



## Women's Health Update

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## Contraception Choice

*Methodology of Choice for Hormonal Methods*




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## The 50% statistics.....


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## Nearly half of pregnancies in the United States are unintended



Unintended, occur earlier than desired - 29%  
 Unintended, occur after desired family size reached - 20%  
 Intended - 51%


1.4 million unplanned births annually in the US  
 1.2 million induced abortions




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## Outcomes of Unintended Pregnancies

Approximately 3.0 Million Annually

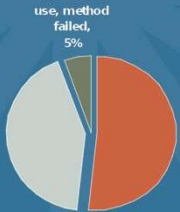


Outcome	Percentage
Abortions	~48%
Births	~42%
Miscarriages	~15%




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## Most unintended pregnancies occur when women fail to use contraceptives or use their method inconsistently

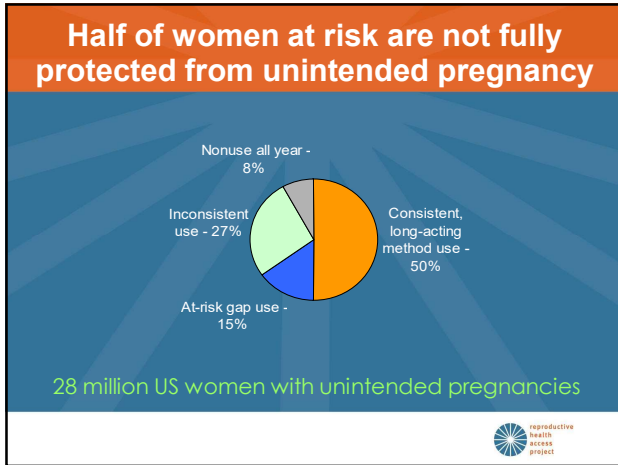


Consistent use, method failed, 5%  
 Nontuse, 52%  
 Inconsistent or incorrect use, 43%

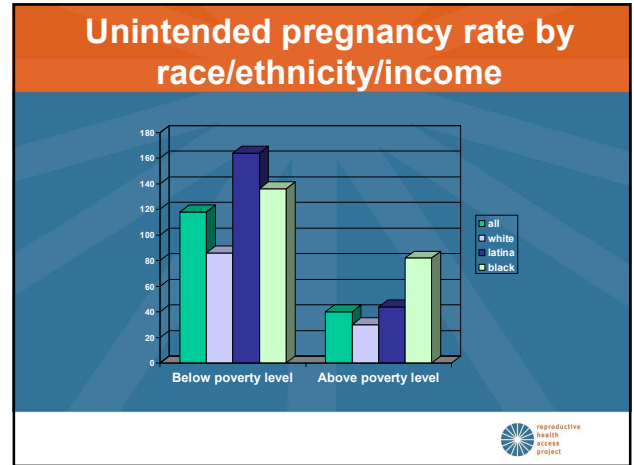
3.1 million unintended pregnancies due to contraception use failure



