VLCKD overview and focus on efficacy, safety and right nutrients intake

Objective: In last years, the very low calorie ketogenic diet (VLCKD) has become increasingly important as a diet therapy for weight loss. In particular, in aesthetic medicine, it is widely used for its effectiveness in body reshaping and for localized fat. The correct protein intake and duration of treatment are still a source of discussion. The objective of this review is to determine more precisely, according to the latest scientific evidence, the optimal nutrients intake and the duration of VLCKD to help the aesthetic doctor in drafting an effective but equally healthy ketogenic protocol especially in case of pathologies related to obesity.

Materials and methods: Were analyzed the most representative works published in the last three years which contained the following keywords: VLCKD, Body Composition, Efficacy, Safety, Metabolic state, Muscle mass, which therefore highlighted parameters as protein intake, duration of treatment, results in terms of weight loss and body recomposition, inflammatory parameters and safety.

Results: VLCKD was effective and free from complications over two months. The protein intake that has given the greatest guarantee of the best body recomposition is the personalized one, parameterized on the patient's lean body mass. Weight loss is reported in all the studies analyzed, but fat loss with simultaneous saving in lean body mass has been highlighted exclusively for studies with higher protein percentages. All studies showed extensive safety profiles.

Conclusions: From the analysis of the literature it is possible to affirm that VLCKD in the treatment of obesity and overweight as well as localized fat, can be considered a valid, safe and effective resource for the aesthetic doctor even in the case of pathologies related to obesity, provided that a complete and personalized protein intake and a lipid intake with strong anti-inflammatory properties are guaranteed.

-The Ketogenic Diet: Evidence for Optimism but High-Quality Research Needed.
DS Ludwig

-Effects of a Personalized VLCKD on Body Composition and Resting Energy Expenditure in the Reversal of Diabetes to Prevent Complications
L. Romano et all.

-Comparison of two low-calorie-restricted diets on lean body mass loss in patients during weight loss
M. Marchetti et all.

-Effects of very-low-calorie diet on body composition, metabolic state, and genes expression: a randomized double-blind placebo-controlled trial
G. MERRA et all.

-Very-low-calorie ketogenic diet with aminoacid supplement versus very low restricted-calorie diet for preserving muscle mass during weight loss: a pilot double-blind study
G. Merra et all.

-Efficacy and safety of very-low-calorie ketogenic diet: a double blind randomized crossover study
A. De lorenzo et all.