Contents of Phytosterols in Vegetables and Fruits Commonly Consumed in China¹

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Objective To quantify five specific dietary phytosterols and phytostanols in vegetables and fruits commonly consumed in China. Methods A total of 34 different kinds of vegetables and 33 kinds of fruits were chosen according to the consuming habit of Chinese people. All the samples were purchased from two shops in Beijing. The contents of phytosterols (β -sitosterol, campesterol, stigmasterol, β -sitostanol, and campestanol) were analyzed by GLC method which was established by our laboratory, and the total phytosterols were calculated. Results The total phytosterol content in vegetables ranged 1.1-53.7 mg/100 g edible portion. The highest concentration was found in pea, cauliflower, broccoli, and romaine lettuce. The phytosterol contents in fruits ranged 1.6-32.6 mg/100 g, the highest concentration was found in navel orange, tangerine, and mango. Conclusion The phytosterol contents in vegetables and fruits are not as high as those in edible oils, but because of the large amount of consumption, they also play an important role in increasing the people's phytosterols intake, indicating that increased intake of vegetables and fruits with higher phytosterol contents helps increase the phytosterol intake in China.

Key words: Phytosterol; Vegetables; Fruits; China

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