

GLUTEN-FREE FOOD PRODUCT



Fig 1. Gluten free rice hard pretzel



Fig 2. Processing of gluten free rice hard pretzel

INTRODUCTION

The present invention relates to a gluten-free (GF) composition for preparation of GF food product. The composition comprises of brewer's rice and hydroxypropyl methylcellulose. The present invention also relates to a method for preparing a gluten-free food product.

NOVELTY

- This product is a gluten-free version of a healthy snack specially prepared for those who are suffering from celiac disease or intolerance towards gluten.
- Brewer's rice offers phytonutrients with functional properties beneficial for health. It has been reported that the phytochemicals (such as total phenolic compounds, vitamin E, oryzanol and phytic acid) in Brewer's rice has a potential to inhibit the proliferation of colon cancer (HT-29), ovary cancer (Caov-3), and liver cancer (HepG2) cells without causing any cytotoxicity on normal cells (BalB/c3T3).

ADVANTAGE AND COST-BENEFIT

- Usage of brewer's rice flour is an added value to the rice milling industry with predicted profit increase up to RM23,200,000/year in Malaysia. Thus, this new product can be sold at much lower price in comparison to other GF product which are 4-6 times more expensive;

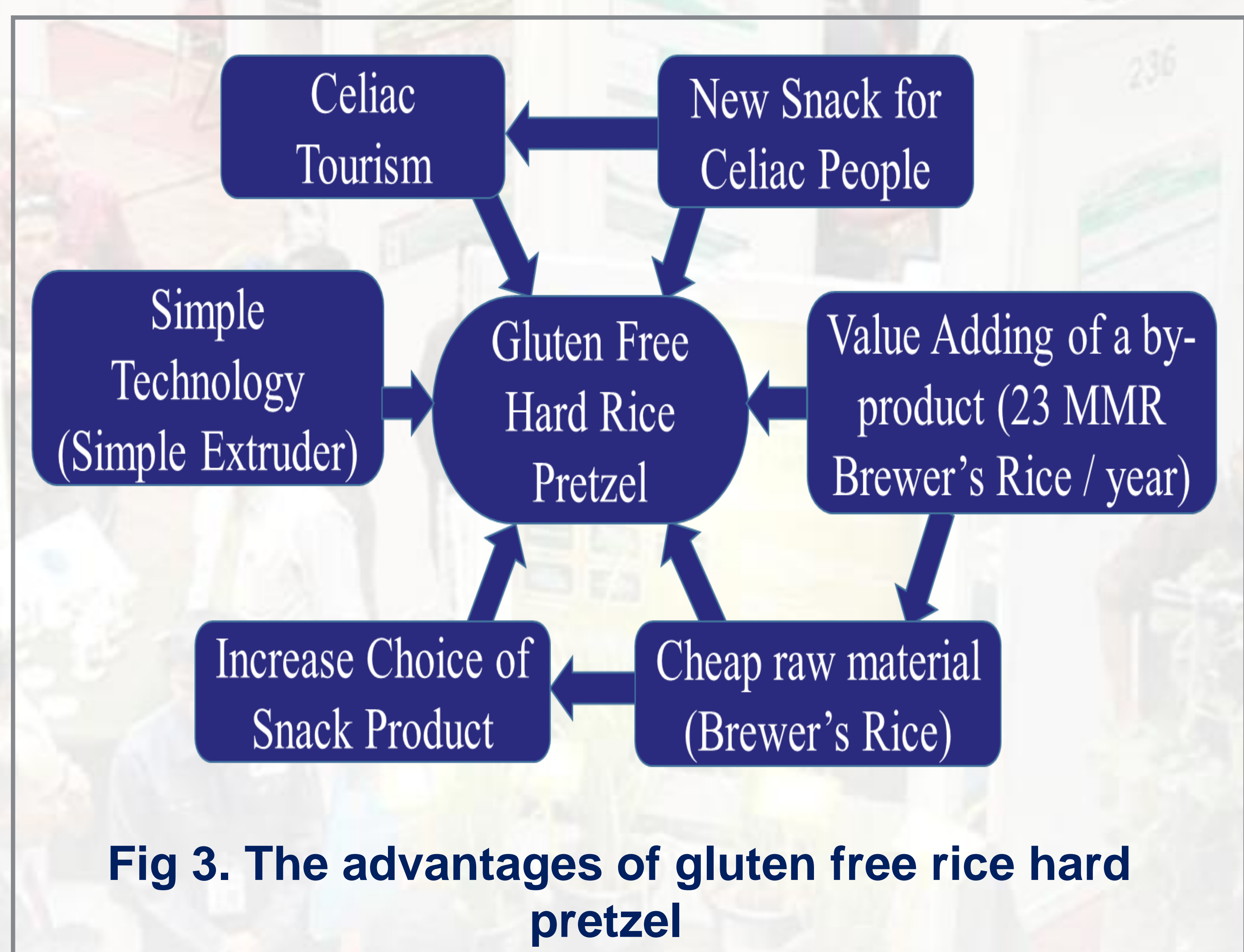


Fig 3. The advantages of gluten free rice hard pretzel

MARKET POTENTIAL

- Pretzels are fifth commonly used snack in the USA at US\$1.22 billion (6.3%) in 2002.
- Pretzels are popular snacks in Germany, Italy, and many other European countries. Moreover, the proportions of celiac people in these countries also are higher than in these parts of the world.
- The increasing demand for healthy snacks are driving the global pretzel market. Pretzels contain less fat as compared to other savory snacks and the introduction of gluten-free pretzels shall further enhance this demand.



Project Leader : Associate Professor Dr. Roselina Karim
Co-Researchers : Professor Dr. Nazamid Saari, Dr. Rabiha Sulaiman, Maryam Paykary
Faculty : Faculty of Food Science and Technology
Email : rosaz@upm.edu.my
Tel : +603 089468353
Expertise : Cereal Technology