## Obesity and hormonal contraception

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Obesity today is an epidemic affecting 20-30% of the European population. The WHO defines obesity as a BMI of ≥ 30 kg / $m^2$. Obesity is a risk factor for cardiovascular disease and venous thromboembolism (VTE). During pregnancies it is asscoicated with severe morbidities of infant and mother.Therefore effective contraception is of paramount importance.
Progestagen-only contraceptives (POC) and intrauterine devices are first choice contraceptives in obese women, because to the present knowledge they are safe and do not further elevate VTE risk. However plasma levels of the progestins may be decreased, what theoretically could impair efficacy. DMPA plasma levels are in the therapeutical range in obese women, but can be a the boarder for very obese females. In these cases intervals for the injection could be shortened. Plasma Levels of etonogestrel in implant users decreses over time and can be in the undermost range after two years of use. Therefore an earlier removal has to be considered. For the desogestrel-only pill no data are available with regard to efficacy in obese individuums, however there are no reports about unintended pregnancies with this pill in obese women. Combined preparations can be used after weighing benefits and risks for the individual patient. Women have to be informed about the increased VTE risk and about alternative options for contraception. Newstarters might profit from condom protection during the initial phase of COC use. Preparations with 30mcg EE result in higher plasma levels and might be more efficient. The long cycle is another option to increase efficacy but is offlabel in European countries.