Many persons in the developed countries report sensitive skin. Persons with sensitive skin have a predisposition to several skin diseases, most importantly dry skin, but also atopy, seborrheic dermatitis, acne vulgaris, rosacea, and perioral dermatitis. Their complaints may be triggered by environmental factors such as low temperature, wind, high temperature, sun exposure and stress. Various skin care products and cosmetics are not tolerated. A disturbed skin barrier function and reduced stratum corneum water content are most important in the pathophysiology of sensitive skin. Environmental factors and cosmetics may induce irritation of the skin because of the disturbed skin barrier. Of further importance for the pathogenesis are neurogenic factors including stress and hyper-excitability. Mechanisms in signal transduction involve cytokines and neurotransmitters, but the exact pathways are unknown.