Background and Aims: Dietary intervention is one of the key components in type 2 diabetes (T2D) management. Vegetarian diet is a promising alternative in the nutritional treatment of T2D. The aims of our study were:

1. To compare the effects of vegetarian and conventional diabetic diet with the same caloric restriction on insulin resistance, volume of visceral fat and plasma concentrations of oxidative stress markers after a 12-weeks-diet-intervention and subsequent 12-weeks of diet plus aerobic exercise training in subjects with T2D.

2. To explore the effect of 12 weeks of diet intervention and subsequent 12 weeks of diet combined with aerobic exercise training on -cell function and to evaluate the role of gastrointestinal peptides in subjects with T2D.

3. To study quality of life, Beck depression score and changes in eating behaviour in response to a vegetarian and a conventional diabetic diet.

4. To explore the role of changes in fatty acid composition of serum phospholipids in diet-induced changes in insulin sensitivity in subjects with T2D.

5. To follow-up our patients 1 year from the end of the intervention.