

Weight Gain & Contraceptive Use: A Research Summary¹

Prepared for the Oregon DHS Office of Family Health, Women's and Reproductive Health

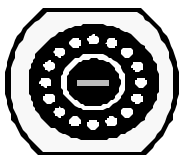


In the spring of 2004, the Office of Family Health, Women's and Reproductive Health asked researchers at Oregon State University's Department of Public Health to conduct 3 literature reviews. This handout summarizes the findings from literature review question 1, "Does quantitative research confirm or deny the existence and extent of weight gain related to the use of birth control methods?"¹

Take Home Messages

- Weight gain while using hormonal contraceptive methods is a concern of both women and providers.
- Determining a causal relationship between use of a method and weight gain is complex due to the fact that weight gain or loss is determined by more than a single variable such as use of the pill. Other variables to take into consideration include diet, exercise routine, age, body image, depression, genetic factors, etc.
- Randomized control trials [RCTs] are the gold standard for measuring a causal relationship between use of contraceptives and weight gain.
- Relatively few RCT studies have closely examined the relationship between contraceptive use and weight gain. The majority of studies conducted are quasi or non-experimental designs. Studies focus on amount of pounds gained failing to measure other explanatory variables such as change in diet or exercise regime.
- The literature indicates that only 2 methods of contraception are associated with weight gain – the implant Norplant® and the injectable Depo Provera®. The results for combined oral contraceptive pills show no association between use and weight gain.

Research Study Findings



Combined Oral Contraceptive Pill:

- 3 placebo-controlled randomized trials found no causal associations between combined OC use and weight gain.
- Comparisons of different formulations of combined OCs showed no substantial differences in weight or in discontinuation due to weight gain.

- It is recommended that practitioners reassure women that substantial weight gain has not been demonstrated in women using combined hormonal contraceptive pills.

Patch:

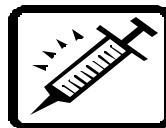
- Three randomized control trials did not find a weight difference between women who used the patch and women taking oral contraceptive pills.



- The patch does not appear to cause weight gain any more or less than what is attributed to oral contraceptive pills.

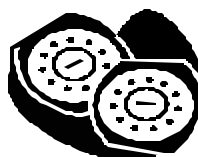
Implants and Injectables:

- Currently, there is no implantable method of contraception available for new contraceptive users in the U.S.



- No randomized controlled trials have examined the effect of implant use or the injectable Lunelle® on weight gain.
- Quasi-experimental studies of implants do show a significant association. Norplant® use is associated with an average weight gain of 2.2 lbs per year.
- Six quasi-experimental and non-experimental studies examined the association between use of the injectable, Depo Provera®, and weight gain. Results indicate that women using Depo Provera® do gain weight in the first year (2.5 –12 lbs) and in subsequent years of use.

Progestin Only Methods [Pills & IUD]:



- No studies examining weight gain have been completed for progestin only pills.
- Only one randomized control study examined the relationship between weight gain and the intrauterine device. No relationship was found between weight gain and use of progestin methods.

Action Steps

1. **Openly discuss weight concerns with your clients, especially adolescents.** Assist clients to identify a plan of action if they feel weight gain may cause them to discontinue a method. Jointly select a backup method in advance. Encourage clients to contact you to discuss side effects and plans to discontinue a method.
2. **Seek additional training on reproductive health impacts of being overweight or obese.** Find out how to best address obesity and weight gain with your clients. Motivational counseling may be an ideal approach.
3. **Encourage your clients to be physically active on a daily basis.** Oregon has the distinction of being the sole state west of the Rocky Mountains with adult obesity rates over 20%. Partner with community organizations to advance the *Healthy Active Oregon* - Physical Activity Plan - <http://www.dhs.state.or.us/publichealth/hpcdp/>

¹ Zukoski, A.P., Hill, T.F., & Kaunda, J.R. (2004). *Weight gain, weight concerns, contraceptive use and reproductive health: A literature review.* Corvallis, OR: Oregon State University, Department of Public Health. For copies contact Jessica.duke@state.or.us - 503-872-6743.