CLAIMS:

1. A non-human animal formulated feed supplement comprising an extract derived from sugar cane, the extract comprising from about 10 catechin equivalent (CE) g/L to about 50 CE g/L of polyphenols and about 1 CE g/L to about 15 CE g/L of flavonoids or from about 100 CE mg/g to about 500 CE mg/g of polyphenols and about 10 CE mg/g to about 150 CE mg/g of flavonoids.

2. The supplement according to claim 1, wherein the extract comprises from about 20 CE g/L to about 50 CE g/L of polyphenols or from about 200 CE mg/g to about 500 CE mg/g of polyphenols.

3. The supplement according to claim 1 or claim 2, wherein the extract comprises from: about 2 CE g/L to about 10 CE g/L of flavonoids or from about 20 CE mg/g to about 100 CE mg/g of flavonoids.

4. The supplement according to any one of claims 1 to 3, wherein the polyphenols comprise one or more of syringic acid, chlorogenic acid, caffeic acid, vanillin, sinaptic acid, p-coumaric acid, ferulic acid, gallic acid, vanillic acid, diosmin, diosmetin, apigenin, vitexin, orientin, homoorientin, swertisin, tricin, (+)catechin, (-)catechin gallate, (-)epicatechin, quercetin, kaempherol, myricetin, rutin, schaftoside, isoschaftoside, luteolin and scoparin.

5. The supplement according to any one of claims 1 to 4, wherein the polyphenols comprise: syringic acid, chlorogenic acid, caffeic acid, vanillin, sinaptic acid, diosmin, diosmetin, apigenin, vitexin, orientin, homoorientin, swertisin, and tricin.

6. The supplement according to any one of claims 1 to 5, wherein the polyphenols comprise vanillin, sinaptic acid, homoorientin, and swertisin.

7. The supplement according to any one of claims 1 to 6, wherein the polyphenols comprise syringic acid, chlorogenic acid and diosmin.

8. The supplement according to any one of claims 1 to 7, wherein the extract is a syrup and the polyphenols comprise syringic acid, chlorogenic acid and diosmin in the ratio of about 2.98 : 1.67 : 1 based on dry weight.

9. The supplement according to any one of claims 1 to 8, wherein the extract is in a form selected from the group comprising a mash, crumble, pellet, syrup, liquid and a powder which is optionally spray-dried, freeze-dried or drum-dried.

10. The supplement according to any one of claims 1 to 9, wherein the extract is a syrup and the syrup has a Brix value of about 50 - 75º.

11. The supplement according to any one of claims 1 to 10, wherein the extract is a syrup and the syrup has a pH value of about 4 to about pH 5.

12. The supplement according to any one of claims 1 to 11, wherein the extract is a syrup and the syrup has a density of about 1.20 g/mL to about 1.40 mg/mL.

13. The supplement according to any one of claims 1 to 12, wherein the extract comprises iron bound to the polyphenols.

14. The supplement according to any one of claims 1 to 13, wherein the extract is a syrup and the syrup comprises: no greater than about 5,900 mg of calcium per kilogram; and/or no greater than about 160 mg of iron per kilogram; and/or no less than about 290 mg of magnesium per kilogram; and/or no less than about 1000 mg of potassium per kilogram; and/or no less than about 60 milligram of sodium per kilogram.

15. The supplement according to any one of claims 1 to 15, wherein the extract is derived from a sugar cane derived product selected from the group consisting of: molasses, massecuite, bagasse, first expressed juice, mill mud, clarified sugar juice, clarified syrup, treacle, golden syrup, field trash, cane strippings, leaves, dunder and combinations thereof.

