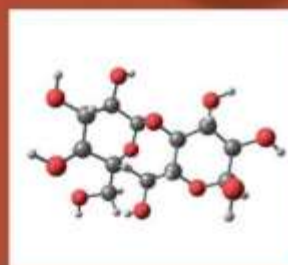


PLANT POLYSACCHARIDES AS PHARMACEUTICAL EXCIPIENTS

EDITED BY
AMIT KUMAR NAYAK
MD SAQUIB HASNAIN
DILIPKUMAR PAL



Chapter 18 - Plant polysaccharides for protein binding

*Gaanty Pragas Maniam*¹, *Natanamurugaraj Govindan*¹, *Karthick Murugan Palanisamy*¹, *Palaniselvam Kuppusamy*², *Mohd Hasbi Ab. Rahim*¹

¹ Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, Gambang, Kuantan, Pahang, Malaysia

² Department of Animal Biotechnology, Jeonbuk National University, Jeonju, Republic of Korea

ABSTRACT

Polysaccharides are polymeric carbohydrates that are made up of many monosaccharide units linked together by glycosidic linkages. They are architecturally complex biomacromolecules because of the different monosaccharides and their infinite ways to form the building blocks with each other.

KEYWORDS

Protein; Polysaccharide; Plant-based; Protein binding

REFERENCES

1. Pitkänen L, Heinonen M, Mikkonen KS. Safety considerations of plant polysaccharides for food use: a case study on phenolic-rich softwood galactoglucomannan extract. *Food Funct* 2018;9:1931.
2. Dumitriu S. Polysaccharides as biomaterials. In: Dumitriu S, Dekker M, editors, *Polymeric biomaterials*. New York; 2002, p. 161.

3. Singh D, Rajput A, Bhatia A, Kumar A, Kaur H, Sharma P, et al. Plant-based polysaccharides and their health functions. *Funct Food Health Dis* 2021;11(4):179200.
4. Spagnoli C, Korniaikov A, Ulman A, Balazs EA, Lyubchenko YL, Cowman M. Hyaluronan conformations on surfaces: effect of surface charge and hydrophobicity. *Carbohydr Res* 2005;340:92941.
5. Rinaudo M, Auzely R, Mazeau K. Polysaccharides and carbohydrate polymers. In: Wiley J, editor, *Encyclopedia of polymer science and technology*. New York; 2004, Vol. 11, p. 200261.

