# Introduction

The nose is our most important environmental sensor. Very low levels of environmental chemicals can be detected and categorized as pleasant, neutral or unpleasant. Especially unpleasant odors or those that are believed harmful can annoy us **(Danuser, 2001)**.

Sense of smell provides people with valuable input from the chemical environment around them. When this input is decreased or distorted, disability and decreased quality of life are reported **(Miwa et al, 2001)**.

Olfactory disorders have a great impact on humans life as olfaction is essential for both physiological (e.g. food and drink) and security needs. Normal salivary and pancreatic/ gastric anticipatory secretions in response to food smells are presumably absent or severely attenuated in the anosmic(patient with absence of smell functions).the unpalatability of food when it arrives serves further to decrease food enjoyment**(Rombaux et al., 2005)**.

So smell disorders have significant consequences for the patient including:
1-Impaired quality of life
2-Increased health or safety risks from spoiled foods and dangerous vapors (e.g. leaking natural gas)
3-Altered food choices and consumption patterns that can adversely impact health or worsen underlying illness (e.g. decreased body weight, impaired immunity, overuse of salt in hypertension or sugar in diabetes mellitus **(Doty, 2004)**

Decreased sense of smell is a common problem affecting approximately 61-69% of patients with chronic rhinosinusitis (CRS) and is one of the four signs and symptoms used to diagnose CRS. Olfactory impairment negatively impacts patients' quality of life and ability to function safely in day to day life. **(Jamie R. Litvack et al., 2009)**

Dissecting the sense of smell leads to at least 3 different components, namely, 1) the perception of odors at low concentrations (odor threshold), 2) the nonverbal distinction of different smells (odor discrimination), and 3) the ability to name or associate an odor (odor identification) **(Jorn Lotsch et al., 2008).**

Numerous clinical olfactory tests have been described in the literature, including ones incorporating psychophysical, electrophysiological, and psychophysiological methods. Such tests range from simple single-item odor identification screening tests to complex electrophysiological tests employing sophisticated olfactometers **(Isabelle A et al, 2007)**.

Olfactory function is worth testing routinely in any rhinology workup. Valuable clinical information for diagnostic and follow-up purposes can be gained **(Landis BN and Lacroix JS, 2009).**