

Chapter 1 : Update on Oral Contraceptive Pills - - American Family Physician

The Pill: an update – At present ~ million women rely on oral contraceptives worldwide – Oral contraceptives are "anovulatory agents" - ie they prevent ovulation – When used properly, they are virtually % effective – Relatively low cost – BUT there are side effects.

Contraceptive use[edit] Combined oral contraceptive pills are a type of oral medication that is designed to be taken every day, at the same time of day, in order to prevent pregnancy. For the first 21 days of the cycle, users take a daily pill that contains hormones estrogen and progesterone. The last 7 days of the cycle are hormone free days. Some packets only contain 21 pills and users are then advised to take no pills for the following week. Other packets contain 7 additional placebo pills, or biologically inactive pills. Some newer formulations have 24 days of active hormone pills, followed by 4 days of placebo examples include Yaz 28 and Loestrin 24 Fe or even 84 days of active hormone pills, followed by 7 days of placebo pills Seasonale. Then after 28 days, or 91 days depending on which type a person is using, users start a new pack and a new cycle. For instance, someone using oral forms of hormonal birth control might be given incorrect information by a health care provider as to the frequency of intake, forget to take the pill one day, or simply not go to the pharmacy on time to renew the prescription. COCPs provide effective contraception from the very first pill if started within five days of the beginning of the menstrual cycle within five days of the first day of menstruation. If started at any other time in the menstrual cycle, COCPs provide effective contraception only after 7 consecutive days use of active pills, so a backup method of contraception such as condoms must be used until active pills have been taken for 7 consecutive days. COCPs should be taken at approximately the same time every day. If less than 24 hours have passed, the pill is considered "late. Continue to take the rest of the pack as instructed. No backup method should be necessary as long as no other pills were missed that cycle. If two or more pills were missed, take the missed pill as soon as possible. Continue to take the rest of the pack as instructed, even if that requires taking more than one pill in a day. Use a back up method for 7 days. If pills are missed in the first 7 days on the cycle, and the user had unprotected sex within the 5 days prior to starting menstruation, emergency contraception should be considered in addition to a back up method. If pills are missing the last 7 hormonal days days , continue to take the hormonal pills until finished and start a new pack right away with taking the placebo pills. A backup method should still be used for 7 days. If the pills do not use a monthly cycle, ask a doctor for information. By continuing to take a pill everyday, users remain in the daily habit even during the week without hormones. Failure to take pills during the placebo week does not impact the effectiveness of the pill, provided that daily ingestion of active pills is resumed at the end of the week. Because the pill suppresses ovulation to be discussed more in the Mechanism of Action section , birth control users do not have true menstrual periods. Instead, it is the lack of hormones for a week that causes a withdrawal bleed. Unexpected breakthrough bleeding can be a possible side effect of longer term active regimens. No or less frequent placebos[edit] Main article: Extended cycle combined oral contraceptive pill If the pill formulation is monophasic, meaning each hormonal pill contains a fixed dose of hormones, it is possible to skip withdrawal bleeding and still remain protected against conception by skipping the placebo pills altogether and starting directly with the next packet. Attempting this with bi- or tri-phasic pill formulations carries an increased risk of breakthrough bleeding and may be undesirable. It will not, however, increase the risk of getting pregnant. Starting in , women have also been able to use a three-month version of the pill. Seasonique is another version in which the placebo week every three months is replaced with a week of low-dose estrogen. A version of the combined pill has also been packaged to completely eliminate placebo pills and withdrawal bleeds. FDA for the previously mentioned uses despite extensive use for these conditions. Women with PCOS often have higher than normal levels of estrogen all the time because their hormonal cycles are not regular. This overgrowth is more likely to become cancerous than normal endometrial tissue. Both COCPs and progestin-only methods are recommended. COCPs are preferred in women who also suffer from uncontrolled acne and symptoms of hirsutism, or male patterned hair growth, because COCPs can help treats these symptoms. This works to lessen its inflammatory effects. Surgery is the only definitive treatment.

