

## Production of Chitosan Hydrochloride

Start with skeletons of shrimps certified for human consumption.



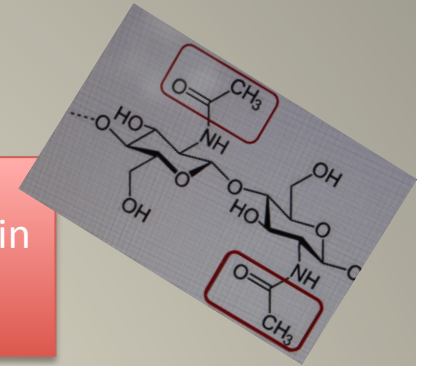
Treatment by acid for demineralization.



Treatment by base for deproteinization.



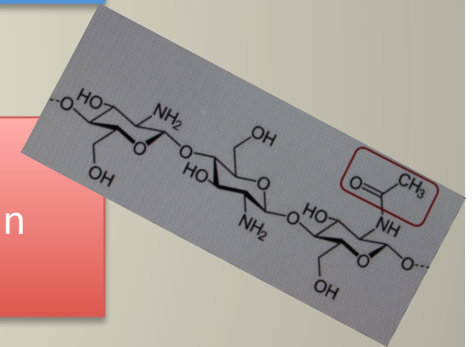
Chitine (product is not soluble in water).



Treatment by base at high temperature for Deacetylation with degree of deacetyl. > 75%.



Chitosan (product is little soluble in water).



Treatment by acid (HCl) to become Hydrochloride: increase the solubility and stabilize pH.



Chitosan Hydrochloride as end-product: See specification.