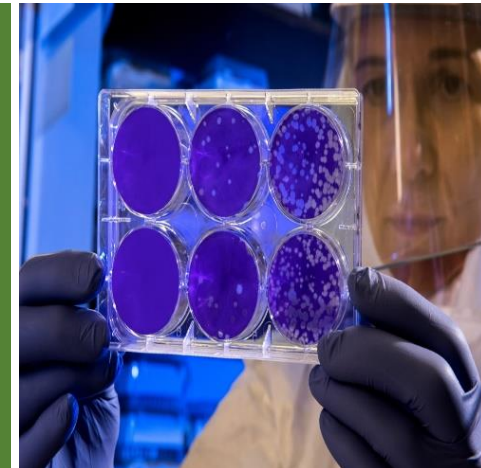


# Abstract for Chitosan Coated Medical Face Mask Production Line

*This abstract reflects general technical aspects of Chitosan coated medical face masks*



# INTRODUCTION

Viruses and Bacteria are spread all over the world. So every creature is attacked by viruses and bacteria for

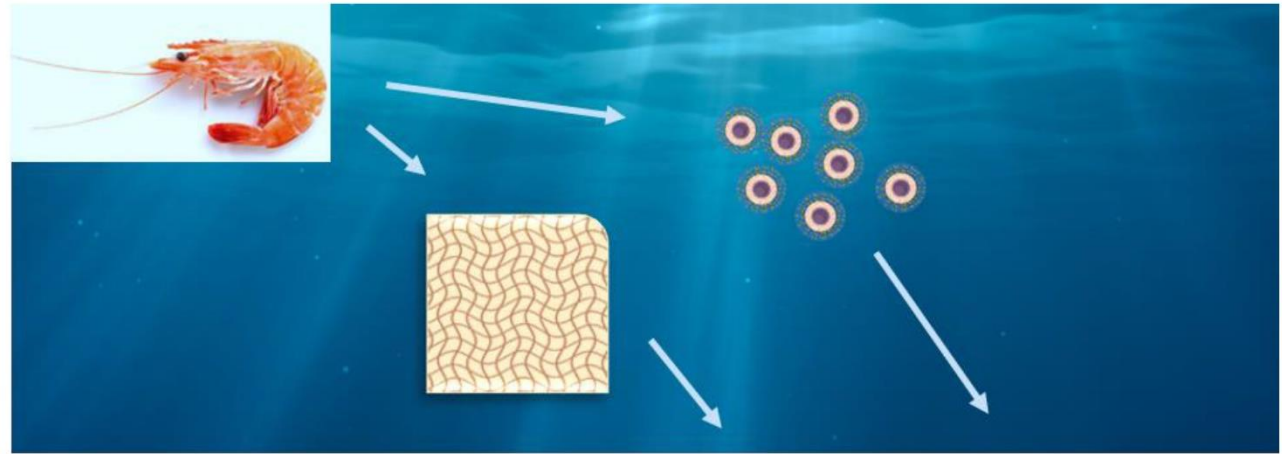
the whole life time. Hence adequate protection equipment is needed to minimize the risk of

harmful diseases caused by viruses and bacteria and to improve life time and comfort.



# The Benefits of Chitosan

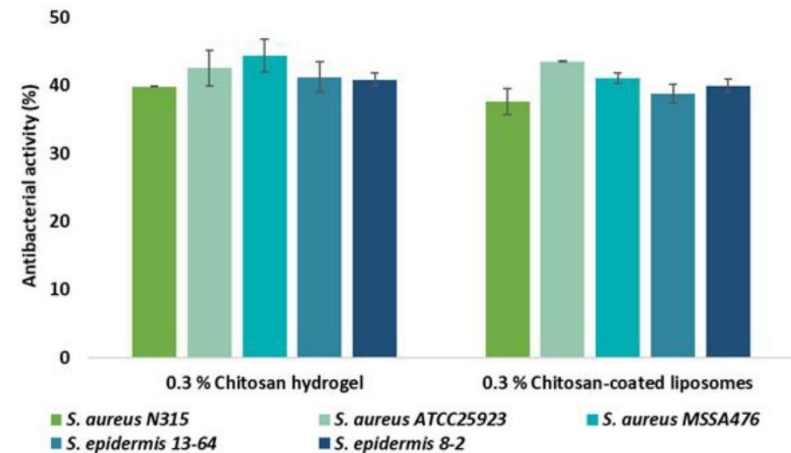
Chitosan is a bio-polymer derived from the natural bio-polymer chitin. Chitin is the molecule of which most exoskeletons are made of, like Crustacean shells, insects and many other organisms. The antibacterial, antiviral and antifungal effects of chitosan are scientifically proven.



