

We claim:

1. A method for preparing microbial contamination free spice powder which retains the aroma, essential oils, taste, color, chemical compounds and antioxidant properties of the spice, the method comprising the steps of:
 - a. filling one or more dried raw spice into a feeding hopper;
 - b. grinding the raw spice(s) under cryogenic conditions;
 - c. packaging the grinded powder obtained in step (b) first into primary packaging and then into secondary packaging;
 - d. subjecting the packed spice powder to gamma irradiation;
 - e. subjecting the packed rice (black, red and unpolished etc) nutria bar, instant mixes, etc, to gamma irradiation and
 - f. obtaining microbial contamination free packed spice powder and packed rice (black, red and unpolished etc) nutria bar, instant mixes, etc.
2. The method as claimed in claim 1, wherein the combination of cryogenic grinding and gamma irradiation are used to produce microbial contamination free spice powder.
3. The method as claimed in the claim 1, wherein the spice powder is selected from turmeric, pepper, chilli, coriander, rasam powder, garam masala, clove, cinnamon, cumin, cardamom or the like.
4. The method as claimed in claim 1, wherein the step (b) of grinding under cryogenic conditions involves the following steps:
 - a. mixing the raw material with liquid nitrogen at temperature of 20 to 22°C,
 - b. passing the mixture through hammer mill to obtain the coarse powder,
 - c. grinding the obtained coarse powder at universal mill under liquid nitrogen and at temperature of 5 to 7°C,
 - d. grinding the powder obtained in step c) at cryogenic mixer at temperature of -5 to 2°C to obtain the fine powder, and
 - e. sieving the fine powder through rotary sifter.
5. The method as claimed in claim 1, wherein the primary packaging is done in pouches with nitrogen purging and secondary packaging is done aseptically in cartons.

6. The method as claimed in claim 1, wherein the material for primary packaging is selected from polyethylene terephthalate, metalized polyethylene terephthalate, polyethylene, polynatural, or biodegradable plastic or food grade plastic.
7. The method as claimed in claim 1, wherein the secondary packaging is carried in 5 ply carton box.
8. The method as claimed in claim 1, wherein the packaging of the grinded spice powder is carried with nitrogen gas.
9. The method as claimed in claim 1, wherein the spice powder obtained is prevented from oxidation and rancidity.
10. The method as claimed in claim 1, wherein the spice powder obtained has extended shelf life due to prevention of oxidation process of volatile oils and chemical compounds and due to microbial elimination.
11. The method as claimed in claim 1, wherein the packed spice powder is subjected to gamma irradiation of 240 kCi strength for 30-60 minutes.
12. The method as claimed in claim 11, wherein source used for gamma irradiation is Cobalt 60.