**WHAT IS CLAIMED IS:**

1. A method of producing irradiated edible residues, the method comprising:

irradiating a feedstock comprising a cellulosic and/or lignocellulosic material with electron beam radiation;

~~irradiating edible residues, wherein the edible residues have been produced as a by-product of~~ bioprocessing the irradiated ~~a~~ feedstock using a cellulolytic enzyme, wherein bioprocessing ~~comprising a cellulosic and/or lignocellulosic feedstock to~~ produces a sugar and edible residues; and irradiating the edible residues with electron beam radiation.

~~2. The method of claim 1 wherein bioprocessing comprises using an enzyme.~~

~~3. The method of claim 2 wherein the enzyme is a cellulolytic enzyme.~~

4~~2~~. The method of claim 1 wherein the bioprocessing comprises fermentation.

5~~3~~. The method of claim ~~4~~ 2 wherein the edible residues comprise distillers grains and solubles (DGS).

6~~4~~. The method of ~~any of the above~~ claim~~s~~ 1, wherein the edible residues contain an antibiotic, and the step of irradiating is performed under conditions selected to inactivate or destroy the antibiotic.

7~~5~~. The method of claim ~~6~~ 4 wherein, after irradiation, the edible residues contain less than 100 ppm, such as less than 50, 25, 10, or 1 ppm, by weight of active antibiotic.

8~~6~~. The method of claim ~~7~~ 5 wherein the edible residues are substantially free of active antibiotic.

9~~7~~. The method of claim ~~8~~ 6 wherein prior to irradiation the edible residues contained from about 500 ppm to about 10,000 ppm by weight of active antibiotic.

~~10~~8. The method of ~~any one of~~ claims 1-~~5~~, wherein~~,~~ prior to irradiation, the edible residues contain bacteria, and irradiation of the edible residues is performed under conditions that destroy the bacteria.

~~11~~9. The method of claim ~~10~~ 8 wherein the bioprocessing is conducted without addition of antibiotics.

~~12~~10. The method of claim ~~35~~ wherein the distillers grains and solubles have been dried, producing dried distillers grains and solubles (DDGS).

~~13~~11. The method of claim ~~12~~ 10 wherein drying is performed prior to irradiation.

~~14~~12. The method of ~~any of the above~~ claims 1, wherein irradiation is delivered at a dose of greater than about 0.5 M~~R~~rad.

~~15~~13. The method of ~~any of the above~~ claims 1, wherein irradiation is delivered at a dose of less than about 5 Mrad.

~~16~~. The method of ~~any of the above~~ claims 1, wherein irradiation is delivered at a dose of from about 1 to about 3 Mrad.