organs, such as brain, liver, muscles, etc., especially in the case of intravenous drug delivery. Some pharmaceutical agents may move swiftly into the particular tissues; therefore, their concentration in drugs delivered intravenously must not be high. The ways of drug transfer in various tissues are widely described in Chapter 9.

Some transdermal therapeutic systems (TTS) are the way of drug delivery. The patch or plaster with drug extended release may be as thin as 150 μm and cover an area of 5–20 cm^2 of the skin surface. The patch should be applied to a part of the body where a skin has a constant thickness and constant high blood flow. This occurs mainly diffusion of the drug through the skin from the TTS–skin interface to the subcapillary plexus. It is one of the transdermal therapeutic systems, which are widely described in Chapter 10.

In conclusion, bioavailability of drug delivery systems is one of the most important parameter during researching new drugs and determination of their dosage forms. Their interaction with macromolecular structural and functional carbohydrates will be something that is going on at all times. However, this book might be very useful not only for researchers at university and in the pharmaceutical industry, but also for therapists devoted to curing patients at the hospital, for physicians and pharmacists staying permanently in touch with their ill customers and finally for professors and their students, who will be physicians, pharmacists and researchers of tomorrow.

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Available online 8 December 2006

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doi:10.1016/j.carbpol.2006.10.010

Wanda Baer-Dubowska, Agnieszka Bartoszek, Danuta Malejika-Giganti (Eds.), Carcinogenic and Anticarcinogenic Food Components, CRC Press, Boca Raton, FL, USA, 2006 (x + 393 pp., £74–99, ISBN 0-8493-2096-8)

Understanding both the benefits and risks to human health from the consumption of foods containing carcinogenic and anticarcinogenic substances is crucial for combating cancer. *Carcinogenic and Anticarcinogenic Food Components* explains the importance of dietary sources containing carcinogenic and anticarcinogenic components supported with latest clinical trials. It contains 17 chapters that each covers different aspects of carcinogenic and anticarcinogenic food components.

One third of all cancers are associated with dietary factors therefore it is essential to understand the basic concepts of food, cancer, the carcinogenic (cancer causing) and anticarcinogenic (cancer preventing) food components (Chapter 1). The molecular and cellular events during the multistage processes of chemical carcinogenesis involve initiation, promotion, benign neoplasm, progression and invasion (Chapter 2). The metabolic transformations of mutagens and carcinogens require the transformation of a chemically inert molecule to a DNA reactive agent (Chapter 3). Genotoxic refers to toxic and heritable effects to genetic material in germinal and somatic cells. Increasing human exposure to pollutants with carcinogenic activity and human lifestyle, including tobacco habits, excessive alcohol use, lack of exercise and above all dietary traditions, have also become implicated in the occurrence of diverse types of cancer (Chapter 4). The methods of food processing, preservation and cooking can influence the risk of cancer (Chapter 5). An increase in toxic inorganic and organic compounds in the environment due to intensive industrialization is drastically deteriorating the surface and ground water as well as agricultural land (Chapter 6). Reactive oxygen species are continuously produced by the human body and can get into cells causing DNA damage. Oxidatively damaged DNA has mutagenic potential, and its accumulation results in cancer (Chapter 7). The impact of dietary polyunsaturated fats in carcinogenesis is discussed in Chapter 8. The battle against cancer cannot be won by treatment alone and an alternative approach is needed. The basic mechanisms and targets of chemoprevention are discussed in Chapter 9. The subsequent chapters discuss anticarcinogenic food components, which include phenolic compounds in common, species (Chapter 10), tea and tea constituents (Chapter 11), wine polyphenols and resveratol (Chapter 12), flavonoids of fruit and vegetables (Chapter 13), carotenoids (Chapter 14), constituents of cruciferous vegetables (Chapter 15), and phytoestrogens (Chapter 16). The final chapter provides perspective on the impact of diet on cancer prevention based on human trials.

This book is designed for professionals employed by the food processing industry and food scientists, students of food science, nutritional and biomedical scientist involved in studies of cancer etiology and prevention.

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Available online 4 December 2006

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doi:10.1016/j.carbpol.2006.09.014