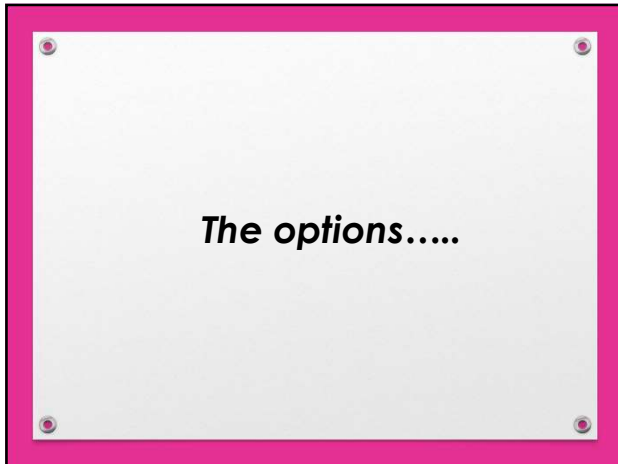
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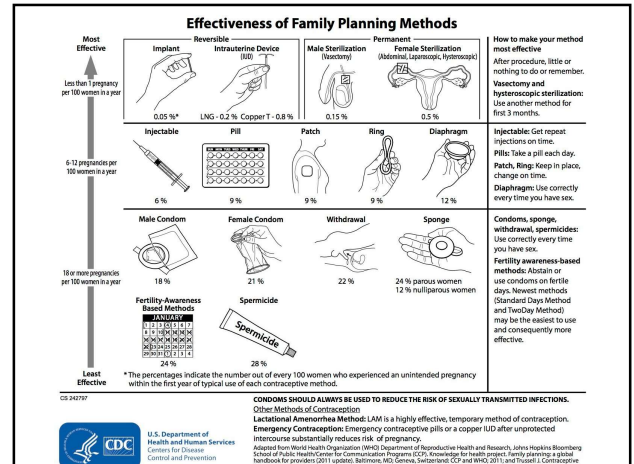
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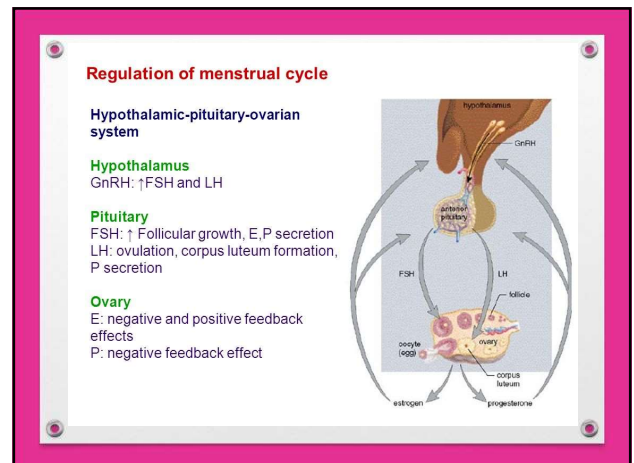
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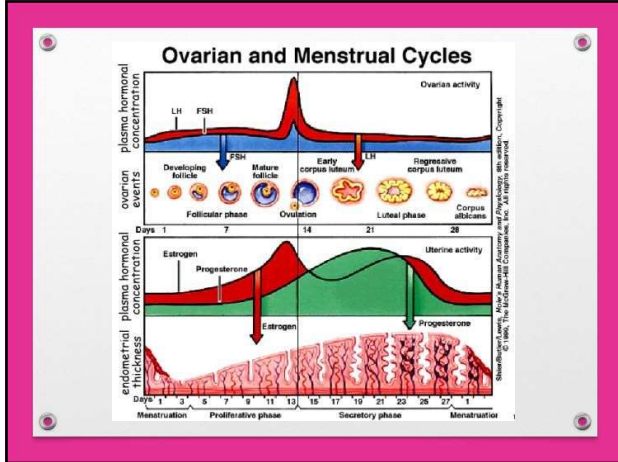
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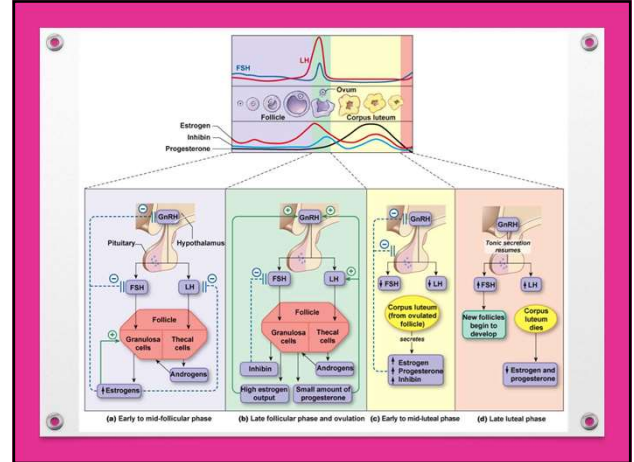
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*The pills.....*

