Efficacy and tolerability of a formulation containing pasteurized *Akkermansia muciniphila* in healthy premenopausal women

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Objective. Aim of this work was to evaluate the efficacy and tolerability of a food supplement formulation containing pasteurized *Akkermansia muciniphila* in healthy premenopausal adult women.

Materials and Methods. 14 premenopausal women aged between 40 and 55, belonging to the team of the SOC Gynecology and Obstetrics ASUFC of the Udine Hospital were recruited. The tolerability of the product and some haematochemical and clinical parameters were evaluated: weight, BMI, waist circumference, lean mass and fat mass (through BIA), glycaemia, insulinemia, glycated haemoglobin, total cholesterol, HDL cholesterol, triglycerides, AST, ALT. The patients took one tablet a day for 90 days containing pasteurized *Akkermansia muciniphila* (30 billion/day), green tea extract, chromium, vitamins B2 and D. The patients were left on a free diet and no indication was provided on physical activities. Tests were performed at recruitment and after 90 days.

Results. The food supplement showed excellent tolerability, as no undesirable effects have been reported. After 90 days of supplementation, a reduction in weight of 1.7 kg, in waist circumference of 2 cm and in glycaemia was observed ($p < 0.05$).

Conclusions. Pasteurized *Akkermansia muciniphila* supplementation is well tolerated, and has been shown to be effective in reducing weight and waist circumference in a statistically significant way. The other parameters, in the normal range at the time of recruitment (T0), remained substantially unchanged.