"الظروف المثلى لإنتاج الكيتوزان من قشور الجمبرى"

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OPTIMIZATION OF SHRIMP SHELLS CHITOSAN PRODUCING CONDITIONS

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(Received: July 25, 2012)

ABSTRACT: *Due to the multiapplications of chitosan particularly in food products. This paper was preformed to achieve the optimum parameters involved in shrimp shells processing. The shells had 44.96% and 36.63% ash and protein respectively. Different concentrations of HCl were used to remove ash (demineralization) which 2M HCl at 45°C for 2hr was the best with ash reduction rate of 91.98%. Removal of protein (Deproteinization) was optimum at 1M NaOH at 75°C for 4hr. To produce chitosan deacetylation of chitin is required and the optimum parameters were 40% (10M NaOH) at 90°C for 2hr.*

The produced shrimp shells chitosan under these conditions had 83.53%, 521.65% and 405.65% degree of deacetylation, water and fat binding capacities respectively.

Keywords: *Shrimp shells, chitin, chitosan, deacetylation, functional properties*

إعداد وتقييم قمح الديورم لإنتاج المكرونة .

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DURUM WHEAT PREPARATION AND EVALUATION FOR PASTA PRODUCTION

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(Received: May 20 , 2012)

ABSTRACT: *The objective of this study was to develop newer varieties of pasta with improved nutritional quality produced by using wheat durum semolina as a base plus the addition of different durum wheat milling fractions compared with pasta made from only semolina.*

Chemical analysis, Dietary fiber and its fractions (soluble, insoluble), cooking quality and sensory evaluation were performed. Results show that, increase the substitution level improve the nutritional quality. Also, using durum wheat milling fractions to contrary limit enhance the nutritional quality of pasta without affecting its sensory properties negatively.

Key words : *Durum, pasta, milling fraction, dietary fiber, soluble, insoluble*