CLAIMS

1. A method for the detoxification of gluten proteins from grains of cereals, characterized by the following phases:

A. hydration with water of the cereal grains, performed in a time frame between 30 minutes and 3 hours by using 500 ml of water for every 100 grams of grains;

B. removal of water from the cereal grains;

C. microwave treatment of the cereal grains, performed in a time frame between one and three minutes, using a power between 750 and 1500 watts;

D. cooling of the cereal grains.

2. Method for the detoxification of gluten proteins according to claim 1 characterized in that the time frame of phase A is of approximately one hour.

3. Method for the detoxification of gluten proteins according to claim 1 characterized in that the time frame of phase C is of two minutes and the used power is of 1000 watts.

4. Method for the detoxification of gluten proteins according to claim 1 characterized in that the cooling phase of the grains is performed at a temperature between 18 ° C and 24 ° C.

5. Method according to any one of the preceding claims, wherein the grains of cereal are selected between wheat, barley and oats.

6. Grains selected in the group of wheat, barley and oats obtainable according to the method as defined in any one of claims 1-5 characterised in that they are detoxified from toxic epitopes of gluten.

7. A product obtainable from the grains of claim 6 selected in the group of semolina, flours, pasta, bread, bakery products, beer.

8. Grains and products according to any one of claims 6-7 for use to feed people with celiac disease and whom may further be suffering from Diabetes Mellitus Type 1.

9. Use of wheat according to claim 6 for the production of semolina and flour for people with celiac disease and for people suffering from Diabetes Mellitus Type 1.

10. Use of the barley according to claim 6 for the production of beer free from toxic ordeine.

11. Use of the oats according to claim 6 for the production of products free from toxic avenine.

12. Use of the flour according to claim 7, for the preparation of foodstuff suitable for people with celiac disease and equivalent, in taste and appearance, to foodstuff commonly used in the Mediterranean diet.