

CHAPTER 1

Basic Aspects and Properties of Biopolymers

N. F. MAZUKI,^a M. A. SAADIAH,^b A. F. FUZLIN,^a N. M. KHAN^a
AND A. S. SAMSUDIN^{*a}

^a Ionic Materials Team, Faculty of Industrial Sciences and Technology, University of Malaysia, 26300 Kuantan, Pahang, Malaysia; ^b Department of Chemistry, Centre for Foundation Studies, International Islamic University Malaysia, 26300 Gambang, Pahang, Malaysia

*Email: ahmadsalihin@ump.edu.my

1.1 Introduction

The term nutraceuticals is derived from “nutrition” and “pharmaceuticals,” and functional foods are considered as a type of nutraceutical. Defelice (1979) was the first researcher to label certain foods as “dietary supplements”, *i.e.* food that can give health benefits and nutritional effects.¹ Since then, much effort has been made in the field of nutraceutical research, resulting in advances in medical, pharmaceutical, and dietary supplements. These nutraceuticals and functional foods are in high demand due to changing health trends since consumers today are more nutrition-savvy.

The food supplements and nutraceuticals industry involves proper assessment with specific classifications to ensure the safety of their products. In recent times, the definition of nutraceuticals has been refined to distinguish it from pharmaceutical products. In particular, nutraceuticals are classified as products derived from vegetal (phytochemical) or animal origin (secondary metabolites) that could prevent or treat diseases and provide

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