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Seminars & Webinars

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Greetings from the Appenzell region...

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GRÜEZI!


The Alpstein Mountains in Appenzell


Market Place in Gais near Appenzell


Alpstein Clinic in Gais

Understanding and relief PMS – The online seminar for your natural hormonal balance!

Dr. med. Heike Herzog und Team, Alpstein Clinic Gais / AR, Schweiz

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Short introduction about myself

Dr. med. Heike Herzog

- General practitioner
- Co-founder of the Alpstein Clinic in 2018
- **Additional qualifications in:**
  - Acupuncture
  - Neural therapy
  - Short-term psychotherapy (transformation therapist and coach)
  - Naturopathy
  - Vital field therapist / bioresonance therapist
  - Biomedicine Paracelsus Academy
  - Integrative biological cancer medicine
  - Functional medicine and stress medicine
  - Biological aesthetic treatment with PRP
  - Hormone coach for bioidentical hormone therapy

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«PMS? Not with me! Your cycle, your power!»

- **What is PMS?**
- **Symptoms of PMS?**
- **Causes of PMS?**
- **Diagnosis of PMS?**
- **Treatment options for PMS?**
  - Conventional medicine versus biological-integrative treatment approaches
- **Summary and conclusion**

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What is PMS?

- **PMS = Premenstrual Syndrome**
- **PMS** comprises physical, psychological and emotional symptoms
- **PMS** occurs regularly in the second half of the cycle, from ovulation to the onset of menstruation, and then subsides again!
- **Duration of symptoms** varies from 5 -10 days before menstruation
- **PMS** is widespread and, depending on the study, affects 20-40% of all menstruating women

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Difference between PMS and PMDD

- **PMDD = Premenstrual Dysphoric Disorder**
- **This is a heavy form of premenstrual syndrome (PMS)**
- **As with PMS, PMDD causes physical and psychological symptoms before menstruation,** but the psychological symptoms, such as extreme irritability, depression, anxiety and mood swings, are much more pronounced
- **PMDD has a much greater impact on everyday life and relationships!**
- **Approximately 5-8% of patients suffer from PMDD**

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What are the typical symptoms of PMS?

Physical symptoms	Mental & emotional symptoms
• Pain / tension in the breast /abdomen • Fatigue / lack of energy • Sleep disorders • Headaches / migraines • Back pain / joint pain • Flatulence / bloating / irregular bowel movements • Water retention • Cravings • Blemished skin	• Increased irritability • Mood swings • Depressive mood • Sadness • Anxiety • Nervousness • Inner restlessness • Concentration problems

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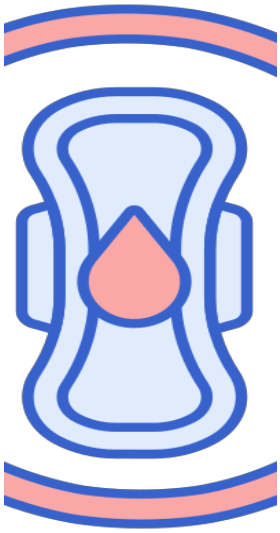
Causes – How does PMS work?

1. Hormonal fluctuations
2. Neurotransmitter changes
3. Neuroendocrinological factors
4. Genetic factors
5. Lifestyle and environmental factors



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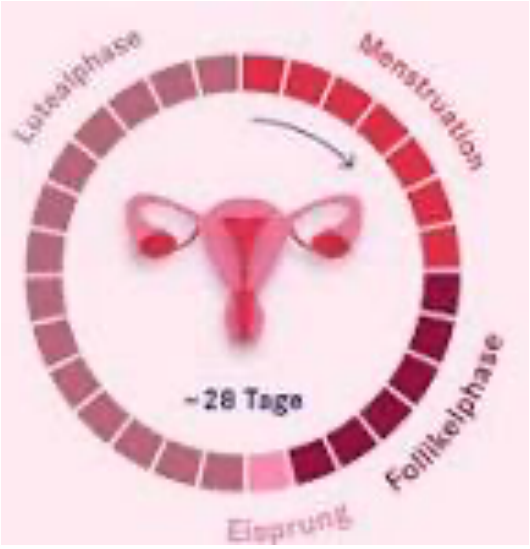
Natural hormonal fluctuations during the normal menstrual cycle



