Claims

1. A process for preparing a liquid oat base or drink of improved soluble oat protein content from an oats material comprising starch and oat protein, by suspending the oats material in an aqueous medium, in particular water, degrading starch of the oats material with one or more amylases and solubilizing oat protein by means of protein-deamidase without use of protease; optionally decanting the product.

2. The process of claim 1, wherein the protein-deamidase is glutaminase.

3. The process of any of claims 1 to 2, wherein the amount of protein glutaminase used in the process is from 0.5 U/g of oat protein to 2 U/g of oat protein, .

4. The process of any of claims 1 to 3, wherein the amount of protein glutaminase used in the process is about 1 U/g of oat protein.

5. The process of any of claims 1 to 4, wherein the improvement in content of soluble protein is 10 per cent by weight or more of protein solubilized in absence of protease.

6. The process of any of claims 1 to 5, wherein the improvement in content of soluble protein is up to 20 per cent by weight or more of protein solubilized in absence of protease.

7. The process of any of claims 1 to 6, wherein the amylase is β-amylase or a mixture of α-amylase and β-amylase.

8. The process of claim 7, wherein oat protein is solubilized by protein-deamidase concurrently with starch degradation.

9. The process of claim 8, wherein protein-deamidase is added in two or more portions during the process.

10. The process of claim 9, wherein the first portion is added during a first step of starch hydrolysis by amylase and the second portion is added during a second step of starch hydrolysis by amylase.

11. The process of any of claims 8 to 10, wherein oat protein solubilization and starch degradation is carried out at a temperature of from 40 °C to 65 °C.

12. The process of any of claims 8 to 10, wherein oat protein solubilization and starch degradation is carried out at a temperature of from 50 °C to 60 °C.

13. The process of any of claims 8 to 10, wherein oat protein solubilization and starch degradation is carried out at a temperature of about 55 °C.

14. The process of any of the preceding claims, wherein the product is UHT treated.

15. The process of any of the preceding claims, wherein the oat base is enriched with one or more of vegetable oil, sodium chloride, dicalcium phosphate, tricalcium phosphate, calcium carbonate, vitamin.

16. Liquid oat base prepared by the process of any of claims 1 to 15.

17. Use of the liquid oat base of claim 16 as a food, a food additive or a starting material for the production of food, all of them intended for human consumption.