properties such as the taste, texture and the overall appearance of the freeze-dried snack product (organoleptic parameters), as well as its processability.

[0001] The consumer is not willing to compromise on product organoleptic properties, in order to increase his daily whole grain intake. Taste, texture and overall appearance are such organoleptic properties.

[0002] Obviously, industrial line efficiency is a mandatory requirement in the food industry. This includes handling and processing of raw materials, forming of the freeze-dried snack product, packaging and later storing, in warehouses, on the shelf or at home.

[0003] US 4,282,319 relates to a process for the preparation of hydrolyzed products from whole grain, and such derived products. The process includes an enzymatic treatment in an aqueous medium with a protease and an amylase. The obtained product may be added to different types of products. US 4,282,319 describe a complete degradation of the proteins present in the whole grain.

[0004] US 5,686,123 discloses a cereal suspension generated by treatment with both an alpha-amylase and a beta-amylase both specifically generating maltose units and have no glucanase effect.

Further, US 2014/166201 A1 relates to preparation of an edible product from raw materials comprising starch and water by heating, cooling, holding and drying. US 3,840,673 A relates to process for the manufacture of snacks foods such as potato chips with a reduced calorie content. EP 1 053 682 A2 relates to the field of the manufacturing of tile and particularly of the manufacturing of ceramic tiles for outdoor applications. DATABASE WPI, Week 199727, Thomson Scinetific, London, GB; AN 1997-292439 discloses information relating to takoyaki.

[0005] Thus, it is an object of the present invention to provide a freeze-dried snack product that are rich in whole grains and in dietary fibers, that provide an excellent consumption experience to the consumer, and that

may be easily industrialised at a reasonable cost without compromising the organoleptic parameters.

SUMMARY OF THE INVENTION

[0006] Accordingly, in a first aspect the invention relates to a freeze-dried snack product comprising

- a food component selected from a dairy component, a vegetable component, a fruit component, or mixtures thereof,
- a hydrolyzed whole grain composition,

before or after enzymatic treatment. Roasting and toasting may improve the taste of the final product.

[0001] To prolong the storage time of the product several treatment can be performed. Thus, in an embodiment the process further comprises at least one of the following treatments: UHT, pasteurization, thermal treatment, retort and any other thermal or non-thermal treatments, such as pressure treatment. In a further embodiment the freeze-dried snack product is applied to an enclosure under aseptic conditions. In yet an embodiment the freeze-dried snack product is applied to an enclosure under non-aseptic conditions, such as by retort or hot-for-hold.

[0002] It should be noted that embodiments and features described in the context of one of the aspects or embodiments of the present invention also apply to the other aspects of the invention.

[0003] All patent and non-patent references cited in the present application, are hereby incorporated by reference in their entirety, that the relevant contents and description of the present patent application are supported by the referenced cited documents, and shall be regarded as useful information with regards the application.

[0004] The invention will now be described in further details in the following ~~non-limiting~~ examples that are limiting thereto.

[0005] **Examples**

[0006] ***Example 1 - Preparation of a hydrolyzed whole grain composition***

[0007] Enzyme compositions comprising Validase HT 425L (alpha-amylase) optionally in combination with Alcalase 2.4 L (protease) were used for the hydrolysis of wheat, barley and oats.

[0008] Mixing may be performed in a double jacket cooker, though other industrial equipment may be used. A scraping mixer works continuously and scraps the inner surface of the mixer. It avoids product burning and helps maintaining a homogeneous temperature. Thus enzyme activity is better

controlled. Steam may be injected in the double jacket to increase temperature while cold water is used to decrease it.