- The menstrual cycle is subject to completely natural hormonal fluctuations
- After ovulation, estrogen levels drop down and progesterone levels rise
- Shortly before menstruation, estrogen and progesterone levels drops sharply
- These hormonal changes affect the neurotransmitters in the brain – serotonin, which influences mood, sleep and appetite

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Normal regular menstrual cycle

1. Estradiol (E2) dominates 1th half of the cycle:

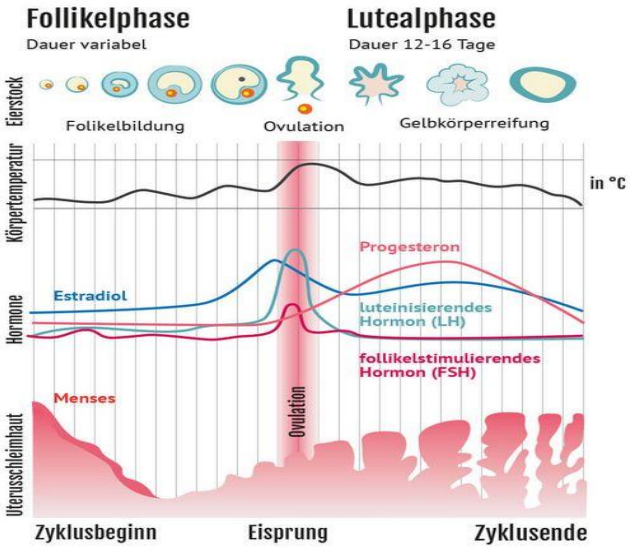
- Estradiol stimulates the cells of the breast to wake up
- Estradiol builds up the lining of the uterus, loosens the connective tissue, stores water & fat in the tissue & leads to ovulation => A follicle matures in the ovary!

2. Mid-cycle during ovulation:

- the egg shell is broken and the egg is released
- The egg ***shell (known as the corpus luteum) is the site of progesterone production***

3. Progesterone dominates the 2nd half of the cycle:

- Progesterone slows down cell growth, excretes tissue water & converts fat into energy (opposite effect to estradiol)
- Progesterone maintains the uterine lining so that a fertilised egg can implant itself and pregnancy can occur
  => if pregnancy occurs, the hormone level continues to rise
- if pregnancy does not occur, the hormone level drops and menstrual bleeding occurs



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Causes of PMS: 1. Hormonal fluctuations

Typical for PMS: The ratio of progesterone to estrogen is altered

CAUSES:

- **Insufficient progesterone production**
  - after ovulation due to corpus luteum insufficiency
  - Progesterone drops too early or too sharply
- **Estrogen remains at a moderate level and falls more slowly**
  - Estrogen remains relatively higher => relative estrogen dominance
- **Conclusion**: In the second half of the cycle (luteal phase), PMS is characterised not by absolute, but relative estrogen dominance over progesterone deficiency!

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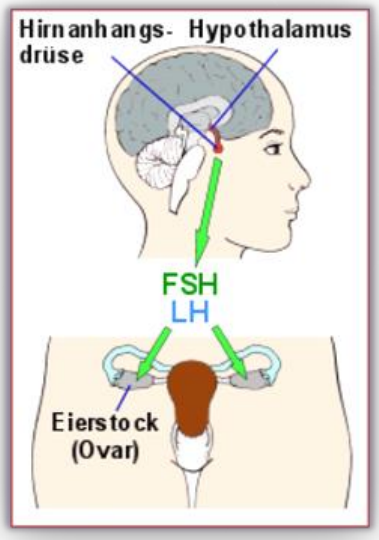
Causes of corpus luteum insufficiency