Chitosan hydrogel

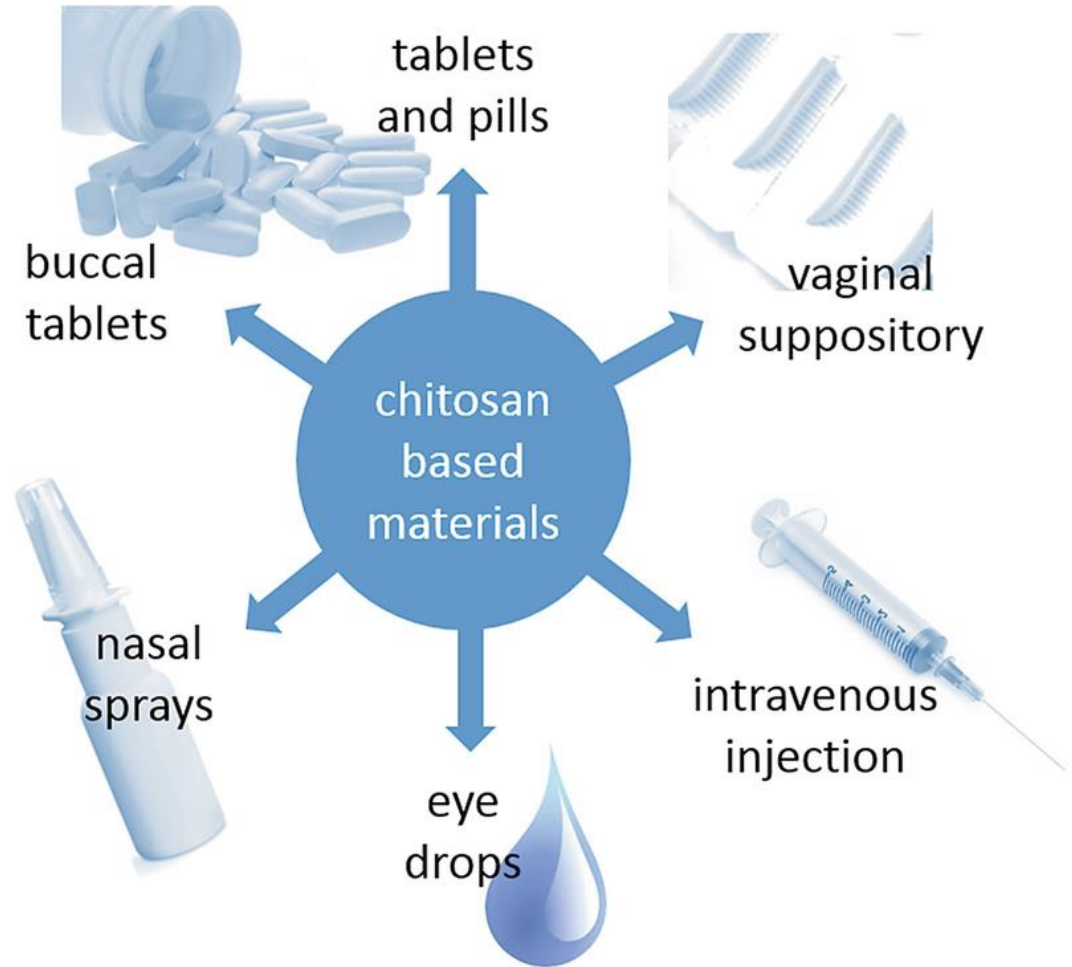


Chitosan-coated liposomes



# Applications of Chitosan

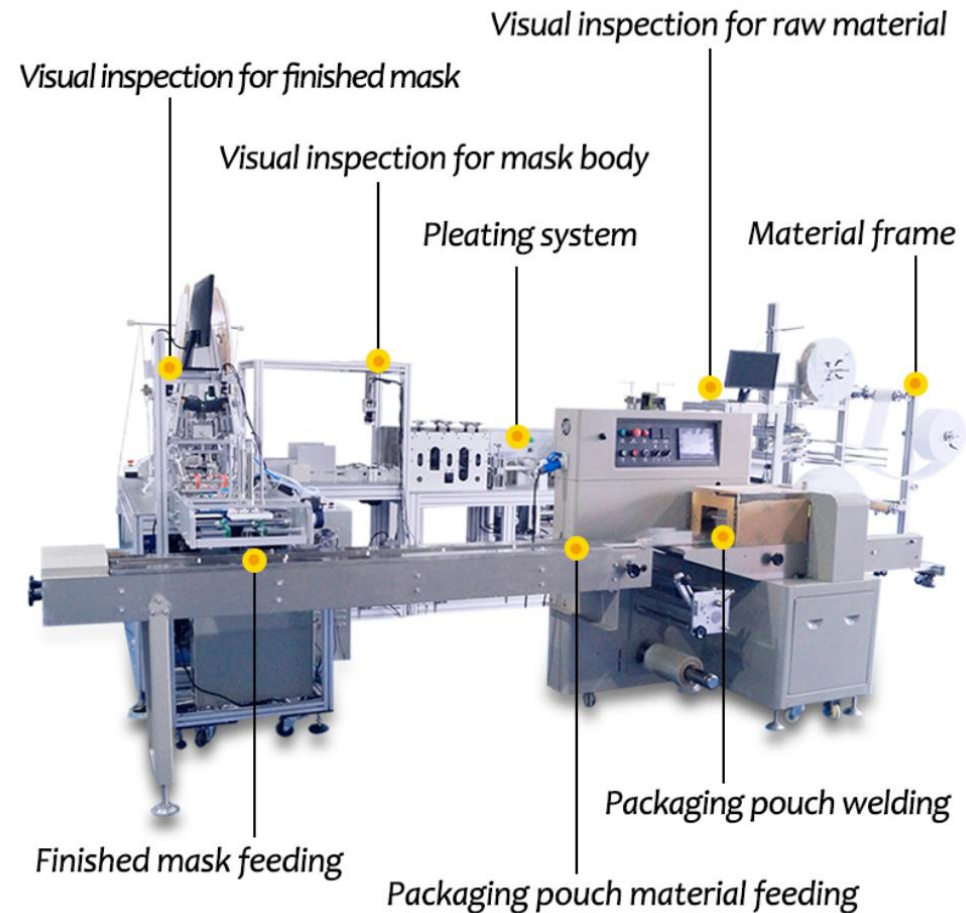
Chitosan based materials are used in a very wide range of products. Some are shown in the figure beside. The application for antibacterial coatings is the new state-of-the-art technology to use the positive benefits of chitosan even for more products.





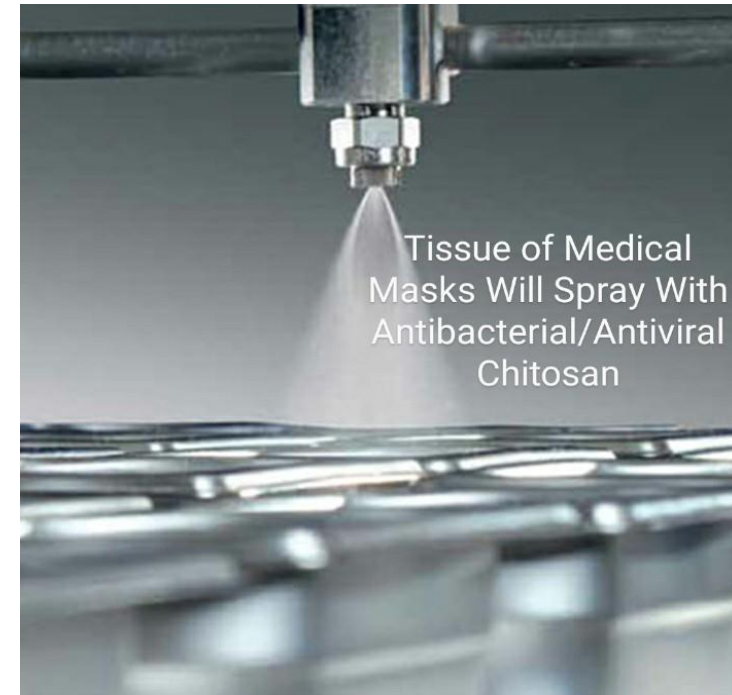
# Production Line Equipment

The production line equipment for producing medical face masks is very simple and shown in the figure beside. It represents a very small, production line that can be installed even with very limited room capacities.



# Production Line Impressions

The tissues of the medical face masks are coated with a specific natural antibacterial, antiviral and antifungal solution based on chitosan derivatives. This is all that must be done to improve a very good product to a safer and better one.

