7 Anti-Obesity Potential of Indian Traditional Medicinal Plants and Their Phytochemicals

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CONTENTS

7.1 INTRODUCTION

Obesity is becoming one of the greatest threats to global health in this century, with more than 1.5 billion overweight adults and at least 400 million clinically obese subjects (Drew et al. 2007). Due to these increasing obesity rates, the World Health Organization (WHO) has prompted to consider it as the epidemic of 21st century and to promote strategies to prevent and control its progress (Brug and Crawford 2009). The development of obesity is characterized by a chronic imbalance between energy intake and energy expenditure (Schrauwen and Westerterp 2000), and it is often ascribed to changing lifestyles and inadequate dietary habits. Also, decreased energy expenditure is often associated with an inherited low basal metabolic rate, low physical activity and a low capacity for fat oxidation (Little et al. 2007). To reduce body weight and adiposity, a change in lifestyle habits is still the crucial cornerstone (Rubio et al. 2007). Physical activity might be helpful in the prevention of obesity by elevating the average daily metabolic rate and increasing energy expenditure. Unfortunately, this clinical approach is not long lasting, and weight regain is often seen.

Epidemiological studies have shown a direct relation between the incidence of overweight/obesity and dietary fat consumption (Little et al. 2007). Humans are frequently exposed to foods rich in fat, which are usually associated with a high-energy