1. Malfunciton of egg maturation & ovulation:

a. Cycle disorders => stress, intense exercise, weight changes
b. Hormonal imbalance => e.g. too low LH peak
c. Polycystic ovary syndrome (PCOS)

2. Malfunction of the hypothalamic-pituitary-ovarian axis:

Signals from the brain (hypothalamus, pituitary gland) to the ovaries are disrupted
=> Too little LH leads to
=> insufficient conversion of follicular cells into corpus luteum cells



Causes of corpus luteum insufficiency

3. Thyroid dysfunction:
- Underactive or overactive thyroid can disrupt hormone balance => luteal insufficiency

4. Hyperprolactinemia:
- Elevated prolactin levels inhibit LH secretion => luteal insufficiency

5. Age and reduced egg quality:
- With increasing age, the quality of the eggs decreases and with it, the ability to form a stable corpus luteum.

6. Inflammation and dysfunction of the uterine lining:
- The uterine lining does not respond properly to progesterone ('progesterone resistance')
  - Can lead to luteal insufficiency

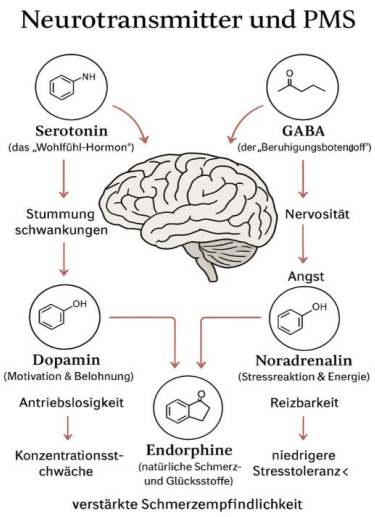
Causes of PMS: 2. Neurotransmitter changes

Hormonal changes affect neurotransmitters

- **Decrease in serotonin levels:**
  Serotonin = happiness/feel-good hormone.
  Irritability, sadness, sleep disorders, craving

- **Decrease in GABA:**
  GABA = calming/relaxing neurotransmitter.
  Progesterone decreases -> allopregnanolone (metabolite from Progesteron) decreases
  -> GABA activity decreases: more irritable, anxious, restless

- **Decrease in dopamine:**
  Dopamine = reward/motivation hormone
  Lack of drive, craving, depressive mood, poor concentration



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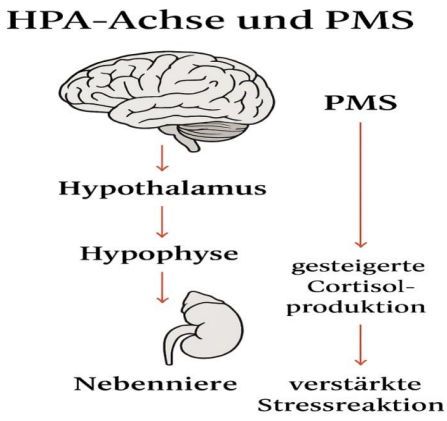
Causes of PMS: 3. Neuroendocrinological factors

The hypothalamic-pituitary-adrenal axis (HPA axis) controls cortisol production

- **Hypersensitive reaction of the HPA axis during PMS**
  - ➢ due to estrogen/progesterone fluctuations
    - ➢ causes increased cortisol release
      - ➢ intensifies the stress response
      - ➢ e.g. irritability, tension, mood swings



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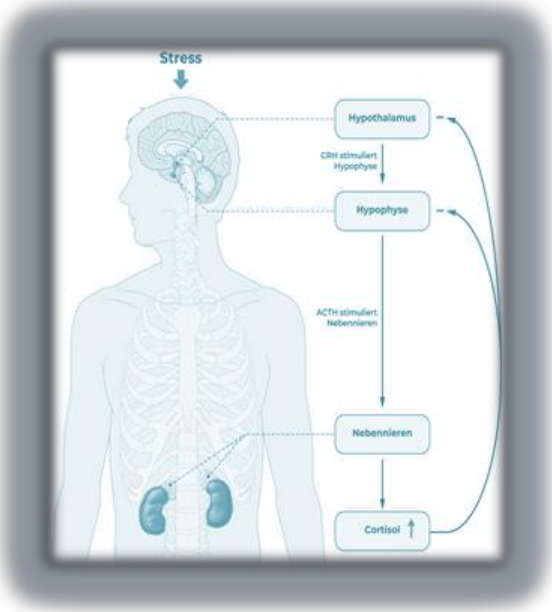
HPA-Axis