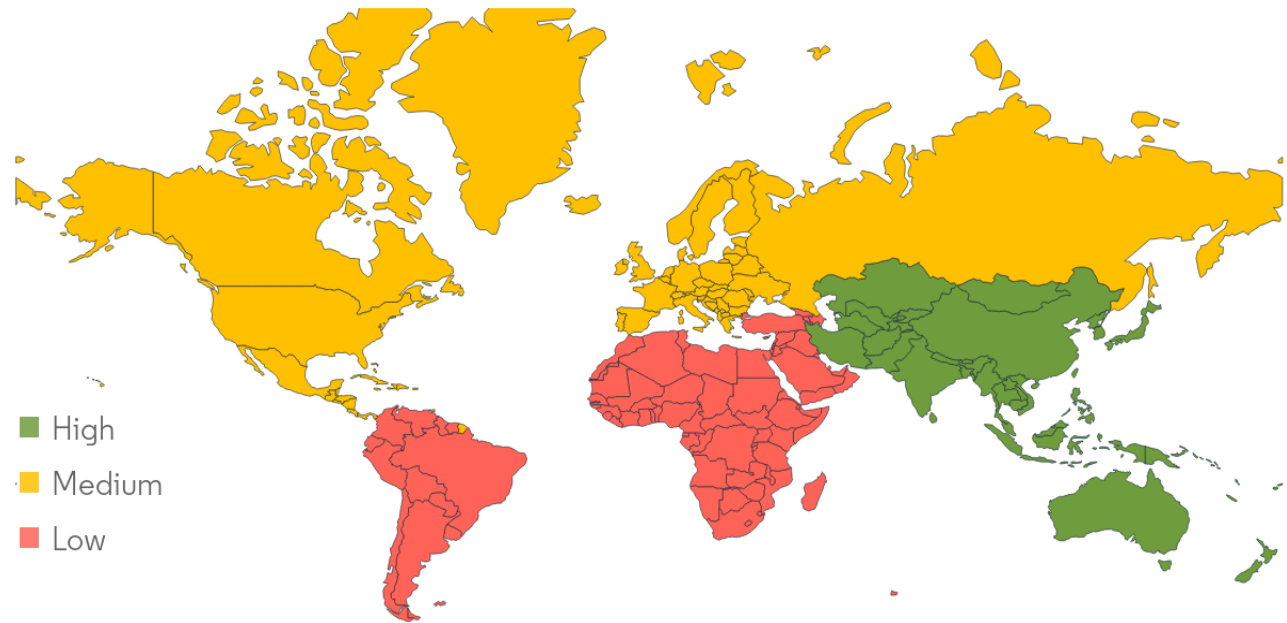


# Global Medical Face Mask Market

The global market for medical face masks is a high value one. Medical face masks are used for various applications and in many institutions like hospitals, dentists, retirement homes, research institutes and many others. This shows the high market volume for this product with very low production cost.



Face Mask Market: Market Size, By Region, Global, 2019



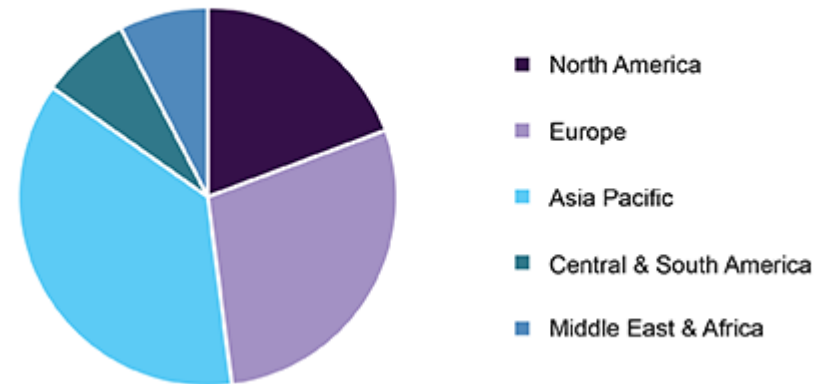
Source : Mordor Intelligence



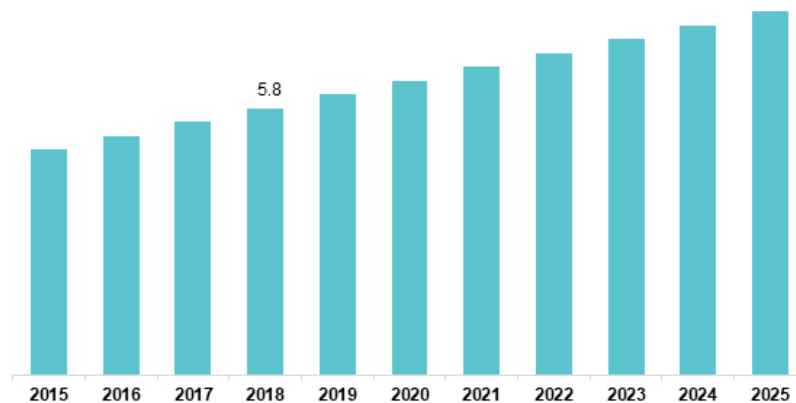
# Global Medical Face Mask Market

The figures below shows some general market aspects for the global production of medical face masks. The market volume is growing constantly with the high developed regions like North America, Europe and Asia Pacific as the main markets.

Global sheet face mask market share, by region, 2018 (%)



Global Face Masks Market Size, 2015-2025 (USD Billion)



Source: Adroit Market Research © 2019





# Summary

As shown on the figure beside, there is nothing complex on medical face masks. By spraying a chitosan derivate solution to these masks, they can be improved with antibacterial, antiviral and antifungal properties to get an advanced and save product.



GRAZIE VINAKA  
TERIMA KASIH  
THANK YOU  
TAKK  
merci

감사합니다  
ありがとう



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