Process for an instant oil fried noodle

The present invention relates to a process for the production of an instant oil fried noodle. The oil used for frying the instant noodle comprises the fatty acids C16:0 in the range of 1 to 25 wt% (based on weight of total fat) and C18:1 in the range of 60 to 90 wt% (based on weight of total fat) and C18:2 in the range of 0.1 to 20 wt% (based on weight of total fat).

It is already known to have an instant oil fried noodle. The noodles are fried in palm oil due its low cost, ease of availability and high oxidative stability. Consumers are increasingly becoming sensitive to palm oil or palm fat concerns. Many of them perceive palm fat as not healthy due to high amounts of saturated fatty acids (SFA) and many others perceive it as not environmentally sustainable as a lot of news mention that the rain forest is destroyed to grow palm trees.

US2010/0323070A1 discloses an instant-prepared fried noodle which is aimed to reduce the amount of fats and oils, while maintaining a favourable texture and taste using a simple method, without depending on any special device. At the same time, US2018/0338515A1 also discloses a process for producing food having fried organoleptic properties with low oil content such as instant noodles with good aroma, taste, mouthfeel, colour and other characteristics by incorporating an antioxidant into the dough and cooking it in a stream of circulated air at a temperature of 100° C. or above.

A manufacturing method of instant noodle to substantially reduce the contents of fat while maintaining the intrinsic property and taste such as viscoelasticity, glutinosity, as well as lubricity is also disclosed in KR101237897B1, while TW201238499A relates to a tangle-free instant noodle with excellent spreading property and the manufacturing method. WO2018/005480A1 on the other hand relates to a dough composition suitable for frying which comprises fruit juice powder.

Lastly, NZ555574A relates to a process for the manufacture of non-fried instant cooking dry noodles, while WO2011/078788A1 discloses an invention that relates to an instant oil fried noodle comprising an amount of iron between 26 and 35 mg for 100 g of noodles, between 1 and 20 % of oil, between 60 and 90 % of flour, up to 2 % of kansui ingredient and a water content between 2 and 12 %.

Therefore in order to provide nutritional benefits, reduction of total fat and/or SFA content in the product is of considerable importance. It is hence essential to explore other vegetable oils for frying of noodles which are not only economical to produce and easy to handle but are also stable for frying purposes. It should make noodles healthier without compromising on the sensory attributes, and overall quality of the product. In addition it should also have lower values of process contaminants formed during refining of oils, i.e. glycidyl fatty acid esters (GE) < 1 ppm (preferably < 0.5 ppm) and 3-MCPD < 3 ppm

Summary of the invention

The object of the present invention is to improve the state of the art and to provide an improved or at least an alternative solution to overcome at least some of the inconveniences described above. The object of the present invention is achieved by the subject matter of the independent claims. The dependent claims further develop the idea of the present invention.

Particularly, the object of the present invention is to provide a process for the production of an instant fried noodle with a healthier perceived oil having good oxidation stability, low amounts of glycidyl fatty acid esters (< 1 ppm, preferably < 0.5 ppm) and 3-MCPD (<3 ppm), good sensory attributes and a shelf life of at least 9 months of the product.