Studies looking at rates of pelvic pain recurrence after surgery have shown that continuous use of COCPs is more effective at reducing the recurrence of pain than cyclic use [38] Adenomyosis[edit] Similar to endometriosis, adenomyosis is often treated with COCPs to suppress the growth the endometrial tissue that has grown into the myometrium. FDA for that sole purpose. Women who are experiencing menstrual dysfunction due to female athlete triad are sometimes prescribed oral contraceptives as pills that can create menstrual bleeding cycles. Oral contraceptives should not be used as an initial treatment for female athlete triad. People with known or suspected breast cancer or unexplained uterine bleeding should also not take COCPs. Women who are known to be pregnant should not take COCPs. Postpartum women who are breastfeeding are also advised not to start COCPs until 4 weeks after birth due to increased risk of blood clots. The most common side effect is breakthrough bleeding. The risk reduction for both ovarian and endometrial cancer persists for at least 20 years. Cervical cancer risk in those infected with human papilloma virus is increased. The study found that women experienced a significantly wider range of arousal responses after beginning pill use; decreases and increases in measures of arousal were equally common. Women continuing use of oral contraceptives had SHBG levels four times higher than those who never used it, and levels remained elevated even in the group that had discontinued its use. A study found the pill can have a negative effect on sexual attractiveness: High levels of estrogen, as in first-generation COCPs, and progestin, as in some progestin-only contraceptives, have been shown to lower the brain serotonin levels by increasing the concentration of a brain enzyme that reduces serotonin. Hypertension[edit] Bradykinin lowers blood pressure by causing blood vessel dilation. Certain enzymes are capable of breaking down bradykinin Angiotensin Converting Enzyme, Aminopeptidase P. Progesterone can increase the levels of Aminopeptidase P AP-P , thereby increasing the breakdown of bradykinin, which increases the risk of developing hypertension. Side effects associated with older high-dose COCPs include nausea , vomiting , increases in blood pressure , and melasma facial skin discoloration ; these effects are not strongly associated with low-dose formulations. Excess estrogen, such as from birth control pills, appears to increase cholesterol levels in bile and decrease gallbladder movement, which can lead to gallstones. One study claims that the pill may affect what male body odors a woman prefers, which may in turn influence her selection of partner. These include drugs such as rifampicin , barbiturates , phenytoin and carbamazepine. In addition cautions are given about broad spectrum antibiotics, such as ampicillin and doxycycline , which may cause problems "by impairing the bacterial flora responsible for recycling ethinylestradiol from the large bowel" BNF Mechanism of action[edit] Combined oral contraceptive pills were developed to prevent ovulation by suppressing the release of gonadotropins. Combined hormonal contraceptives, including COCPs, inhibit follicular development and prevent ovulation as a primary mechanism of action. Decreased levels of FSH inhibit follicular development, preventing an increase in estradiol levels. Progesterone negative feedback and the lack of estrogen positive feedback on LH secretion prevent a mid-cycle LH surge. Inhibition of follicular development and the absence of an LH surge prevent ovulation. Estrogen negative feedback on the anterior pituitary greatly decreases the secretion of FSH, which inhibits follicular development and helps prevent ovulation. Endometrial atrophy and alteration of metalloproteinase content, which may impede sperm motility and viability, or theoretically inhibit implantation. Endometrial edema, which may affect implantation. Insufficient evidence exists on whether changes in the endometrium could actually prevent implantation. The primary mechanisms of action are so effective that the possibility of fertilization during COCP use is very small. Since pregnancy occurs despite endometrial changes when the primary mechanisms of action fail, endometrial changes are unlikely to play a significant role, if any, in the observed effectiveness of COCPs. Oral contraceptive formulations Oral contraceptives come in a variety of formulations, some containing both estrogen and progestins , and some only containing progestin. Doses of component hormones also vary among products, and some pills are monophasic delivering the same dose of hormones each day while others are multiphasic doses vary each day. COCPs have been somewhat inconsistently grouped into "generations" in the medical literature based on when they were introduced. After three years of extensive botanical research, he discovered a much better starting material, the saponin from inedible Mexican yams *Dioscorea mexicana* and *Dioscorea composita* found in the rain forests of Veracruz near Orizaba. The saponin could be converted in the lab to its aglycone moiety

diosgenin. Unable to interest his research sponsor Parke-Davis in the commercial potential of synthesizing progesterone from Mexican yams, Marker left Penn State and in co-founded Syntex with two partners in Mexico City. When he left Syntex a year later the trade of the barbasco yam had started and the period of the heyday of the Mexican steroid industry had been started. Syntex broke the monopoly of European pharmaceutical companies on steroid hormones, reducing the price of progesterone almost fold over the next eight years.

Chapter 2 : Update the firmware of your Beats product

Pill , Beats Pill +, Powerbeats 2 Wireless, Powerbeats 3 Wireless, Studio Wireless, Studio 3 Wireless, Solo 2 Wireless, Solo 3 Wireless, or Beats x A recent version of Apple Safari, Google Chrome, Mozilla Firefox, or Microsoft Internet Explorer.

These side effects often settle with time. The pill has not been shown to cause weight gain. Can the pill cause any serious health problems? The pill causes a very small increase in your risk of deep vein thrombosis blood clot , heart attack or stroke. When is the pill not a good option? The pill may not be a good option for you if you: What if I miss a pill? If you miss a pill: Take the missed pill as soon as you notice this may mean taking two pills on the same day. Continue to take your pills as normal. Use condoms for the next seven days. If you have had sex without a condom in the seven days before missing a pill, you may need emergency contraception or you may need to skip your next sugar pills and start a new pill pack in the hormone section. This depends on where you are up to in the pill packet check with your doctor, nurse or pharmacist. It is safe to continue the pregnancy and stop the pill or to have an abortion. If you are breastfeeding, do not use the pill until your baby is six weeks old. After six weeks you can use the pill but other types of contraception might be better choices check with your doctor, nurse or pharmacist. If you are not breastfeeding, you can start using the pill once your baby is three weeks old check with your doctor, nurse or pharmacist. You can stop the pill at any time and your fertility will quickly return. What else should I know about the pill? If you run out of pills and cannot see a doctor for a new script, speak to a pharmacist. They can often give you a small supply of pills without a script. If possible show them your old pill packet.

Chapter 3 : Combined oral contraceptive pill - Wikipedia

VIDEO UPDATE: "The Red Pill" did hit #1 in Canada, as I source. TRP has now hit #1 in the USA, Canada, Australia, and Sweden on Youtube. It has hit #1 on Google Play in Australia, and possibly.

