~~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 3~~5~~ 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~~ claim~~s~~ 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~~ claim~~s~~ 1, wherein irradiation is delivered at a dose of less than about 5 Mrad.

~~16~~14. The method of ~~any of the above~~ claim~~s~~ 1, wherein irradiation is delivered at a dose of from about 1 to about 3 Mrad.