CLAIMS:

1. A non-human animal formulated feed supplement comprising an extract derived from sugar cane, the extract comprising from 10 catechin equivalent (CE) g/L to ~~50~~100 CE g/L of polyphenols and 1 CE g/L to 15 CE g/L of flavonoids or from 100 CE mg/g to ~~500~~1000 CE mg/g of polyphenols and 10 CE mg/g to 150 CE mg/g of flavonoids.

2. The supplement according to claim 1, wherein the extract comprises from ~~20~~10 CE g/L to ~~50~~80 CE g/L of polyphenols or from ~~200~~100 CE mg/g to ~~500~~800 CE mg/g of polyphenols.

3. The supplement according to claim 1 or claim 2, wherein the extract comprises from: ~~2~~3 CE g/L to 10 CE g/L of flavonoids or from ~~20~~30 CE mg/g to 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~~p-coumaric acid, ~~vanillin, sinaptic~~vanillic 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~~chlorogenic acid, ~~homoorientin,~~vanillic acid and ~~swertisin.~~p-coumaric acid..

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 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.~~8 The supplement according to ~~any one of claims 1 to 9~~claim 7, wherein the extract is a syrup ~~and the syrup has a Brix value of 50 - 75º~~.

~~11~~9. The supplement according to ~~any one of claims 1 to 10~~claim 7, wherein the extract is a ~~syrup and~~powder which is spray-dried, freeze-dried or drum-dried.

10. The supplement according to claim 8, wherein the syrup has a Brix value of 50 - 75º.

11. The supplement according to claim 8, wherein the syrup has a pH value of 4 to pH 5.

12. The supplement according to ~~any one of claims 1 to 11~~claim 8, wherein ~~the extract is a syrup and~~ the syrup has a density of 1.20 g/mL to 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~~claim 8, wherein the ~~extract is a syrup and the~~ syrup comprises: ~~no greater than 5,900 mg of~~ calcium ~~per kilogram~~; and/or ~~no greater than 160 mg of~~ iron ~~per kilogram~~; and/or ~~no less than 290 mg of~~ magnesium ~~per kilogram~~; and/or ~~no less than 1000 mg of~~ potassium ~~per kilogram~~; and/or ~~no less than 60 milligram of~~ sodium ~~per kilogram.~~.

15. The supplement according to any one of claims 1 to ~~15~~14, 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 non-human animal feed according to claim 17, wherein the supplement is present in the feed in an amount up to 2 wt%.

~~19. A method for:~~

19. The non-human animal feed according to claim 17 or 18 wherein the supplement is present in the feed in an amount of up to 1 wt%.

20. The non-human animal feed according to claim 17 or 18 wherein the non-human animal feed is for a fish, prawn and/or shrimp and the supplement is present in the feed in an amount of 0.2 wt% to 0.6 wt% of feed.

21. The non-human animal feed according to claim 17 or 18 wherein the non-human animal feed is for poultry and the supplement is present in the feed in an amount of 0.02 wt% to 4 wt% of feed.

22. The non-human animal feed according to claim 17 or 18 wherein the non-human animal feed is for a cat.

23. The non-human animal feed according to claim 17 or 18 wherein the non-human animal feed is for a horse.

24. An extract derived from sugar cane when used to manufacture a non-human animal formulated supplement for non-therapeutic use in:

(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.~~;

(iii) ~~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.~~;

(iv) ~~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~~.~~;

wherein the ~~29. Use of an~~ extract ~~as defined according~~comprises from 10 catechin equivalent (CE) g/L to ~~any one~~100 CE g/L of ~~claims~~polyphenols and 1 CE g/L to 15 CE g/L of flavonoids or from 100 CE mg/g to 1000 CE mg/g of polyphenols and 10 CE mg/g to 150 CE mg/g of flavonoids.

25. ~~16 in the~~ An extract derived from sugar cane when used to manufacture ~~of~~ a non-human animal formulated supplement or feed, wherein the extract comprises from 10 catechin equivalent (CE) g/L to 100 CE g/L of polyphenols and 1 CE g/L to 15 CE g/L of flavonoids or from 100 CE mg/g to 1000 CE mg/g of polyphenols and 10 CE mg/g to 150 CE mg/g of flavonoids.

26. ~~30. Use~~The extract according to claim ~~29~~25, wherein: the supplement or ~~medicament~~feed improves the appeal and/or palatability of food; the supplement or ~~medicament~~feed has a beneficial non-therapeutic immunomodulatory effect; the supplement or ~~medicament~~feed has ~~an~~a non-therapeutic anti-inflammatory effect; the supplement or ~~medicament~~feed has ~~an~~a non-therapeutic anti-oxidant effect; the supplement or ~~medicament~~feed has a non-therapeutic cytoprotective effect; or the supplement or ~~medicament~~feed has ~~an~~a non-therapeutic anti-microbial effect.

27. The extract~~31. Use~~ according to claim ~~29~~25 or claim ~~30~~26, 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.

28. The extract~~32. Use~~ according to claim ~~31~~27, wherein the aquatic animal is selected from the group ~~comprising~~consisting of fish, finfish, pangus, tilapia, shellfish, a crustacean, crabs, crayfish, lobsters, prawns, shrimp, a mollusc, clams, mussels, oysters, scallops and winkles.

29. The extract~~33. Use~~ according to ~~claim 31~~any one of claims 25 - 28, wherein the polyphenols comprise one or more of syringic acid, chlorogenic acid, p-coumaric acid, vanillic acid, vitexin, swertisin and tricin.

30. The extract according to any one of claims 25 – 29 wherein the polyphenols comprise chlorogenic acid, p-coumaric acid and vanillic acid.

31. The extract according to any one of claims 25 – 30 wherein the extract comprises:

-from 10 CE g/L to 100 CE g/L of polyphenols, and

-from 1 CE g/L to 15 CE g/L of flavonoids,

and has a Brix value in a range of 50-70 °, a pH value in a range of 4-5 and a density in a range of 1.20 to 1.40mg/mL.

32. The extract according to any one of claims 25 - 31 wherein the extract has a Brix value in a range of 60-65 °.

33. The extract according to any one of claims 25-32 wherein the extract is spray-dried to a powder.

34. The extract according to any one of claims 25 - 33, wherein the animal is a bird ~~is~~ selected from the group ~~comprising~~consisting of chickens, ducks, geese and turkeys.

35. The extract~~34. Use~~ according to ~~claim 31~~any one of claims 25 - 33, wherein the animal is a monogastric non-human animal ~~is~~ selected from the group ~~comprising~~consisting of a rodent, cat, dog and pig.

36. ~~35. Use~~The extract according to ~~claim 31~~any one of claims 25 - 33, wherein the animal is a ruminant ~~is~~ selected from the group ~~comprising~~consisting of cattle, sheep, goats and deer.

~~36. Use~~37. The extract according to ~~claim 31~~any one of claims 25 - 33, wherein the animal is a pseudo-ruminant ~~is~~ selected from the group ~~comprising~~consisting of horses, rabbits and guinea pigs.