Intermenstrual spotting Breakthrough vaginal bleeding is common between expected periods. This usually resolves within 3 months of starting to take the pill. During spotting, the pill is still effective, as long as it has been taken correctly and no doses are missed. Anyone who experiences 5 or more days of bleeding while on active pills, or heavy bleeding for 3 or more days, should contact a health care professional for advice. This bleeding may happen because the uterus is adjusting to having a thinner endometrial lining or because the body is adjusting to having different levels of hormones.

Nausea Some people experience mild nausea when first taking the pill, but symptoms usually subside after a while. Taking the pill with food or at bedtime may help. If nausea is severe or persists for longer than 3 months, you should seek medical guidance.

Breast tenderness Birth control pills may cause breast enlargement or tenderness. This normally resolves a few weeks after starting the pill. Anyone who finds a lump in the breast or who has persistent pain or tenderness or severe breast pain should seek medical help. Tips for relieving breast tenderness include reducing caffeine and salt intake and wearing a supportive bra.

Headaches and migraine Some people experience side effects with "the pill," such as irregular periods, nausea, headaches or weight change. The hormones in birth control pills can increase the chance of headaches and migraine. Pills with different types and doses of hormone may trigger different symptoms. Using a low-dose pill may reduce the incidence of headaches. Symptoms normally improve over time, but if severe headaches start when you begin taking the pill, you should seek medical advice.

Weight gain Clinical studies have not found a consistent link between the use of birth control pills and weight fluctuations. However, fluid retention may occur, especially around the breasts and hips. According to one review, most studies have found an average weight gain of under 4. Studies of other birth control methods showed the same gain. Some types of hormonal contraceptive have been linked to a decrease in lean body mass. Anyone experiencing mood changes during pill use should contact their medical provider.

Missed periods Even with proper pill use, a period may sometimes be missed. Factors that can influence this include stress, illness, travel, and hormonal or thyroid abnormalities. If a period is missed or is very light while using the pill, a pregnancy test is recommended before starting the next pack. It is not unusual for a flow to be very light or missed altogether on occasion. If concerned, seek medical advice.

Decreased libido The hormone or hormones in the contraceptive pill can affect sex drive or libido in some people. If decreased libido persists and is bothersome, this should be discussed with a medical provider. In some cases, the birth control pill can increase libido, for example, by removing concerns about pregnancy and reducing the painful symptoms of menstrual cramping, premenstrual syndrome, endometriosis, and uterine fibroids.

Vaginal discharge Changes in vaginal discharge may occur when taking the pill. This may be an increase or a decrease in vaginal lubrication or a change in the nature of the discharge. If vaginal dryness results, added lubrication can help make sex more comfortable. These changes are not usually harmful, but alternations in color or odor could indicate an infection. Anyone who is concerned about such changes should speak with their medical provider.

Eye changes Hormonal changes caused by the birth control pill have been linked to a thickening of the cornea in the eyes. Oral contraceptive use has not been associated with a higher risk of eye disease, but it may mean that contact lenses no longer fit comfortably. Contact lens wearers should consult their ophthalmologist if they experience any changes in vision or lens tolerance during pill use.

Risks The combined pill can increase the risk of cardiovascular problems, such as blood clots, deep vein thrombosis (DVT), a clot on the lung, a stroke or heart attack. Birth control pills have also been associated with an increase in blood pressure, benign liver tumors, and some types of cancer. The pill should not be taken by:

Long-term effects Use of birth-control pills may increase the risk of long-term health problems.

Cardiovascular problems People with a history of blood clots, heart attacks or stroke are advised not to take the combination birth control pill. Combination pills can slightly increase the risk of cardiovascular side effects, such as heart attack, stroke, and blood clots. These can all be fatal. The risk is higher with some pills. A doctor can advise on suitable options. Anyone who has

uncontrolled high blood pressure or a personal or family history of blood clots, heart attack, or stroke should ask their medical provider about alternative methods. Cancer risk Female hormones that occur naturally, such as estrogen, are thought to affect the chances of a woman developing some types of cancer. It is therefore possible that using a hormone-based method of birth control could have a similar effect. Ovarian and endometrial cancer: These appear to be less likely among women who use the pill. There appears to be a slightly higher chance of breast cancer developing in women who have recently been using the contraceptive pill, and especially if they started using it during their teenage years. However, after 10 years of not using the pill, the risk appears to be the same as for someone who has never used it. Long-term use of the pill has been linked to a higher risk of cervical cancer, compared with those who have never used it. However, most types of cervical cancer are caused by the human papillomavirus HPV. Whether HPV is linked to the use of oral birth control pills has not yet been confirmed. Oral contraceptives have been linked to a higher chance of developing benign liver tumors, but these rarely become cancerous. Some studies have suggested that liver cancer risk is higher after using oral contraceptives for at least 5 years, but other studies have not had the same results. Alternatives For those who cannot use or do not wish to the birth control pill, other options are available. Condoms This is a barrier method of birth control that prevents sperm from coming into contact with egg cells. Male condoms are sheathes that are placed over the penis. A female condom is a pouch with a ring at each end. It is inserted into the vagina. Condoms are widely available, but they are often made from latex, which can trigger an allergy in some individuals. Alternative materials include polyurethane or lambskin. For both types of condom, the risk of it not working is 18 percent or over in a year. Diaphragm This is a shallow, dome-shaped rimmed cup that is placed in the vagina to block the cervix. Used with spermicide, it prevents the sperm and egg from meeting. Disadvantages include possible urinary tract infections and vaginal irritation. The irritation may stem from a reaction to the material the diaphragm is made from or the spermicide. Between 6 and 12 pregnancies occur annually in every women who use it, because of human error. NuvaRing vaginal ring A plastic ring is inserted into the vagina, and it releases hormones to suppress ovulation. Each month, it is inserted for 3 weeks and removed for 1 week, during which menstruation occurs. These hormones are very similar to the pill, so similar side effects can occur. Every year, between 6 and 12 pregnancies occur in every women who use it, because of errors in use. As a hormonal method of birth control, the vaginal ring can have similar side effects to the pill, including intermenstrual spotting, headache, and reduced libido. Intrauterine devices IUDs Intrauterine devices offer an alternative to the birth control pill. IUDs can be hormonal or non-hormonal. Hormonal IUDs thicken the cervical mucus and suppress ovulation. Non-hormonal IUDs produce an inflammatory response in the uterus that is toxic to sperm. It lasts for up to 10 years and is almost percent effective at preventing pregnancy. Adverse effects include intermenstrual spotting and irregular menses. Some IUDs can lead to heavier periods with worsened cramps.

