

Obesity Middle East 2018: Diabetes type-2 patients can stop insulin treatment when following the low carbohydrate lifestyle- Harriet Verkoelen- Dutch Knowledge Center for Dietitians on Overweight & Obesity, Netherlands

Harriet Verkoelen

Dutch Knowledge Center for Dietitians on Overweight & Obesity, The Netherlands

Treatment of type 2 diabetes mellitus (T2DM), which is usually insulin resistance caused by metabolic syndrome, is mainly by tablets and insulin injections. The treatment protocol starts with a dietary advice which traditionally corresponds to the dietary advice of the World Health Organization (WHO). But when bloodsugarlevels are raised, diabetes medication is prescribed starting with Metformin oral tablets. When bloodsugarlevels are still raised or raise again, Sulfonylurea derivatives (SU) are prescribed in addition. When bloodsugarlevels are still raised or raise again, insulin injections are prescribed in addition. Starting with one injection of long-acting insulin per day. This can be intensified by three injections short-acting insulin per day. Medical treatment of T2DM often comes with a side-effect which is gaining weight. The problem is that T2DM patients mostly are overweight already. Gaining extra weight by medical treatment causes more health problems. Furthermore, increasing overweight causes more insulin resistance. Introducing the low carb lifestyle in the treatment of T2DM brings new possibilities. Less insulin is needed when eating less carbohydrates. This way patients with T2DM can postpone or even stop their medical treatment. A second effect, most importantly, is that the patient will lose weight. This will be beneficial to their health. By losing weight bloodsugarlevels will drop, the blood pressure will also drop, and cholesterol levels will improve (HDL-C and TG). Another effect is that the patient will be less hungry. In my own dietitians' office the focus is on losing weight. That is why I advise the low carb

lifestyle. The result was that 90% of T2DM patients was able to stop insulin injections. They all lost weight and in 80% HbA1c value improved within half a year. More studies show similar results. These findings show that the current treatment protocol of T2DM patients could be considered to change. The doctrine presented here is that overweight patients suffering from type 2 diabetes (T2DM) do not have an insulin deficiency but are actually insulin resistant, causing them an endogenous hyperinsulinemia (characterized by an increase in the size of the belly out of proportion to the diet). Insulin is a growth hormone that drives anabolic metabolism. The increased blood sugar values are a symptom of being overweight induced changes in the metabolic state (insulin resistance). Because of the sulphonylureas (SU) and / or insulin drug (SU tablets and insulin injections), patients undergo overdose such as further increases hyperinsulinemia. This facilitates counter-regulation by causing adrenaline high blood sugar values persist. Typically the drug has increased significantly particular SU tablets and insulin injections - sometimes surprisingly high and often with low levels results. Losing weight seems impossible in this situation. The result is increased insulin resistance and even higher hyperinsulinemia that not only maintains being overweight, but also has a negative impact on the lipid profile. This is one of the mechanisms for hyperinsulinemia is a risk factor for cardiovascular disease. Following a low carbohydrate diet reduces the need for insulin, transforming itself