Claims

Claim 1. Use of a composition comprising biomass of a thermophilic fungus as a source of at least one of choline and a mineral, in at least one of a food product, a beverage, a pet food product and a feed product,

wherein the fungus is a strain of a fungal genus selected from the group consisting of *Rasamsonia, Talaromyces, Penicillium, Acremonium, Humicola, Paecilomyces, Chaetomium, Rhizomucor, Rhizopus, Thermomyces, Myceliophthora, Thermoascus, Thielavia, Mucor, Stibella, Melanocarpus, Malbranchea, Dactylomyces, Canariomyces, Scytalidium, Myriococcum, Corynascus,* and *Coonemeria*.

Claim 2. The use according to claim 1, wherein the composition comprising biomass of a thermophilic fungus is a cake obtainable in a process comprising the steps of a) growing a strain of a thermophilic fungus in submerged culture in a medium, b) recovery of the fungal biomass from the medium by at least one of sieving, filtration and decantation to produce a biomass cake, whereby preferably the dry matter concentration of the sieved, filtered or decanted biomass cake is at least 12% (w/v),

Claim 3. The use according to claim 2, wherein the biomass cakes are dried by pressing residual water out to obtain a biomass cake with a dry matter concentration of at least 20%.

Claim 4. The use according to claim 1, wherein the composition comprising biomass of a thermophilic fungus is a dried powder obtainable by milling and further drying the biomass cake obtained in claim 2 or 3 to a biomass powder by warm air, by freeze drying, preferably under vacuum, or by flash drying, preferably to a water content of no more than 7 % (w/w).

Claim 5. The use according to any one of the preceding claims, wherein the genus is *Rhizomucor.*

Claim 6. The use according to any one of the preceding claims, wherein the fungus is a strain *Rhizomucor pusillus*, or *Rhizomucor pusillus* CBS 143028, or a strain that is a single colony isolate or a derivative thereof.

Claim 7. A use according to any one of the preceding claims, wherein the biomass of the thermophilic fungus is used as a source of choline in a vegan or vegetarian food product, or in a pet food,

Claim 8. A use according to claim 7, wherein the pet food comprises a cat food or a dog food.

Claim 9. A use according to any one of the preceding claims, wherein the biomass of the thermophilic fungus is used as a source of iron.

Claim 10. A use according to claim 9, wherein the biomass of the thermophilic fungus is used to replace soya as source of iron.

Claim 11. A use according to claim 9, wherein the biomass of the thermophilic fungus is used to replace soya as source of iron in a meat replacer.

Claim 12. A use according to any one of the preceding claims, wherein the biomass of the thermophilic fungus is used for incorporating into a food product, a beverage, a pet food product and a feed product at a maximum level of 70% (w/w) and at a minimum level of at least 1% (w/w), in either cake or powder form.

Claim 13. A use according to any one of the preceding claims, wherein the biomass of the thermophilic fungus is used as an ingredient for:

a) a meat replacer, wherein the meat replacer comprises no more than 42% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 14% (w/w) of the biomass of the thermophilic fungus in powder form;

b) a hybrid meat product, wherein the hybrid meat product comprises no more than 52% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 17.3% (w/w) of the biomass of the thermophilic fungus in powder form;

c) a cereal-based food product, wherein the cereal-based food product comprises no more than 30% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 10% (w/w) of the biomass of the thermophilic fungus in powder form;

d) a ready to eat meal food product, wherein the ready to eat meal food product comprises no more than 16% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 5.3% (w/w) of the biomass of the thermophilic fungus in powder form;

e) a ready to eat soup, wherein the ready to eat soup comprises no more than 27% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 9% (w/w) of the biomass of the thermophilic fungus in powder form; and,

f) a food product for sporting people, the food product for sporting people comprises no more than 70% (w/w) of the biomass of the thermophilic fungus in cake or in powder form.

Claim 14. A food product comprising a composition comprising biomass of a thermophilic fungus as defined in any one of claims 1 – 4, wherein the food product is:

a) a meat replacer, wherein the meat replacer comprises no more than 42% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 14% (w/w) of the biomass of the thermophilic fungus in powder form;

b) a hybrid meat product, wherein the hybrid meat product comprises no more than 52% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 17.3% (w/w) of the biomass of the thermophilic fungus in powder form;

c) a cereal-based food product, wherein the cereal-based food product comprises no more than 30% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 10% (w/w) of the biomass of the thermophilic fungus in powder form;

d) a ready to eat meal food product, wherein the ready to eat meal food product comprises no more than 16% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 5.3% (w/w) of the biomass of the thermophilic fungus in powder form;

e) a ready to eat soup, wherein the ready to eat soup comprises no more than 27% (w/w) of the biomass of the thermophilic fungus in cake form, or no more than 9% (w/w) of the biomass of the thermophilic fungus in powder form; and,

f) a food product for sporting people, the food product for sporting people comprises no more than 70% (w/w) of the biomass of the thermophilic fungus in cake or in powder form.