Chapter 4 : *œ*™m on the Pill• PrEP Ads Begin Airing on National TV - POZ

For Pill or Pill XL owners, the new software updates speed up boot times and allow you to use the speaker while plugged in by hitting the large 'b' button. The Pills are also better about.

In addition to effective contraception, benefits include the prevention of ovarian and endometrial cancers, an increase in bone mass and the reduction of perimenopausal symptoms. Cardiovascular complications are the major concerns in older women who take oral contraceptive pills Table 7. Venous thromboembolism occurs more often in women who use this form of contraception, regardless of age i. Check for any reason WHO criteria [see Table 3] that the patient should not take oral contraceptive pills. Ask the patient about a history of headaches, hypertension and diabetes; ask about a family history of premature cardiovascular disease. Ask the patient about smoking habits. If the patient is 50 to 52 years of age, assess the follicle-stimulating hormone level during a pill-free interval. Smoking dramatically increases the risk of myocardial infarction at the ages when the overall risk of this event begins to rise steeply. The combination of oral contraceptive pill use and smoking has a greater effect on risk than the simple addition of the two factors. Thus, oral contraceptive pills generally are not prescribed to smokers over 35 years of age. Strong smoking cessation assistance should be provided to women who wish to use oral contraceptive pills. Women past menopause are no longer at risk of pregnancy and do not need contraception. Thus, oral contraceptive pill use can be discontinued after menopause is documented. Menopause is generally indicated by a serum follicle-stimulating hormone FSH level greater than 30 mIU per mL 30 IU per L , measured on the sixth day of a seven-day pill-free interval. In some women, the FSH level may not rise sufficiently during the pill-free interval; in others, there is a slight chance of a late ovulation, even with one high FSH level. Then they are instructed to use a back-up contraceptive method for the pill-free period required to check and possibly recheck the FSH level. Menopause can be diagnosed and contraception may be safely discontinued if the following criteria are met: Estrogen replacement therapy is helpful for treating menopausal symptoms and preventing osteoporosis. Teenage girls and their sexual partners have the highest rates of sexually acquired infections of any age group, and they do not usually establish long-term mutually monogamous relationships. Hence, use of a barrier method for protection from infection should be advocated and prescribed with oral contraceptive pills for all sexually active teenage girls. Adolescents may be more likely to discontinue oral contraceptive pill use because of early or minor side effects, such as nausea or breakthrough bleeding. Therefore, the family physician needs to provide thorough counseling before this form of contraception is initiated and should be prepared to respond to complaints after a teenage girl starts taking the pill. Counseling that these benefits evaporate when pills are discontinued helps to encourage compliance when the primary purpose of oral contraceptive pill use is to relieve a physiologic condition. Acne and hirsutism may be improved with the use of more estrogenic formulations and the newest progestin formulations. The American Academy of Family Physicians has published a policy position statement regarding contraceptive advice in adolescents.

Chapter 5 : Beats Updater App is a Must-Download for Beats Pill or Studio Wireless Users – Chip Chick

Despite the fact a Harvard researcher has recently been quoted to say the secret to halting the aging process is much closer than we think and that "there is no limit on the human lifespan," [Yahoo News Aug 19,], it is difficult if not impossible to conclusively prove so-called anti-aging.

Please connect to your computer and run the following command: In our next release, we will make the navigation bar hiding a separate toggle so users can opt-in to hiding the navigation bar. This will hopefully fix that problem. This is NOT a bug. This is a side-effect of a change we intentionally made after version 1. We are coloring in the nav bar to hide this white line. We are not sure if this obscure workaround will still work in the final release of Android P. To give us a higher chance of that workaround still working in P, we are choosing not to publicize this workaround. Please bear with us! Do not uninstall the app unless you first disable the pill in the app. Please first disable the pill and then uninstall it like normal. We have no way of simulating a long press on the back button without root. A tentative solution we are looking into is detecting when the phone enters a pinned screen state and disabling the pill to bring back the stock nav bar. The app hides the dock in Samsung DeX. Apparently, the dock in DeX is seen as a navigation bar. Very likely no, sorry. We are already pushing the screen content down to hide the nav bar. Adding this feature would require us to push the screen content up as well. Can we hide the pill when on the launcher? Yes, a future release will allow for hiding the pill when you are on your home screen. Can we have the pill open a certain app? Yes, that is planned for a future release. Can we have the pill open an app launcher? Can we lock the screen? There are 4 ways we know of to do this, and none of them are ideal. Can we take a screenshot? Can we add special root actions? Yes, we planned to have them for this release but had to push them back. Feedback and Support Feedback is very important for us. We plan on adding additional features in coming releases to give users more options for swipe gestures and actions. We hope to provide an experience that can replace the navigation bar on your device. If you feel that we should add a feature or two to make that happen, then please reach out to us with your ideas!