- **Stress axis => HPA- axis**

⇒Hypersensitive reaction of the HPA axis in PMS due to estrogen/progesterone fluctuations

⇒causes increased cortisol release
⇒intensifies the stress response
⇒e.g. irritability, tension, mood swings ….



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Causes of PMS: 4. Genetic factors

Genetic factors play an important and complex role in PMS:

1. Serotonin genes:

a. **Serotonin transporter gene (SLC6A4):** Genetic variants in the transporter gene influence how strongly the body reacts to hormonal fluctuations!
b. **Serotonin receptor gene (e.g. HTR1A, HTR2A):** Changes in the serotonin receptor gene can influence sensitivity to estrogen/progesterone!

2. Hormone receptor genes:

a. **Estrogen receptor genes (ESR1, ESR2):** Changes in these genes are associated with altered hormone sensitivity and thus mood swings!
b. **Progesterone receptor gene (PGR):** Gene variants can influence how strongly progesterone and its metabolites (such as allopregnanolone) affect the central nervous system!

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Causes of PMS: 4. Genetic factors

3. Genes of the stress and neurosteroid system:

a. **GABA-A receptor genes:** highly relevant, as allopregnanolone (a progesterone metabolite) acts via GABA-A receptors. Here, gene variants can alter the neuronal response to the hormonal cycle!
b. **Corticotropin-releasing hormone (CRH) and glucocorticoid receptor genes (NR3C):** Changes in the stress axis (HPA axis) can exacerbate PMS symptoms!

4. Epigenetic changes:

a. The newest research results show, that it is not so much hormone levels that are important, but rather the genetic disposition to react to hormonal fluctuations!

5. Family and twin studies:

a. Familial clustering of PMS has been demonstrated repeatedly!
b. Heredity studies show that 30-60% of PMS/PMDD symptoms variability is genetically determined!

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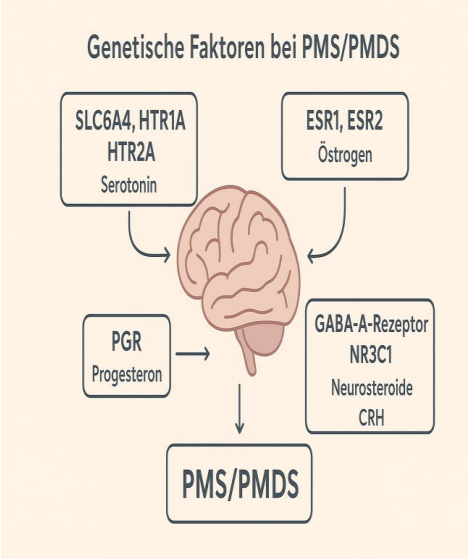
Causes of PMS: 4. Genetic factors: CONCLUSION

CONCLUSION:

PMS is NOT caused by a single 'PMS gene'
but rather by:
an interaction of genetic variants
that influence how sensitively the brain
reacts to hormonal cycle fluctuations!