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Monophasic Oral Contraceptives		
Estrogen	Progestin	Product
Mestranol 50 mcg	Norethindrone 1 mg	Necon 1/50, Ortho-Novum 1/50, Nelova 1/50, Norinyl 1+50
<b>High dose</b>		
EE 50 mcg	Norethindrone 1 mg	Ovcon-50
EE 50 mcg	Norgestrel 0.5 mg	Ogestrel 0.5/50, Ovral
EE 50 mcg	Ethinodiol diacetate 1 mg	Zovia 1/50, Demulen 1/50
<b>Low dose</b>		
EE 35 mcg	Ethinodiol diacetate 1 mg	Zovia 1/35, Demulen 1/35
EE 35 mcg	Norethindrone 1 mg	Necon 1/35, Ortho-Novum 1/35
EE 35 mcg	Norethindrone 0.5 mg	Nelova 1/35, Norinyl 1+35, Norel 1/35
EE 35 mcg	Norethindrone 0.4 mg	Modicon, Brevon, Necon 0.5/35, Nelova 0.5/35, Norel 0.5/35
EE 35 mcg	Norgestimate 0.25 mg	Ovcon-35
EE 35 mcg	Norgestimate 0.25 mg	Ortho-Cyclen, Sprintec
EE 30 mcg	Desogestrel 0.15 mg	Apti, Desogest, Ortho-Cept
EE 30 mcg	Drospirenone 3 mcg	Yasmin
EE 30 mcg	Levonorgestrel 0.15 mg	Levlen, Levora, Nordette, Portia
EE 30 mcg	Norethindrone acetate 1.5 mg	Loestrin 1.5/30, Microgestin Fe 1.5/30
EE 30 mcg	Norgestrel 0.3 mg	Lo/Ovral, Low-Ogestrel, Crystelle
<b>Ultra-Low-Dose</b>		
EE 20 mcg	Levonorgestrel 0.1 mg	Alesse, Aviane, Levite, Lessina
EE 20 mcg	Norethindrone acetate 1 mg	Loestrin 1/20, Microgestin 1/20
<b>Progestin-Only</b>		
—	Norgestrel 0.075 mg	Orvette
—	Norethindrone 0.35 mg	Ortho Micronor, Nor-QD

EE - Ethinyl estradiol.

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Biphasic and Triphasic Oral Contraceptives			
Estrogen	Day	Progestin	Product
<b>Biphasic</b>			
EE 20 mcg	1-21	Desogestrel 0.15 mg	Mircette, Kariva
10 mcg	22-28		
EE 35 mcg	1-7	Norethindrone 0.5 mg	Jenest
35 mcg	8-21	1 mg	
EE 35 mcg	1-10	Norethindrone 0.5 mg	Necon 10/11, Nelova 10/11, Ortho-Novum 10/11
35 mcg	11-21	1 mg	
<b>Triphasic</b>			
EE 30 mcg	1-6	Levonorgestrel 0.05 mg	Tri-Leven, Trivora, Triphasil
40 mcg	7-11	0.075 mg	
30 mcg	12-21	0.125 mg	
EE 35 mcg	1-7	Norgestimate 0.18 mg	Ortho Tri-Cyclen
35 mcg	8-14	0.215 mg	
35 mcg	15-21	0.25 mg	
EE 35 mcg	1-7	Norethindrone 0.5 mg	Ortho-Novum 7/77
35 mcg	8-14	0.75 mg	
35 mcg	15-21	0.125 mg	
EE 35 mcg	1-7	Norethindrone 0.5 mg	Tri-Norinyl
35 mcg	8-14	1 mg	
35 mcg	15-21	0.5 mg	
EE 25 mcg	1-7	Norgestimate 0.18 mg	Ortho Tri-Cyclen Lo
25 mcg	8-14	0.215 mg	
25 mcg	15-21	0.25 mg	
EE 25 mcg	1-7	Desogestrel 1.1 mg	Cyclessa
25 mcg	8-14	0.125 mg	
25 mcg	15-21	0.150 mg	
EE 20 mcg	1-6	Norethindrone 1 mg	Estrostep Fe, Estrostep 21
30 mcg	6-12	1 mg	
35 mcg	13-21	1 mg	

EE - Ethinyl estradiol.