Chapter 6 : Another Windows 10 version overview – Red Pill Blogs

Update: How I feel three months after coming off the Pill February 10, By Poppy Dinsey 96 Comments Back in November I blogged about coming off the Pill and I was overwhelmed by the response to it, both publicly and privately.

How the world got lost on the road to an anti-aging pill Subscribe to our newsletter to receive email notifications when new articles are posted. Markers of aging Short of conducting decades-long studies that would be impractical and unaffordable, there are biological markers of aging that may suffice to prove bona fide anti-pills are at hand. Resveratrol-based dietary supplements are known as molecular mimics of a calorie-restricted diet. Limited calorie diets have been demonstrated to double the lifespan and healthspan of laboratory animals. Two biological experiments reveal this: The oat fiber bran diet decreased the accumulation of aging pigment called lipofuscin almost equally as well as a limited calorie diet. The following section of this report further briefly addresses the validity of the overmineralization theory of aging. The Overmineralization Theory of Aging is also more fully described at the Longevinex website. Of all the various theories about why humans age the antioxidant theory, the hormonal theory, the wear-and-tear theory, the mitochondrial theory, the telomere theory, the immune theory , none of them help explain why humans age at three different speeds. If aging is measured by the rate of accumulation of cellular debris called lipofuscin , an agreed-upon marker of aging, then there is little or no aging during the growing years the first 18 years of life , there is progressive buildup of lipofuscin in the adult years and then the rate of aging flattens out in old age. If you look through a microscope at young cells you see very little if any lipofuscin. So humans are having birthdays during their growth years but not getting old biologically. That is because calcium from the diet is being directed toward growing new bone, iron to make new red blood cells and copper to make connective tissue during the growth years. Once growth ceases then these minerals slowly accumulate. This explains why females generally live longer than males. If a female undergoes early hysterectomy she experiences the same rate of disease as males. Consistent with the overmineralization theory of aging, early surgical hysterectomy increased ferritin iron storage levels in the brain [Neurobiology of Aging Sept] and other organs. Overmineralization drives the speed of aging. Mineral chelators key-lay-tors prolong life. So does blood-letting blood donation to reduce iron stores. Countries where there is water and grassland to feed cattle Scandinavia, Ireland, North America, New Zealand consume more iron-rich red meat and calcium-rich dairy and have the highest rates of heart disease and cancer. What valid markers are there for aging that can be used today? Since it is both impractical and too expensive to conduct a life-long year human longevity study, biologists are left to assess biological markers of aging. There are a number of valid markers of aging. These include but are not limited to 1 lipofuscin accumulation cellular debris , 2 iron accumulation measured as ferritin , and 3 red blood cell width. Lipofuscin and aging Lipofuscin aging pigment is a recognized hallmark of aging and the rate of its accumulation correlates with longevity. For a view of its appearance under the microscope click here. It is formed when compartments within living cells called lysosomes begin to accumulate metals and no longer efficiently clean up cellular debris via enzymatic processes. Lipofuscin can be experimentally increased by exposing cells to greater oxidation and reduced by iron-chelating antioxidants. Lipofuscin can generate free radicals and gene mutations. Once formed lipofuscin is believed to be non-degradable though exceptions are noted. Metal chelators such as resveratrol have been demonstrated to prolong the life of killfish and reduce lipofuscin. However, while lipofuscin would generally require a tissue biopsy to quantify, there may be a non-invasive way to measure it. Stuart Richer OD, PhD with the Rosalyn Franklin School of Preventive Medicine and the North Chicago Veterans Hospital, using direct images of the back of the eyes, has demonstrated that lipofuscin deposits can be reversed via use of oral mineral chelators. The patient experienced dramatically improved vision and lipofuscin deposits were measurably reduced as visualized with retinal photography. This approach awaits technology that will quantify rather than just guesstimate the degree of lipofuscin deposits in the human eye. Ferritin, the iron storage protein, can also be used as a measure of aging though it is sometimes elevated due to chronic infection, inflammation or malignancy which can skew its interpretation. Since iron promotes inflammation and the growth of germs and

cancer cells, the body binds up iron in the ferritin molecule to counter the spread of disease. More than three decades ago it was reported that there is a tendency for iron-stores to increase with advancing age and that iron storage levels ferritin were generally higher in males than females, which helps to explain why men have shorter lifespans than women. Ferritin is a protein the binds and stores iron in the body as excesses accumulate. Ferritin numbers remained low for women into their 40s which was attributed monthly iron losses in menstrual flow whereas ferritin levels rose for males between age 20 and 40. Low ferritin levels were rarely found among women over age 40. Also unbound iron is a source of inflammation and ferritin levels rise in order to limit inflammatory reactions. Ferritin levels may be more important in assessing inflammation than other tests such as C-reactive protein. Iron dietary supplements and red meat are the two primary sources of highly absorbable iron whereas whole grains that provide bran decrease absorption of dietary iron. These are 1 blood-letting; 2 limiting red meat consumption and iron in multivitamins; 3 avoidance of ascorbic acid vitamin C with meals since vitamin C increases iron absorption from the diet; 4 use of iron chelators with meals such as from beverages tea, coffee, from the diet bran from whole grains or from dietary supplements IP6 rice bran extract, quercetin. This may mean you have underlying infection or inflammation and may be a temporary condition.