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Causes of PMS: 5. Lifestyle & environmental factors

- **Unhealthy diet**
  - Important: Balanced diet, high in fibre, low in sugar / coffeine / alcohol / salt
- **Poor gut health**
  - Important: Balanced microbiome
- **Lack of minerals / trace elements / vitamins / omega-3 fatty acids**
  - Important: Substitue of missing vital substances
- **Lack of exercise**
  - Regular exercise lifts the mood and reduces relative estrogen dominance
- **Inadequate stress management**
  - Maintain a healthy work-life balance
- **Poor sleep hygiene**
  - Get regular and sufficient sleep

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Cause and effect: PMS: 6. Inflammation

Due to the hormonal imbalance associated with PMS, increased levels of pro-inflammatory cytokines, e.g.:

- interleukin 6, tumour necrosis factor and C-reactive protein
- These promote headaches, joint or muscle pain, breast tenderness, etc.
- **Reason**:
  - progesterone has an immunosuppressive effect
  - estrogen has an anti-inflammatory effect
  - as both hormones drop at the end of the cycle, this hormonal situation can support inflammatory processes!

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Diagnosis of PMS

1. **The important diagnostic factor for PMS is:**
   - The symptoms are cycle-dependent and do not occur throughout the whole month!
2. **Gynaecological check-up including ultrasound examination**
3. **Laboratory parameters:**
   - FSH, LH, estradiol, progesterone (on the 21st day of the cycle), testosteron
   - TSH, fT3, fT4, thyroid antibodies
   - Prolactin
     - Prolactin is produced by the pituitary gland and promotes mammary gland development / milk production / water and sodium retention / mood influences via the central nervous system
     - Stress inhibits dopamine => leading to an increase in prolactin
     - Thyroid and prolactin levels should be checked to rule out other endocrinological causes (thyroid dysfunction, PCOS)

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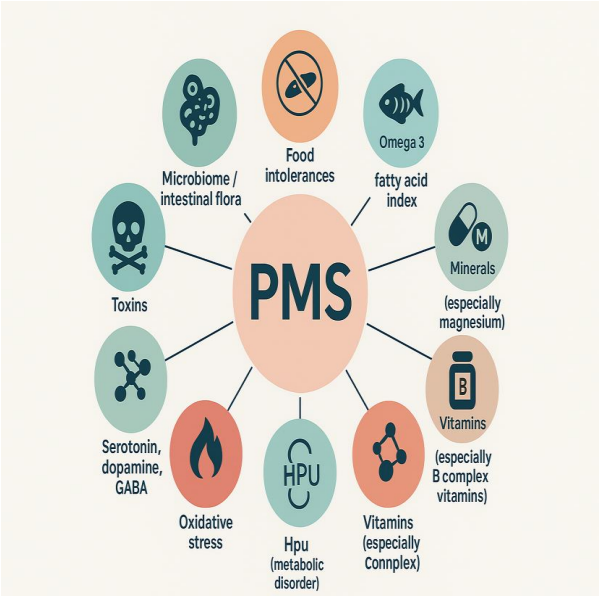
Advanced diagnostics for PMS

- Microbiome / intestinal flora
- Food intolerances
- Omega 3 fatty acid index
- Minerals (especially magnesium)
- Trace elements
- Vitamins (especially vitamin B complex)
- Oxidative stress
- HPU (metabolic disorder)
- Toxins
- Serotonin, Dopamin, GABA
- Cortisol daily profile



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Conventional Medical treatment approaches for PMS

1. Basic therapy

- **Regular exercise** (improves mood, reduces excess estrogen)
- **Healthy diet**
- **Sleep hygiene**
- **Stress management**

2. Pharmacological therapy

- **Hormone therapy**: Contraceptive pills such as drospirenone (synthetic gestagen): has antiandrogenic and diuretic effects, suppresses ovulation => more stable hormone levels, resulting in less fluctuations
- **Antidepressants** (SSRIs, e.g. fluoxetine, sertraline): used especially for PMDD
- **Painkillers** (NSAIDs such as ibuprofen): symptomatic treatment for pain
- **Diuretics**: for heavy water retention

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Biological-integrative therapeutic approaches to PMS

1. Basic therapy

- **Regular exercise**
  - Improves mood, reduces excess estrogen
  - 3-4 times per week Endurance sports
- **Healthy diet based on food intolerance testing**
  - In combination with a gut restoration programme based on microbiome analysis
  - In combination with good omega-3 oils
- **Sleep hygiene**
- **Stress management**, e.g. mind-body techniques: yoga, meditation, progressive muscle relaxation …

