Enovid: The First Hormonal Birth Control Pill [1]

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**Enovid** [4] was the first hormonal birth control [5] pill. G.D. Searle and Company began marketing **Enovid** [4] as a contraceptive in 1960. The technology was created by the joint efforts of many individuals and organizations, including Margaret Sanger, Katharine McCormick [6], Gregory Pincus, John Rock, Syntex [7], S.A. Laboratories, and G.D. Searle and Company Laboratories. Although there were many pieces and contributors to the final product, it was first conceived of and created by Gregory Pincus and Margaret Sanger through the Worcester Foundation in Worcester, Massachusetts, and was distributed by Searle, located in Chicago. This technology is important to the history of embryology [8] because it changed the way people viewed birth control [5] and revolutionized women’s birth control [5] methods. There is an extensive literature on the cultural and societal effects of the pill; for example, the effect it had on women’s health care, and how it changed perceptions of female sexuality.

The pill was created in response to the problems of family planning [9] and population control. The first discussions of developing the pill occurred after the depression, when poverty was a serious problem throughout the nation. Having smaller families and having more resources for each child was seen as a strategy to combat poverty. During this time period the eugenics movement [10], which encouraged reproduction by particular individuals and discouraged reproduction by others, was also very influential on Sanger and the development of the pill.

Sanger first proposed the idea of a birth control [5] pill and met with Gregory Pincus in 1950 to discuss the potential project. Both Sanger and McCormick believed that family planning [9] and fertility regulation [11] were essential to giving women more rights and improving their lives. They sincerely believed that medical science could provide these solutions. Both women felt that if a new contraceptive method were created then it should be controlled by women since they are the ones who get pregnant and bear the responsibility. Sanger, in particular, viewed the pill as important for the safety of women because of her experience as an obstetrics nurse working with poor women who had gone through dangerous and harmful abortions. At this time, new and vast knowledge of the endocrinology [12] and physiology of the female reproductive system made a hormonal birth control [5] pill seem like a natural direction to explore.

McCormick had a very large personal inheritance and although there was some funding from the Planned Parenthood Federation of America [13], she contributed the majority of funds for development. Gregory Pincus headed the project and he and Min-Chueh Chang [14] were responsible for the basic concept of the pill. John Rock conducted the actual clinical trials. The pill consists of synthetic estrogen [15] and progestin [16] (a type of synthetic progesterone [17]). The progestin [16] used for the first birth control [5] pill was norethynodrel [18] developed by Frank Colton [19] in 1953. Carl Djerassi [20] developed norethindrone [21] at Syntex [7] Laboratories in 1951, which was used in many of the first birth control [5] pills. Both inventors worked independently of Pincus’ project and did not foresee the use of progestins as birth control [5]. At the Fifth International Conference on Planned Parenthood in 1955, Pincus announced that in his experiments on rabbits, these two compounds, norethynodrel [18] and norethindrone [21], were found to have the greatest potential for development into a hormonal contraceptive pill. In 1954 and 1955 John Rock conducted clinical trials with norethynodrel [18] at the Free Hospital for Women [22] in Boston, Massachusetts, and from 1957–1958 Dr. Edris Rice-Wray [23] conducted trials in Puerto Rico. In 1957 Enovid [4] was put on the market for the treatment of gynecological disorders but was used off-label for birth control [5] and was finally marketed explicitly for contraceptive purposes in 1960.

In the US, the pill was initially prescribed only to married women but has since been prescribed regardless of relationship status. Enovid [4] was the first birth control [5] pill, but today there are many different kinds of hormonal birth control [5] pills with different levels and types of hormones [24], providing more choices for women. The development of the pill was influenced by many theories and ideas: the existing knowledge of endocrine and reproductive systems, concern over population control and family planning [9], reproductive rights [25], the use of science to find solutions to societal problems, and the existence of synthetic hormones [26].