Red blood cell width distribution Red blood cell width was first recognized as a marker of human mortality in 1950, though it has been known that red blood cell width increases with advancing age since 1910. The intriguing aspect of red blood cell width as a marker of human aging is that it is a widely available and economical off-the-shelf test performed every day with the aid of a Coulter counter in blood laboratories. Red cell width is associated with all-cause mortality. As a person ages the width of their red blood cells expand and their telomeres shorten. Males have significantly shorter telomere lengths than females, [PLoS One Dec 4, 2013] which is again consistent with the overmineralization theory of aging males are more iron overloaded. Human red blood cells usually fall within the range of micrometers in diameter. However red cell width measures the deviation of the red blood cell width, not the actual width or size of individual cells. They generally vary in an individual by 10-15%. A high red cell width variation over 15% is a red cell width variation below 10%. To understand more how red blood cell width is defined and calculated, click here. The study should be completed before the end of 2013 and results reported. Serious longevity seekers can go to a local blood testing lab and order up a complete blood count CBC that includes measure of red blood cell width variance and test this over time and determine how well their anti-aging regimen is working. It would be wise to have a lab draw an extra tube of blood for a ferritin test at the same time. Be aware, some people have been taking resveratrol pills now for more than ten years. Long-time users of anti-aging nutraceuticals may not produce marked differences in ferritin and red cell width variation as new users.

Chapter 7 : Taking the Red Pill: Michael Goldstein for Congress

With The Pill Club (which hopes to reach all 50 states within the next year), women can cut out the middle man, and get their birth control conveniently delivered right to their door.

Things have been tough. Just bear with me, please! I have shared it on Instagram as well, my account is pillsandpebbles incase you wanted to check it out. I wanted to say that thanks to Plasma Exchange, my resting pulse is now in the 80s! Okay, you can clearly see my thoughts are all over the place. But brain fogâ€¦ it just makes me feel like an idiot. What I mean is, my blood work for the past few weeks shows my hemoglobin is continually falling. I did my last set of blood work as of last week. However as of this weekend, I am passing massive amounts of blood with my stools. I tend to ramble about my emotions on Twitter, as pillsandpebbles, though not as much as usual lately because of my migraines. It is eating me up alive. Using my phone and computer is difficult. I am currently reading Lucky Man, by Michael J. He is a great guy. He has another memoir called Always Looking Up, and I highly recommend reading it. He also talks about how he wants to seek treatment, raise money to fund research and work with politicians to allow stem cell research that can maybe lead to a cure. Wow, I really got off topic. I am able to walk with no issue anymore. Okay, I do have some issues, I can use the stairs a lot more without assistance but I still have limitations and get exhausted. At least I can breathe though. However, the side effects post treatment have really been destroying me. I either gets sick immediately after treatment, or I have a false sense of security where I feel really wonderful after treatment for an hour or so and then BOOM, the nausea hits me. One of the days that Albert took me, I almost threw up in the car. He pulled over to the side of the road just in time for me to puke my guts out. When we got home and he made sure okay, he came up to me and hugged me to thank me for not throwing up in his car. He always takes care of me, regardless of how bad and gross things can get. Moving on, one of the days after treatment, I was feeling fine, so we went to Poutineville. This amazing poutine restaurant is near the hospital, so we decided to go. I barely managed to eat any, but it was delicious. I only managed to eat at tiny bit though. I have no idea how I have a boyfriend considering how gross poutine vomit is. At least I got to eat the poutine without gaining weight? Is that the bright side? So yeah, treatment worsens my migraines. I look a bit silly, but what else can I do? All of this being said, I really love Plasma Exchange. It could be worse. My resting pulse has been falling into the 80s now. Treatment is really changing my life. I can help myself. I can be a little more independent now. My vomiting post treatment also began when these issues started as well. I am going to inquire about if I need iron infusions or blood transfusions because something is clearly wrong and we need to figure it out. All of this is tough on me, but I can manage it. My tachycardia is getting better and that makes me happy. I realised that from the outside looking in, my life seems really badâ€¦ but I love my life. I have a wonderful life. You may also like

The first way to get free updates for the TomTom maps is offered by the developer and it is called MapShare. MapShare is a facility by means of which the users can make changes to TomTom maps by correcting or modifying street names, blocked roads, turn restrictions, changes in traffic direction or in speed limits.

