While conventional wisdom holds that excessive body weight is the product of some combination of a high-calorie diet and a sedentary lifestyle, public health measures aimed at these factors have been met with only limited success. This chapter considers the possibility that obesity might be better understood in terms of the biologist's notion that humans and other animals evolved the ability to store body fat as an optimal response to the presence of starvation risk. Evidence from a broad array of disciplines is consistent with this view, including the neuroendocrinology of energy homeostasis, parallels between human and animal fattening behaviour, the effect of stress on dietary intake, population-level studies of the impact of economic insecurity on body weight and international variation in obesity rates.