## Birth Control and Its Effect on Love

Hormonal contraceptives have grown quite popular in the modern world, which are used to prevent pregnancy and tend to mask many issues such as dysmenorrhea, to regulate menstrual cycles, help with acne, Endometriosis, PCOS, ect. Birth control is still a new invention, dating back to the 1950s while the influence of birth control on human behavior dates back to only around the 1970s. This article discusses how birth control pills can have an affect on sexual relationships and pair-bonding in humans. Although it's possible that these contraceptives can strengthen the pair-bond by separating sexual intercourse from conception, it may also change women's preferences. This would influence the level of attraction to their partners and potentially affect relationship satisfaction. There are many cons and pros to using hormonal contraceptives and it's usually a topic that isn't discussed enough, especially to teenage girls.

In many cultures, especially the Roman Catholic Church, birth control is considered taboo since sexual intercourse without the possibility of conception doesn't happen within nature and should be forbidden. However, this can accommodate for the high libido that men are evolved with, without contributing to increasing the size of population. The expression of women's libido has been taken into effect due to hormonal birth control, which has been proven to be no less than the results of evolutionary pressures. Which means this could have a positive effect on both parties, therefore potentially maintaining a pair-bond for longer.

When it comes to human behavior and the use of hormonal birth control, it seems that the pill may have an affect on women's partner preferences. In laboratory evidence, it was shown that humans disfavor genetic dissimilarity from body odor, in the same way that female mice were shown to disfavor dissimilarity in mate urine odor. MHC is a protein that is found in

It has been proven that usually women who are considered "sniffers" or not using oral contraceptives, would prefer the partners that had an odor that were usually MHC-dissimilar. When tested in the experimental group, these women who were oral contraceptive users, usually preferred the partners that had an odor that was MHC-similar. However, when testing a different methodology, the correlation between oral contraceptive users and MHC-similar wasn't always true. Which would explain that more factors should be accounted for rather than just pheromones. Other factors such as relationship status, sexual restrictiveness or socioeconomic status do play a role in attraction to potential partners. Tested twice was another control group of women not using hormonal birth control that used the same methodology as before and it was shown that the preference for MHC-dissimilarity wasn't always true, but showed a notable increase in the preference of MHC-similarity among hormonal birth control users. Which introduced that hormonal birth control can definitely modify odor preferences for women on the pill.

Besides the preference of odor, some have wondered whether oral contraceptives have also changed the way women see or choose partners based on other factors not related to smell. It was shown that women were more selective in partners for cues of health during the non-fertile phase compared to the fertile phase of the menstrual cycle, more in pregnant women compared to non-pregnant women, and more in hormonal birth control users compared to non-users. Meaning that there is a greater preference from these groups of women to be more attracted to an individual who has the benefit of having a strong immune system which could also be linked to being more attracted to paternal traits. Other studies have found that hormonal birth control users are shown to be more attracted to more masculine traits that appear to be more dominant.

Women's judgment towards male faces and dominant male odor is high when the woman is ovulating. For oral contraceptive users, facial masculinity attractiveness didn't change much, which could potentially be due to the fact that there are similarities in hormonal levels between pregnant women and women on birth control. When women are in these phases it is usually a time when mate-searching isn't at a high. Although, usually these women are biased towards the benefits of a mate's choice with paternal investments.

If a woman's birth control routine shifts, this can alter the attraction towards their partner. For example, if a woman is already in a relationship and decides to initiate or discontinue taking the pill, the woman's attraction towards her partner may change. This is an important study to be aware about especially since attraction is a very important aspect in maintaining a happy, healthy and satisfying sexual relationship. Another study shows that women who were previously on hormonal birth control while meeting their partner, had less libido and usually enjoyed the non-sexual aspects of the relationship more. A conducted study proved that users of hormonal birth control were more likely to have heightened feelings of romantic jealousy. The studies show that jealousy was more common and heightened during the non-fertile stage, but not fertile stages in the menstrual cycle.

It has been proven that men have an increased attraction of their partner during the time of their mid-cycle which is near ovulation compared to other phases of the menstrual cycle or when using oral contraceptives. Hormonal birth control can also have an effect on the woman's partner due to the different studies listed above such as low libido or not finding their partner attractive if their oral contraceptive routine may change. This could have a hardship on both parties due to neither of them receiving the sexual satisfaction that they are evolved from.

To wrap things up, hormonal birth control has become very common and they are still finding new ways to prevent pregnancies every year. However, there are many pros and cons to using oral contraceptives and it should be the woman's choice of whether or not she wants to take this medication. It has been proven that an estimation of 1 in 4 women aged 15-49 is a user of hormonal birth control. As well as about 4 in every 5 fruitful women are using or have used some time in their lifetime, an oral contraceptive. (<a href="http://hdl.handle.net/1893/21181">http://hdl.handle.net/1893/21181</a>)