16. The supplement according to any one of claims 1 to 15, wherein the extract is derived from dunder and/or molasses.

17. A non-human animal feed comprising the supplement according to any one of claims 1 to 16.

18. The feed according to claim 17, wherein the supplement is present in the feed in an amount up to about 2 wt%.

19. A method for:

(i) improving or maintaining gastrointestinal health in a non-human animal subject; or

(ii) reducing feed conversion ratio (FCR) in a non-human animal subject; or

(iii) stimulating or sustaining appetite in a non-human animal subject,

the method comprising the step of administering an effective amount of the supplement according to any one of claims 1 to 16 or the feed according to claim 17 or claim 18.

20. A method for improving growth performance in a non-human animal subject, the method comprising the step of administering an effective amount of the supplement according to any one of claims 1 to 16 or the feed according to claim 17 or claim 18.

21. The method according to claim 20, wherein: the size of the subject is increased; the weight gain of the subject is increased; the length of the subject is increased; or feed conversion ratio (FCR) is reduced.

22. A method for reducing body fat content in a non-human animal subject, the method comprising the step of administering an effective amount of the supplement according to any one of claims 1 to 16 or the feed according to claim 17 or claim 18.

23. A method for improving nutrient digestibility in a non-human animal subject, the method comprising the step of administering to the subject an effective amount of the supplement according to any one of claims 1 to 16 or the feed according to claim 17 or claim 18.

24. A method for improving meat quality in a non-human animal subject, the method comprising administering to the subject an effective amount of the supplement according to any one of claims 1 to 16 or the feed according to claim 17 or claim 18.

25. The method according to claim 24, wherein: the toughness of meat is improved as optionally assessed by shear force measurement; the taste of the meat is improved; the flavour of the meat is improved; the odour of the meat is reduced; or the protein percentage of the meat is increased.

26. A method for improving or maintaining muscle condition in a non-human animal subject, wherein the method comprises the step of administering an effective amount of the supplement according to any one of claims 1 to 16 or the feed according to claim 17 or claim 18.

27. The method according to any one of claims 19 to 26, wherein the administration is by oral administration.

28. Use of an extract as defined according to any one of claims 1 to 16 in the manufacture of a non-human animal formulated supplement for:

(i) improving or maintaining gastrointestinal health in a non-human animal subject; or

(ii) improving growth performance in a non-human animal subject; or

(iii) reducing body fat content in a non-human animal subject; or

(iv) for improving nutrient digestibility in a non-human animal subject; or

(v) reducing feed conversion ratio (FCR) in a non-human animal subject; or

(vi) improving meat quality in a non-human animal subject; or

(vii) improving or maintaining muscle condition in a non-human animal subject.; or

(viii) stimulating or sustaining appetite in a non-human animal subject.

29. Use of an extract as defined according to any one of claims 1 to 16 in the manufacture of a non-human animal formulated supplement or feed.

30. Use according to claim 29, wherein: the supplement or medicament improves the appeal and/or palatability of food; the supplement or medicament has a beneficial immunomodulatory effect; the supplement or medicament has an anti-inflammatory effect; the supplement or medicament has an anti-oxidant effect; the supplement or medicament has a cytoprotective effect; or the supplement or medicament has an anti-microbial effect.

31. Use according to claim 29 or claim 30, wherein the non-human animal subject is selected from an aquatic animal, an insect, an amphibian, a reptile, a gastropod, a bird, a monogastric non-human animal, a ruminant and a pseudo-ruminant.

32. Use according to claim 31, wherein the aquatic animal is selected from the group comprising fish, finfish, pangus, tilapia, shellfish, a crustacean, crabs, crayfish, lobsters, prawns, shrimp, a mollusc, clams, mussels, oysters, scallops and winkles.

33. Use according to claim 31, wherein the bird is selected from the group comprising chickens, ducks, geese and turkeys.

34. Use according to claim 31, wherein the monogastric non-human animal is selected from the group comprising a rodent, cat, dog and pig.

35. Use according to claim 31, wherein the ruminant is selected from the group comprising cattle, sheep, goats and deer.

36. Use according to claim 31, wherein the pseudo-ruminant is selected from the group comprising horses, rabbits and guinea pigs.