Increasing resistant starch content in fish crackers through repetitive cooking-chilling cycles

ABSTRACT

This work describes the effect of a repetitive cooking-chilling process on resistant starch content in crackers prepared from a mixture of fish and starch, which are popularly known in Malaysia as "keropok." Three fish cracker formulations were prepared using tapioca, wheat, and sago starch. Up to four cycles of repetitive cooking-chilling increased the resistant starch content in all products; however, the hardness of chilled samples decreased, and their moisture content increased. For the fried samples, the texture became harder, the color turned darker, and linear expansion was reduced. The dried fish cracker samples prepared with sago starch yielded the highest resistant starch content. The results demonstrated that four cycles of repetitive cooking-chilling were able to enhance resistant starch in fish crackers.

Keyword: Chilling; Cooking; Fish cracker; Resistant starch; Snack