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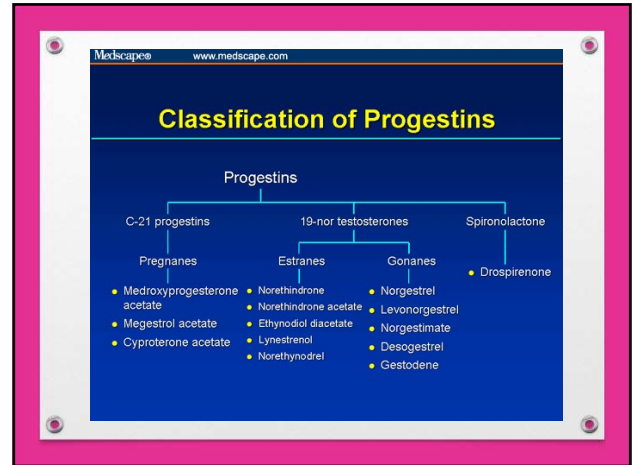
Estrogen and Progestin Dose-Related Adverse Effects	
<b>Estrogen</b>	
Excess	Nausea/vomiting, Bloating/edema, Hypertension, Migraine/headache, Breast tenderness, Decreased libido, Weight gain, Heavy menstrual flow, Leukorrhea
Deficiency	Early cycle spotting/breakthrough bleeding, Amenorrhea, Vaginal dryness
<b>Progestin</b>	
Excess	Acne, Increased appetite/weight gain, Fatigue, Hypertension, Depression, Hirsutism, Vaginal yeast infections
Deficiency	Late breakthrough bleeding, Amenorrhea, Heavy menstrual flow

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**Table 5**  
**Adverse Effects Associated with Type of Hormonal Activity**

Estrogenic	Progestational	Androgenic
Bloating	Headache	Acne/oily skin
Nausea/vomiting	Breast pain/tenderness	Weight gain
Breast fullness	Hypertension	Hirsutism
Breakthrough bleeding		Fatigue
Irritability		Depression
Headache		
Hypertension		

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**The plan.....**

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ORAL CONTRACEPTIVES* w/ 5's	Estrogen (mcg)	Progestin (mg)
Monophasic	50 or 35	0.02, 0.025, 0.04, 0.05, 0.1, 0.2, 0.4, 0.5, 0.75, 1.0, 2.0, 2.5, 3.0, 4.0, 5.0, 10.0, 15.0, 20.0, 25.0, 30.0, 40.0, 50.0, 60.0, 75.0, 100.0
Biphasic	50 or 35	0.02, 0.025, 0.04, 0.05, 0.1, 0.2, 0.4, 0.5, 0.75, 1.0, 2.0, 2.5, 3.0, 4.0, 5.0, 10.0, 15.0, 20.0, 25.0, 30.0, 40.0, 50.0, 60.0, 75.0, 100.0
Triphasic	50 or 35	0.02, 0.025, 0.04, 0.05, 0.1, 0.2, 0.4, 0.5, 0.75, 1.0, 2.0, 2.5, 3.0, 4.0, 5.0, 10.0, 15.0, 20.0, 25.0, 30.0, 40.0, 50.0, 60.0, 75.0, 100.0

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**Progestin Potency of Different Oral Contraceptive Progestins\***

Progestin	Progestational Activity (relative to 1 mg of norethindrone)	Androgenic Activity (relative to 1 mg of norethindrone)
norethindrone 1 mg	1.0	1.0
norethindrone acetate 1 mg	1.2	1.6
ethynodiol diacetate 1 mg	1.4	0.6
levonorgestrel 1 mg	5.3	8.3
di-norgestrel 1 mg	2.6	4.2
norgestimate 1 mg	1.3	1.9
norelgestromin 1 mg**	1.3	1.9
desogestrel 1 mg	9.0	3.4
drospirenone 1 mg	1.5	0.0

