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High-Dosed Vitamin C Plus Zinc (Redoxon® Double Action) for the Common Cold

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Despite great advances in medicine, old, new or re-emerging infectious diseases are still a major health issue in the 21st century. While multiple factors determine whether an individual will become sick or not, the immune system remains the first line of defense against all external pathogens. Among the micronutrients required for proper immune function, vitamin C and zinc hold central positions⁽¹⁾. Data from a number of clinical studies shows that separate administration of either vitamin C (given prophylactically)⁽²⁾ or zinc (in form of lozenges)⁽³⁾ reduces the duration and severity of common cold symptoms in otherwise healthy individuals. However, no studies have looked at the effects of combined vitamin C and zinc given at onset of the common cold.

Redoxon® Double Action is a dietary supplement consisting of 1000 mg vitamin C plus 10 mg zinc indicated for the prevention and treatment of vitamin C and zinc deficiencies during situations and conditions with increased requirements or increased risk of deficiencies. We have investigated the effects of this combination product (administered as effervescent tablet) in two pilot double-blind, randomized, placebo-controlled clinical studies in subjects with the common cold. For both studies, participants were enrolled by general practitioners and treatment lasted for at least five days. Male or female subjects, over 18 years of age, suffering from the common cold without superinfection and with bilateral and clear rhinorrhea (i.e. runny nose) for less than 3 days as well as rectal temperature <38°C were enrolled. Participants (30 in study 1 and 64 in study 2) were required to fill in daily a self evaluation booklet between Day 0 and Day 5. Efficacy was assessed by the progression of the usual common cold symptoms (rhinorrhea, cough, laryngeal irritation, myalgia, headache and rectal temperature). All these symptoms were evaluated at Day 0 and Day 6 by the investigator. In both pilot studies the combination of vitamin C and zinc resulted in a non-significant reduction of rhinorrhea duration in the range of 9–27%. Since the protocols of the two studies were similar, the individual data were pooled and an overall analysis performed. In the pooled analysis, involving 94 subjects, vitamin C plus zinc was significantly more efficient than placebo on the relief of rhinorrhea over the 5 days of treatment ($p = 0.03$). Furthermore, relief was quicker ($p = 0.001$ at Day 4). Discomforts due to nasal obstruction, to sneezing and to eye watering were also improved and overall a very good tolerance of the product was reported. Nasal symptoms are the most common ones occurring in 45% to 75% of common cold sufferers indicating that vitamin C and zinc can make a tangible contribution in ameliorating quality of life and speeding up recovery. In view of the common cold frequency, the related economic social and economic costs, and the limited treatment options, supplementation with vitamin C and zinc may represent an efficacious and safe measure against this infectious viral disease.

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3. Singh M & Das RR (2011) *Cochrane Database Syst Rev* **16**(2), CD001364.