



From apple to applesauce: Processing effects on dietary fibres and cell wall polysaccharides

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Titre	From apple to applesauce: Processing effects on dietary fibres and cell wall polysaccharides
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Auteur	Colin-Henrion, Muriel [1], Mehinagic, Emira [2], Renard, Catherine M-G-C [3], Richomme, Pascal [4], Jourjon, Frédérique [5]
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Résumé en anglais	<p>Modifications in dietary fibre content of apples during industrial processing into applesauce were investigated. Samplings with different post-harvest storage times were performed at five different processing steps (apple sorting, cooking, refining, sugaring and pasteurisation) and the samples examined for their insoluble, soluble and total fibre contents, following the AOAC method. Total fibres were also estimated through preparation of alcohol-insoluble solids and polysaccharide compositions of the various fibre residues were determined. Total fibre content decreased from apple to applesauce from 2.4 to 1.7 g for 100 g of fresh weight and the soluble fraction increased. Fibre loss and soluble/insoluble redistribution occurred during processing. Refining triggered a loss of insoluble polysaccharides whilst cooking and, surprisingly, sugaring led to pectin solubilisation and further degradation due to prolonged heating. These pectic changes, moreover, seemed to be dependent on the post-maturity stage of the apples.</p>
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Liens

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