What she felt should have been an exciting time for her and her partner, had become an anxiety-provoking, stressful one. On top of it, she was experiencing cystic acne and weight gain, neither of which had been a problem for her before the pill! She was feeling pretty desperate, and worse with each new announcement from a friend that a baby was on the way. She and her husband were in the early stages of exploring fertility treatments. Together we discovered that Elise had PCOS, the likely cause of her irregular periods that led to her being started on the pill in the first place – but which had never been recognized and diagnosed. The introduction of oral contraceptives in the 1960s was a major breakthrough for women, giving us more autonomy, freedom, and reproductive choice. To learn more about the potential risks associated with the pill, head over here. Most women transition off it without much problem. With the targeted strategies I walk you through in this article, you can reset your hormone balance so that you, too, have healthy, natural cycles – not pill imposed ones – and in not too long a time. Statistically, most women regain hormonal balance within three months of stopping the pill. This gap between what science shows and what women experience is yet another instance in which women feel medically marginalized or ignored. After stopping the pill, here are some of the most common symptoms women have come to me for help with: Irregular or skipped periods. This may be because periods were irregular before starting the pill or because of a interrupted communication between the ovaries and the hypothalamus the part of the brain that helps regulate bodily processes. This symptom is especially common if you went on the pill to regulate your period or ease heavy bleeding in the first place. Rather, it limits the growth of the uterine lining and blocks ovulation – resulting in a controlled monthly bleed that is more of a hormonal breakthrough bleed and not quite the same as a normal menstrual period. When you go off the pill, heavy bleeding can return if you had it before, or you can experience it anew as your body establishes its own natural hormone balance. Ovulation pain and menstrual cramps. But after they can return with a vengeance. Oral contraceptives reduce the amount of testosterone produced by the body. Testosterone is associated with acne this is often why teenage boys have more severe acne than teenage girls and as your levels return to normal, zits can come along with it. The progestin in some pills acts as a diuretic, so some women retain fluid after coming off the pill. This resolves over time as you re-establish natural hormone balance, but can initially make you feel puffier, fatter, and can show up as additional pounds on your scale or feeling that your clothes are tighter. While the pill itself can initially cause more than usual moodiness, so can going off of it as your body moves away from a carefully controlled daily dose of hormones from the pill, to your own ebbs and flows. This is particularly the case if you had PMS before going on the pill, but can occur regardless. While not a symptom in itself, nutritional deficiencies can cause a host of symptoms – including hormonal imbalances. They are also a problem for women who come off the pill hoping to get pregnant right away because low nutrient status has been associated with fertility problems, and low nutrients in mom can also mean low nutrients in baby. The pill has been associated with robbing a number of nutrients including B vitamins and magnesium. A recent study also found that vitamin D levels drop soon after stopping the pill. While they can regulate our cycles and control many hormonal symptoms, they do so by suppressing our natural cycles of ovulation, menstruation, and hormonal fluctuation. Placebo pills for the last 5 days of the cycle lead to a breakthrough bleed, not a true menstrual period. If you went on the pill to address acne or an irregular cycle, the pill may have simply buried your symptoms. If you went on the pill for birth control, you may not have been suppressing a specific medical condition or symptoms, but a condition or set of symptoms might also have emerged during your time on the pill that were masked by the pill. PCOS is a harbinger of metabolic syndrome and Type 2 diabetes in some women, which themselves are harbingers of other chronic conditions, like heart disease or non-alcoholic fatty liver disease, so not getting proper treatment is a big deal. The good news is that there are ways to use nutrients, herbs, and lifestyle medicine to rebalance

your hormones and ease your symptoms when you come off the pill. **Reset Your Hormones Naturally** If you are coming off the pill, there are many effective ways to balance your hormones and ease symptoms post-pill. Here is my post pill reset plan. I recommend either incorporating all of the steps simultaneously, or pacing it by implementing Step 1 for 2 weeks, adding in Steps 2 and 3 for an additional 4 weeks while continuing Step 1, and if needed, at around 6 weeks on the plan, add in Step 4 while continuing the first three Steps. Vitamin D levels may also drop after coming off the pill. To replace missing nutrients, emphasize nutrient-dense foods at every meal: If tests show nutrient deficiencies, work with your primary provider or nutritionist to supplement enough to boost your levels to an optimal range. Balance your blood sugar. Research has linked oral contraceptive use with imbalanced blood sugar and insulin resistance, two factors that wreak even more havoc on hormonal balance while simultaneously setting the stage for a variety of other quality-of-life-diminishing conditions. Keep your blood sugar steady by eating whole, real, foods. Prioritize breakfast and make sure it includes healthy protein and fat. Keep sugar and white flour to a bare minimum and skip the alcohol which itself can create hormone imbalance especially estrogen. Regular moderate exercise also helps keep blood sugar steady and balanced but over-exercise can have the opposite effect, triggering inflammation and worsening blood sugar imbalances. Consider ditching dairy while rebalancing your hormones. Many women find that removing it from the diet, even if just for 6 to 12 months, makes a difference. If you do include dairy in your diet, make sure it is organic and full fat to minimize toxin exposure and maximize nutrition and blood sugar balance. [Click To Tweet Step 2: Clear Out Excess Estrogen and Reset Hormone Balance](#) This step is especially important if you were on a pill that contained estrogen, but is also beneficial for re-establishing healthy hormone balance generally. Restore friendly gut bacteria. Healthy gut flora contain bacteria with genes that break down and eliminate estrogen. Together, these estrogen-processing organisms form their own community called the estrobolome. These bacteria play an especially important role in transforming plant compounds called lignans from vegetables and legumes into phytoestrogens, plant hormones that protect the body against the risks of excess estrogen. Keep your estrobolome happy and healthy by eating pre- and probiotic rich foods, taking a high-quality probiotic that contains at least ten billion CFUs from a variety of lactobacillus and bifidobacterium species, eating plenty of fiber, and steering clear of antibiotics as much as possible. But most of us are experiencing a combination of exposure overload from environmental toxins and insufficient intake of the nutrients our bodies need to keep liver detoxification functions in top form. The liver loves certain foods, too. Specifically, the liver thrives when we eat brassica vegetables like kale, cabbage, collard greens, broccoli, Brussels sprouts, watercress, and rutabaga. Organic berries, like blueberries, blackberries, raspberries and strawberries, are another liver favorite. That means having a complete bowel movement at least once a day. Focus on getting plenty of fiber in your diet aim for two cups of vegetables with at least two meals each day or add in two tablespoons of freshly ground flaxseed to your diet , getting plenty of exercise, and staying hydrated. Improving the health of your microbiome will help with regularity, too. Keep the lights in your house low as bedtime approaches and, if your schedule allows, opt for a relatively early bedtime and a relatively early wake time. Sleep in a completely darkened room until the full moon cover or eliminate all sources of light, including electronic alarm clocks and phone screens that flash midnight text messages. For the three days of the full moon, sleep with your curtains open and your face toward the moonlight. After three days of light, go back to sleeping in darkness until the next full moon. Sleep in darkness from day 1 to day 14, then sleep with the white light for three nights, then return to darkness. Repeat during your next cycle. You can support hormone balance with targeted herbal supplementation. Vitex, also called Chaste Berry Extract, regulates ovulation, increases fertility, and improves progesterone. Peony and Licorice Combination supplements have been shown to increase ovulation and improved fertility. Vitamin C improves ovulation and progesterone production. You can also visit other articles here on my website for strategies for specific hormonal imbalances as part of your plan, for example, endometriosis , PCOS , or menstrual pain. Additional beneficial therapies can include acupuncture, a personally tailored herbal plan, and yoga, particularly asanas targeted to improve pelvic and ovarian flow. And! Women fought long and hard for access to contraception so that they and we could have more control over our reproductive health. It creates a very specific set of hormonal imbalances that can have short- and long-run consequences. PLoS