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Biological-integrative therapeutic approaches to PMS

2. Phytotherapy

- **Monk's pepper (Vitex agnus-castus):**
  - has a regulating effect on the pituitary-gonadal axis, lowers prolactin, improves breast tenderness / cycle disorders
- **Black cohosh (Cimicifuga racemosa):**
  - has a regulating effect on hormones, improves vegetative symptoms

- **St. John's wort**: has a mood-lifting effect
- **Combination preparations**: e.g. from:
- ***Madena PMS vital***: yam root, lemon balm extract, magnesium, saffron, vitamin C, verbena, etc.
- ***Biogena Nutrifem PMS Formula*** or ***Natugena PrämensPlus***, among others….

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Biological-integrative therapeutic approaches
Phytotherapy in tea form for PMS

Type of Tea	Effect	Intake	Note
Chaste Tree (Vitex) Tea	Hormone balance, stabilizes mood	1 cup dialy, throughout the entire cycle	Take regularly and consistently for at least 3 months
Lady`s Mantle Tea	Support uterus, relieves cramps	1-2 cups daily, during 2nd half of cycle	Especially helpful for PMS cramps
Yarrow Tea	Antispasmodic, anti-inflammatory	2 cups daily, during 2nd half of cycle	Combines very well with Lady`s Mantle Tea
Lemon Balm Tea	Calming, relaxing, helps with sleep and mood issues	1-2 cups dialy, especially in the evening	Ideal for relaxation during stressful phases
Ginger Tea	Stimulates circulation, relieves cramps and nausea	1-2 cups dialy, form first PMS day	Warming effecxt
Raspberry Leaf Tea	Strengthens uterus, antispasmodic	1-2 cups daily, during 2nd half of cycle	Improves unterie blood flow
Nettle Tea	Duretic, detoxifying, relieves bloating	1-2 cups daily, during 2.nd half of the cycle	Support metabolism and detoxification

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Biological-integrative therapeutic approaches
2. Phytotherapy in tea form for PMS

Recommended use for teas for PMS:

- Drink throughout your cycle, not just when symptoms are acute
- Evenings or after meals are ideal:
  better absorption, less stomach irritation
- Alternate or combine teas:
  e.g. lady's mantle + yarrow + lemon balm

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Biological-integrative therapeutic approaches to PMS

3. Micronutrients:

- **Magnesium:** has a relaxing effect on muscles/nervous system, helpful for cramps/irritability
- **Vitamin B2:** reduces fatigue
- **Vitamin B6:** supports neurotransmitter synthesis (serotonin, dopamine)
- **Vitamin D and calcium:** positive effect on mood and physical complaints
- **Omega 3 fatty acids:** anti-inflammatory effect
- **Zinc:** important for hormone balance and the immune system

4. Schüssler salts

- **A common combination for PMS support is:**

  No. 5, No. 7 and No. 8, depending on the symptoms.

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Possible uses of Schüssler salts for PMS

Nr.	Schüssler salt	Function / Effect	PMS symptoms
No. 1	Calcium fluoratum	Strengthens connective tissue, skin, blood vessels	Tension in the mammary gland
No. 3	Ferrum phosphoricum	Anti-inflammatory, promotes O2 uptake	Fatigue, mild inflammation, headaches,
No. 5	Potassium phosphoricum	Nerve tonic, concentration, mood	Irritability, mood swings, exhaustion
No. 7	Magnesium phosphoricum	Antispasmodic, relaxing	Abdominal cramps, headaches, relaxing
No. 8	Sodium chloratum	Regulates fluid balance	Water retention, oedema, bloating
No. 9	Sodium phosphoricum	Supports metabolism, acid-base balance	Bloating, blemished skin, irritability
No. 10	Sodium sulfuricum	Detoxifying, supports elimination	Oedema, slow digestion
No. 11	Silicea	Strengthens joints, skin and nails, stabilises hormonal processes	Hair loss, skin problems, general weakness