\* Loestrin® 1.5/30  
 \* Loestrin® 1/20 Fe  
 \* Estrostep® Fe  
 \* Levlen®  
 \* Alesse®  
 \* Ovral®  
 \* Norlestrin® 1/50

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**Current Pill Problems and Choice of Pill to Switch To**

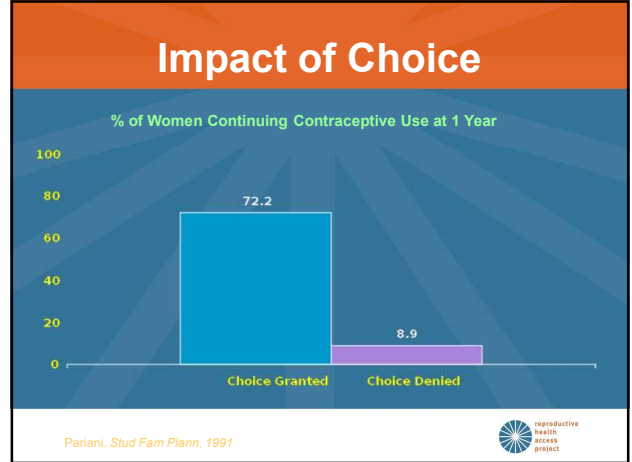
Side Effect/Problem	Principal	Pill Suggestions
Acne	higher estrogen, lower androgen potency	Yasmin®, Demulen® 1/50, Ortho-Tri Cyclen®, Ortho-Cyclen®, Yasmin®, Brevicon®, Modicon®, Necon®, Ortho-Evra®, Mircette®
Break-through bleeding	higher estrogen, higher progestin potency, lower androgen potency	Yasmin®, Demulen® 1/50, Zovia® 1/50E, Ovcon® 50, Desogen®, Ortho-Cept®, Estrostep® Fe, Loestrin® 1/20
Absent or too light menstrual flow	higher estrogen, lower progestin potency	Ortho-Cyclen®, Ovcon® 35, Brevicon®, Modicon®, Necon® 1/50, Norinyl® 1/50, Ortho-Novum® 1/50, Necon® 1/35, Norinyl® 1/35, Ortho-Novum® 1/25
Depression, moodiness or irritability**	lower progestin potency	Ortho-Evra patch®, Ovcon® 35, Ortho-Tri-Cyclen®, Ortho-Cyclen®, Brevicon®, Modicon®, Necon® 1/35, Alesse®, Levite®, Tri-Levlen®, Triphasil®, Triocor®
Headaches (not menstrual migraines)	lower estrogen, lower progestin potency	Ortho-Evra®, Alesse®, Levite®, Loestrin® 1/20
Breast soreness	lower estrogen, lower progestin potency	Yasmin®, Ortho-Evra®, Alesse®, Levite®, Loestrin® 1/20 Fe, any lower estrogen pill than currently on
Weight gain	lower estrogen, lower progestin potency	Yasmin®, Ortho-Evra®, Alesse®, Levite®, Loestrin® 1/20 Fe, any lower estrogen pill than currently on
Severe menstrual cramps	higher progestin potency	Yasmin®, Desogen®, Ortho-Cept®, Mircette®, Loestrin® 1/50, Demulen® 1/35, Zovia® 1/35E, Demulen® 1/50, Zovia® 1/50E
Endometriosis or endometriosis prevention	lower estrogen, higher progestin potency, higher androgen potency	Loestrin® 1.5/30, Loestrin® 1/20 Fe, Lo-Ovral®, Levlen®, Levora®, Nordette®, Demulen® 1/35, Zovia® 1/35, (used either continuously with zero days of placebo pills or with only 4 days of placebo pills for prevention)

\* - The progestin has anti-water retention properties  
 \*\* - Women are sensitive to hormones in different ways - some to the progestin, some to the amount and some to the hormonal fluctuation. Seasonal, or any monophasic oral contraceptive pill (OCP) taken continuously (having only 1 period every 3 months) can also help stabilize mood. Of note, YAZO is the only OCP given an indication for PMDD.