One, June 27, Protective effects of L-carnitine, N-acetylcysteine and genistein in an experimental model of liver fibrosis. Clin Res Hepatol Gastroenterol. The effect of cinnamon on menstrual bleeding and systemic symptoms with primary dysmenorrhea. Iran Red Crescent Med J. Oral contraceptives and changes in nutritional requirements. Eur Rev Med Pharmacol Sci. N-acetylcysteine blocks formation of cancer-initiating estrogen-DNA adducts in cells. Free Radic Biol Med. The effect of combined oral contraception on testosterone levels in healthy women:

Chapter 9 : How to update TomTom for free ? The 3 best methodes here . - theGadgetPill

Navigation Gestures updated with pill customization and many bug fixes. we are ready to release a major update to the app that brings a ton of features and bug fixes that you've all been.

The 3 best methodes here. These devices have proven their functionality throughout time. The maps are constantly updated and many professional and amateur drivers plan their trips using such a navigation system. If we purchase a brand new TomTom navigator from the store we will also have the newest maps installed on the device. But how to get free updates for our TomTom? Or at least get some free maps? On the newly purchased devices we must examine the benefits of the different models available on the market. In order to make sure we have free maps on the TomTom navigator all the time it is important to purchase a model which has the Free LifeTime Maps feature. We can spare ourselves the expenses of new updates and we have a device which is ready for the road whenever we want to use it. We can also get free maps for TomTom if we follow the sales available in their shops or the Internet. Every once in a while there is a sale available on certain navigator models bought when such an important bonus was offered. If we have owned such a navigator for a long time the maps become old and cannot be used efficiently. Not having an updated map database, a TomTom navigator with old maps becomes useless and may have a lot of errors. So how to update TomTom? These maps must be paid for but they are also the most carefully reviewed and updated. The first way to get free updates for the TomTom maps is offered by the developer and it is called MapShare. MapShare is a facility by means of which the users can make changes to TomTom maps by correcting or modifying street names, blocked roads, turn restrictions, changes in traffic direction or in speed limits. All these changes are uploaded by TomTom owners following the steps here. These are then grouped into a single package that becomes available for download to navigator owners which register on the developer website and have the Home app installed on the PC. By connecting the device to the PC and activating TomTom Home it will prompt us when we can download the available updates from the MapShare package. These updates bring fast and accurate adjustments and to a high percentage as many benefits as a brand new set of maps but cost-free. Another great advantage is that compared to paid maps which come out only several times a year, the free updates for TomTom included in MapShare are updated monthly or even daily. Taking into account that TomTom has a huge user database then the adjustments brought by MapShare will most likely cover most regions of the world. Second method for getting updated maps on your Tomtom for free Except MapShare, there are several other independent projects which are try to provide free maps for TomTom using Open Street Maps that we have talked about here. Open Street Maps are free maps which are constantly updated by supporters, more on this project you can read here. Unfortunately there is no turn-by-turn guide or other complex features. It can be installed on an SD card and run alongside the original software on the TomTom device. Finally, the last option to get free TomTom maps is the Android or iPhone smartphone app. If we own a good smartphone or an iPhone then maybe it is time we give up the outdated classic navigator and purchase the TomTom app for phones. TomTom for Windows Phone 8. These are the most popular methods to have the latest maps or free updates for TomTom. I hope this helps for your safe and uneventful travels.