CLAIMS:

1. A composition comprising a blend of co-extruded plant protein and fungi protein, wherein the composition is a texturized protein product (TPP).

2. The composition of claim 1, wherein the plant protein is a vegetable protein.

3. The composition of claim 2, wherein the vegetable protein is obtained from a vegetable selected from peas, faba beans, soybeans, wheat, oats, cotton seeds, broad beans, chickpeas, barley, and com.

4. The composition of claim 2, wherein the vegetable protein is obtained from (Fabaceae), faba beans (Fabaceae), soybeans (Fabaceae), wheat (Poaceae), oats (Poaceae), cotton seeds (Malvaceae), broad beans (Fabaceae), chickpeas (Fabaceae), barley (Poaceae), and com (Poaceae).

5. The composition of any one of claims 1 to 4, wherein the mushroom protein is obtained from a fungi selected from the genus Pleurotus, Agaricus, Coprinus, Lentinula, Trametes, and Ganoderma.

6. The composition of any one of claims 1 to 5, wherein the vegetable protein is present in the composition in an amount of between about 10% wt and 90% wt of the total weight of the composition.

7. The composition of any one of claims 1 to 6, wherein the vegetable protein is present in the composition in an amount of between about 50% wt and about 90% wt of the total weight of the composition.

8. The composition of any one of claims 1 to 7, wherein the vegetable protein is present in the composition in an amount of about 85% wt of the total weight of the composition.

9. The composition of any one of claims 1 to 8, wherein the fungi protein is present in the composition in an amount of between about 10% wt and 90% wt of the total weight of the composition.

10. The composition of any one of claims 1 to 9, wherein the fungi protein is present in the composition in an amount of between about 10% wt and 50% wt of the total weight of the composition.

11. The composition of any one of claims 1 to 10, wherein the fungi protein is present in the composition in an amount of about 15% wt of the total weight of the composition.

12. The composition of any one of claims 1 to 11, wherein the composition has a moisture content of between about 2.5% and about 5.5%.

13. The composition of any one of claims 1 to 12, wherein the composition has a bulk density in g / L of between about 105 and about 225.

14. The composition of any one of claims 1 to 13, wherein the composition has a Protein Digestibility (PDCAAs) of between about 0.80 and about 0.92.

15. The composition of any one of claims 1 to 14, wherein the composition has one or more of the following properties:

i) an oil holding capacity (g of oil / g of sample) of between about 0.70 and about 1.1;

ii) a hydration rate of 2.94 g of water retained per g of sample over 60 minutes;

iii) a chewiness (m.J) of between about 60 and about 395;

iv) a cohesiveness (ratio) of between about 0.3 and about 0.7; and

v) a springiness of between about 5 and about 15.