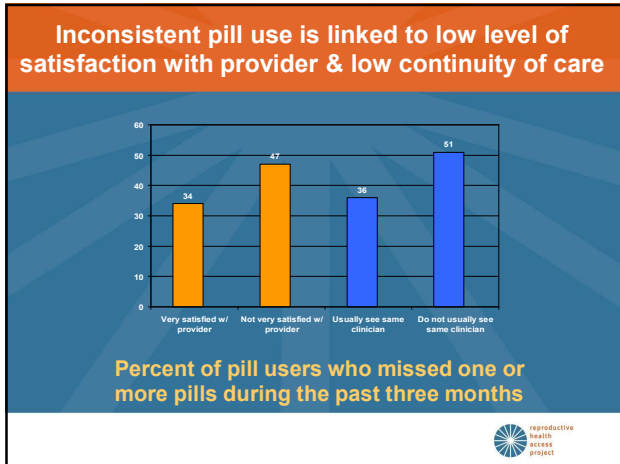
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### Take-home message: Be pro-active with contraception!

- DE-link pap smears and birth control prescriptions
- ROUTINELY prescribe 1-year supply with 3 packs at a time
- Ask about contraceptive needs at all types of visits
- Emphasize high-efficacy methods, but honor women's choice whenever possible

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**Take-home message:  
Be pro-active with contraception!**

- DELINK cap smears from birth control prescriptions.
- ROUTINELY prescribe 1-year supply with 3 packs at a time.
- Use Quickstart.
- Ask about contraceptive needs at all types of visits.
- Emphasize high-efficacy methods, but honor women's choice whenever possible.



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**The patients.....**


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**Yolanda**  
17 year-old high school senior

- Requests pregnancy test – negative
- Requests birth control pill
- Had unprotected sex 4 days ago

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**PLAN: ???**




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**Jessyka**  
21 year old waitress

- Had a medication abortion 1 week ago
- Has severe PMS symptoms
- OCs helped just a bit

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**PLAN: ???**




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**Liz**  
21 year old college student

- Takes oral contraceptive, but forgets pills often
- Has trouble getting refills while at college, and now the pills are too expensive

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**PLAN: ???**



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**Resa**  
16 year-old high school student

- Doesn't want to get pregnant until she finishes school
- Wants contraception that she can hide from her mom

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**PLAN: ???**



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**Amy**  
21-year-old G4P2

New boyfriend wants her to get pregnant, but she doesn't want a child now

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**PLAN: ???**




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**Blanca**  
36 year-old G6P4

Has fibroids and anemia

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**PLAN: ???**



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**The end.....**

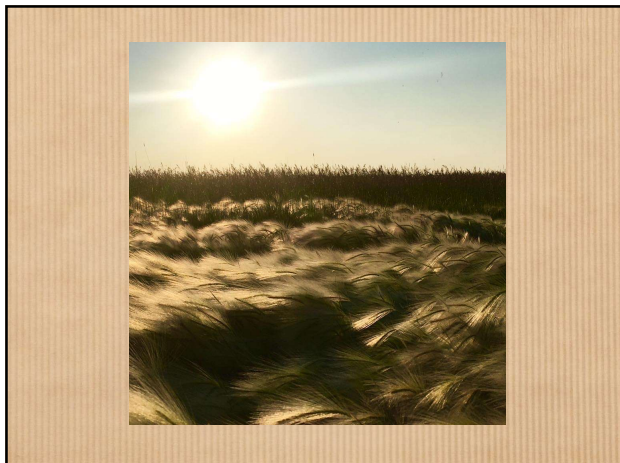
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