of claim 9 or 10 which comprises one or more of tricin, apigenin, luteolin, caffeic acid, hydroxycinnamic acids, sinapic acid, and derivatives thereof.

12. The extract of any one of claims 9 to 11, wherein the extract has α-glucosidase inhibitory activity and/or α-amylase inhibitory activity.

13. The extract of any one of claims 9 to 12, wherein the extract has anti-inflammatory activity.

14. The extract of claims 9 to 13, wherein the extract has calorific value reduction properties.

15. The extract of claim 9 to 14, wherein the extract has glycemic index (GI) reduction properties.

16. A composition comprising the extract of any one of claims 9 to 15 which is a nutritional supplement, dietary supplement, sports nutrition product, food coating or pharmaceutical composition.

17. A food or beverage comprising the extract of any one of claims 9 to 15 or the composition of claim 16.

18. A method of lowering the available calorific value of a food or beverage, the method comprising adding the extract of any one of claims 9 to 11, and/or the composition of claim 16, to the food or beverage.

19. A method of lowering the GI of a food or beverage, the method comprising adding the extract of any one of claims 9 to 11 to the food or beverage, and/or the composition of claim 16, to the food or beverage.

20. A method of treating or preventing disease in a subject, the method comprising administering to the subject the extract of any one of claims 9 to 15, the composition of claim 16, and/or the food or beverage of claim 17.

21. The extract of any one of claims 9 to 15, the composition of claim 16, and/or the food or beverage of claim 17, for use in the treatment or prevention of disease.

22. Use of the extract of any one of claims 9 to 15, the composition of claim 16 , and/or the food or beverage of claim 17 in the manufacture of a medicament for the treatment or prevention of disease.