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Standard dosage for Schüssler salts for adults

- **Schüssler salt No. 5: Potassium phosphoricum D6**: 3 x 2 tablets daily
- **Schüssler salt No. 7: Magnesium phosphoricum D6:** 3 x 2 tablets daily
  For cramps, dissolve an additional 10 tablets in hot water and drink slowly ('Hot 7')
- **Schüssler salt No. 8: Sodium chloratum D6:** 3 x 2 tablets daily

  - **Schüssler salts should be allowed to dissolve slowly in the mouth** (preferably under the tongue),
    - as this allows the minerals to be absorbed through the oral mucosa!
    - Do not eat or drink immediately afterwards (allow approx. 15 minutes before eating)!

As a lozenge (drinkable solution):

- morning: dissolve 2 tablets each of Nos. 5, 7 and 8 in approx. 0.5 l of warm water and drink in small sips throughout the day
- Do not stir with a metal spoon (use plastic or wooden spoon instead)

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Biological-integrative therapeutic approaches to PMS

5. Homeopathy

- The appropriate remedy is selected individually based on the main symptoms and personality!
- Homeopathic constitutional treatment (prescribed by an experienced homeopath!) is often most effective!

A small selection:

- **Sepia officiales**: PMS with mood swings, irritability, listlessness
- **Lachesis muta**: PMS with severe mood swings, hot flushes
- **Pulsatilla partensis**: PMS with tearfulness
- **Natricum muriaticum:** PMS with inner sadness

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Biological-integrative therapeutic approaches to PMS

6. Integrative procedures:

- **Acupuncture**
- **Bioresonance / vital field therapy**
- **Milta Pod (photon biomodulation)**
  - Uses light (laser + infrared) and magnetic fields for non-invasive tissue stimulation:
    - Goal: pain / inflammation reduction, etc.

- **Infrared sauna**
  - Supportive in the second phase of the cycle: leads to muscle relaxation, stress reduction, promotes blood circulation => removal of metabolic products, etc.
  - 2-3 times per week, duration: 20-30 minutes, at a moderate temperature: 45-55 degrees
  - Not at the beginning of menstruation: may lead to heavier bleeding or circulatory problems

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Biological-integrative therapeutic approaches to PMS

7. Bioidentical hormone therapy:

- following laboratory analysis on the 21st day of the cycle and confirmed progesterone deficiency
  - **Individual dosage of bioidentical progesterone** in capsules or transdermal cream: as therapeutic support in the second half of the cycle

- **Alternatively:**
  - **Progesterone D4 transdermal cream** in the second half of the cycle

- **For adrenal fatigue in cases of chronic stress and proven cortisol deficiency in the daily profile:**
  - **Cortisol D4 transdermal cream**

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Summary - Conclusion

Premenstrual syndrome PMS is a multifactorial condition!

PMS is influenced by the following factors:

- **Hormonal:** imbalance of progesterone / estrogen in the second half of the cycle
- **Neuroendocrine:**
  - Neurotransmitters: hormonal imbalance: leads to a drop in serotonin, GABA and dopamine
  - Neuroendocrinological: Hormonal fluctuations/stress => increased cortisol release: increased irritability, mood swings, etc.
- **Genetic:**
  - Epigenetic changes in the genes of hormone, serotonin and GABA receptors influence how sensitively the brain reacts to hormonal cycle fluctuations
- **Lifestyle / environmental factors:**
  - Stress, lack of exercise, poor diet, obesity, toxin exposure, etc.

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„PMS? Not with me! Your cycle, your power!“

„Not moody – just cyclically magical!“

„My hormones are strong and so am I!“

„I'm not difficult, I'm just being honest about my hormones!“

"Power, Mood, Strength my cycle, my superpower!“

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„PMS? Not with me! Your cycle, your power!“

I hope that I have been able
to provide you with
sufficient information about PMS,
and I am now available
to answer any further questions
you may have!

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Announcement for future webinars