CLAIMS

1. A cultured dairy analog food product, comprising:

particles of a filamentous fungus, wherein the filamentous fungus comprises greater than 40 dry wt. % protein content and less than 8 dry wt. % RNA content; and

a microbial food culture;

wherein the particles of the filamentous fungus are the source for at least 50% of protein in the cultured dairy analog food product, and

wherein the filamentous fungus is selected from the group consisting of *Rhizopus oligosporus, Ustilago esculenta, Hericululm erinaceus, Polyporous squamosus, Grifola frondosa, Hypsizygus marmoreus, Hypsizygus ulmarius* (elm oyster), *Calocybe gambosa, Pholiota nameko, Calvatia gigantea, Agaricus bisporus, Stropharia rugosoannulata, Hypholoma lateritium, Pleurotus eryngii, Pleurotus ostreatus* (pearl), *Pleurotus ostreatus* var. *columbinus* (Blue oyster), *Tuber borchii*, *Morchella esculenta*, *Morchella conica, Morchella importuna, Sparassis crispa* (cauliflower), *Fusarium venenatum, Fusarium* strain MK7 (ATCC Accession Deposit No. PTA-10698), *Disciotis venosa, Clonostachys rosea, Cordyceps militaris, Trametes versicolor, Ganoderma lucidum, Flammulina velutipes, Lentinula edodes, Pleurotus djamor, Pleurotus ostreatus, and Leucoagaricus* spp..

2. The cultured dairy analog food product of claim 1, wherein the filamentous fungus is selected from the group consisting of *Sparassis crispa* (cauliflower), *Calvatia gigantea*, *Fusarium venenatum*, and *Fusarium* strain MK7 (ATCC Accession Deposit No. PTA-10698).

3. The cultured dairy analog food product of claim 1, wherein the microbial food culture comprises a microbe selected from the group consisting of a bacteria, a yeast, a mold, and combinations thereof.

4. The cultured dairy analog food product of claim 1, wherein the cultured dairy analog food product is selected from a yogurt analog food product and a cheese analog food product.

5. The cultured dairy analog food product of claim 1, further comprising at least one of an invert sugar, a thickening agent, a rennet, and a probiotic.

6. The cultured dairy analog food product of claim 1, wherein cells of the filamentous fungus are lysed.

7. The cultured dairy analog food product of claim 1, wherein the filamentous fungus comprises less than 10 ppm of a mycotoxin selected from the group consisting of Alfatoxin B1, Alfatoxin B2, Alfatoxin G1, Alfatoxin G2, Fumonisin B1, Fumonisin B2, Fumonisin B3, Ochratoxin A, Nivalenol, Deoxynivalenol, Acetyl deoxynivalenol, Fusarenon X, T-2 Toxin, HT-2 Toxin, Neosolaniol, Diacetoxyscirpenol zearalenone, beauvericin, fusarin C, fusaric acid and any combinations thereof.

8. The cultured dairy analog food product of claim 1, wherein the filamentous fungus comprises less than 10 ppm total mycotoxin content.

9. The cultured dairy analog food product of claim 1, wherein the filamentous fungus comprises greater than 15 wt. % of branched chain amino acids.

10. The cultured dairy analog food product of claim 1, wherein the cultured dairy analog food product is vegan.

11. The cultured dairy analog food product of claim 1, wherein the particles of the filamentous fungus are the sole protein component present in the cultured dairy analog food product.

12. A method for making a cultured dairy analog food product, comprising:

inoculating particles of a filamentous fungus with a microbial food culture, wherein the filamentous fungus comprises greater than 40 dry wt. % protein content and less than 8 dry wt. % RNA content; wherein the particles of the filamentous fungus are the source for at least 50% of protein in the cultured dairy analog food product; and

wherein the filamentous fungus is selected from the group consisting of *Rhizopus oligosporus, Ustilago esculenta, Hericululm erinaceus, Polyporous squamosus, Grifola frondosa, Hypsizygus marmoreus, Hypsizygus ulmarius* (elm oyster), *Calocybe gambosa, Pholiota nameko, Calvatia gigantea, Agaricus bisporus, Stropharia rugosoannulata, Hypholoma lateritium, Pleurotus eryngii, Pleurotus ostreatus* (pearl), *Pleurotus ostreatus* var. *columbinus* (Blue oyster), *Tuber borchii*, *Morchella esculenta*, *Morchella conica, Morchella importuna, Sparassis crispa* (cauliflower), *Fusarium venenatum, Fusarium* strain MK7 (ATCC Accession Deposit No. PTA-10698), *Disciotis venosa, Clonostachys rosea, Cordyceps militaris, Trametes versicolor, Ganoderma lucidum, Flammulina velutipes, Lentinula edodes, Pleurotus djamor, Pleurotus ostreatus, and Leucoagaricus* spp..

13. The method of making a cultured dairy analog food product of claim 12, wherein the filamentous fungus is selected from the group consisting of *Sparassis crispa* (cauliflower), *Calvatia gigantea*, *Fusarium venenatum*, and *Fusarium* strain MK7 (ATCC Accession Deposit No. PTA-10698).

14. The method of making a cultured dairy analog food product of claim 12, wherein the particles of the filamentous fungus are in a liquid dispersion.