

Dr. med. et Dr. scient. med. Jürg Eichhorn

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Manuelle Medizin SAMM  
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Sportmedizin SGSM  
Ernährungsheilkunde SSAAMP  
Anti-Aging Medizin

Neuraltherapie SATH & SRN  
Orthomolekulärmedizin SSAAMP  
applied kinesiology ICAK-D & ICAK-A

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## **Menopause:            Bioidentical therapy during menopause**

**Things to know:**

**Oestrogens  
Progesterone  
Testosterone  
Herbal hormones**

**Breast Cancer:**

**Risk  
Prevention  
Thermography**

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Fon            +41 (0)71-350 10 20  
Adresse      Im Lindenhof  
E-Mail        [drje49@gmail.com](mailto:drje49@gmail.com)

Bahnhofstr. 23  
[www.ever.ch](http://www.ever.ch)

CH-9100 Herisau  
Produkte Info

[www.ever.ch](http://www.ever.ch)

Memberbereich: Passwort: ever

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## The bioidentical hormone therapy before and after menopause

K	Cimifemin Uno	1x1 to 2x1 Kps. daily. Maximum short-term: 2x2 cps.	Black Cohosh	
K	Östrogel (Estrogel, E2)	<ul style="list-style-type: none"> <li>Amount: 1/8 - ¼ - ½ rail:</li> <li>¼ rail (enclosed): = 0.625 g estradiol</li> </ul>	<p>Application: face, body</p> <p>Not on breasts and veins/besen veins. Estrogen dilates the vessels!</p>	Application in the morning
		<ul style="list-style-type: none"> <li>Estrogel = plant-based estradiol, chemically processed. Contains 17-beta-estradiol = bioidentical with the body's own estradiol).</li> <li>Dose individually, depending on how you feel. Occasionally, in the case of flushes, only very small doses (pea size) are necessary every 2-3 days.</li> <li>In case of nocturnal flushes, estrogel can also be used in the evening.</li> </ul>		
NK	Progesterone cream 1.5 % Ideal as a face cream!	<p>Amount: 2 strokes daily (1 tube lasts for about 33 days)</p> <p>Per stroke = 22.5 mg progesterone</p>	<p>Application: face, body, breasts, veins, varicose veins, spider veins. Progesterone constricts the vessels! Do not apply on the nipples!</p>	Application in the evening
K	Utrogestan Kps. pro Kps. 100 mg / 200 mg Progesteron	<ul style="list-style-type: none"> <li>Insertion into the vagina before going to bed: 1 - 2 - 3 - 4 - 5 - 6 - 7 (=evenings per week!).</li> <li>For example Tuesday and Friday 1 capsule each:</li> <li>Increase to the comfort limit, up to 1 capsule daily!</li> </ul>		Progesterone promotes sleep!
NK	Testo Creme Femina	<ul style="list-style-type: none"> <li>Testosterone 0.2 % in 50 g in MMS base cream (1 tube contains 100 mg testosterone). 1 stroke = 1.56 g cream = 3.1 mg testosterone. 1 tube lasts approx. 16 weeks with 2 strokes per week.</li> <li>Apply the amount of 1 stroke to the skin 2 to maximum 3 times per week, preferably elbow-upper arm laterally or/and decolleté.</li> <li>Always start with low doses, e.g. 1 stroke per week, and increase the amount of cream until you feel comfortable!</li> </ul>		Application in the morning during the day or in the evening
	Important therapy principle	<ul style="list-style-type: none"> <li>Always start with low doses and increase the amount of cream until you feel comfortable!</li> <li>Progesterone is the natural counterpart to estrogen!</li> </ul>		

K = cash permissible NK = not cash permissible

# Therapeutic guidelines

## Phase 1: estrogen gel + progesterone cream

- Always start with small doses
- Estrojel ¼ splint corresponds to the weak hormone patches and ½ splint corresponds to the strong hormone patches
- Women with increased sensitivity start with 1/8 splint and slowly increase over a few days to a few weeks until the feel-good dose is reached
- Estrogen is very well absorbed through the skin and progesterone in cream form is less well absorbed, which is why the amount of 2 strokes should be adhered to
- Progesterone in the progesterone cream is better absorbed through the skin due to its alcoholic base

## Phase 2: estrogen gel + progesterone cream + utrogestan

- Progesterone in Utrogestan is better absorbed through the mucous membranes (gastrointestinal or vaginal) thanks to a different basis
- If Utrogestan is swallowed, progesterone enters the liver and stresses it
- It is better to cut open the Utrogestan capsules and swipe them into the vagina with your finger
- Do not start Utrogestan until you feel well under phase 1 (2 to 4 weeks or longer)
- Start with only 1 capsule per week, or even only 2 x ½ capsules per week if necessary if you are sensitive, and increase the amount until you reach the feel-good dose

## Possible side effects

- Progesterone can be converted to estrogen by an enzyme called aromatase
- Excessive amounts of progesterone in the first few weeks of treatment, or sometimes months later, can lead to nipple pain, breast swelling, and weight gain - bloating - due to water retention
- In these cases, reduce the estrogen and progesterone doses or stop the hormones altogether for a short time
- Once the side effects have disappeared, restart with ½ of the previous amounts each time
- So-called breakthrough bleeding can occur even after years and is basically harmless as long as it lasts only a few days
- If bleeding occurs during therapy, I always advise an ultrasound examination by the gynecologist
- Do not apply progesterone to the nipples: may occasionally cause a burning sensation

## Progesterone cream

1. Variante mit DAC Basiscreme als Grundlage = günstigere Variante
2. Variante mit DMS Basiscreme als Grundlage = *Kosmetik Niveau: Ideale Gesichtscreme* (teurere Variante)

## Testosterone Cream Femina

Cosmetic level (do not use on face because of possible hair growth or acne)

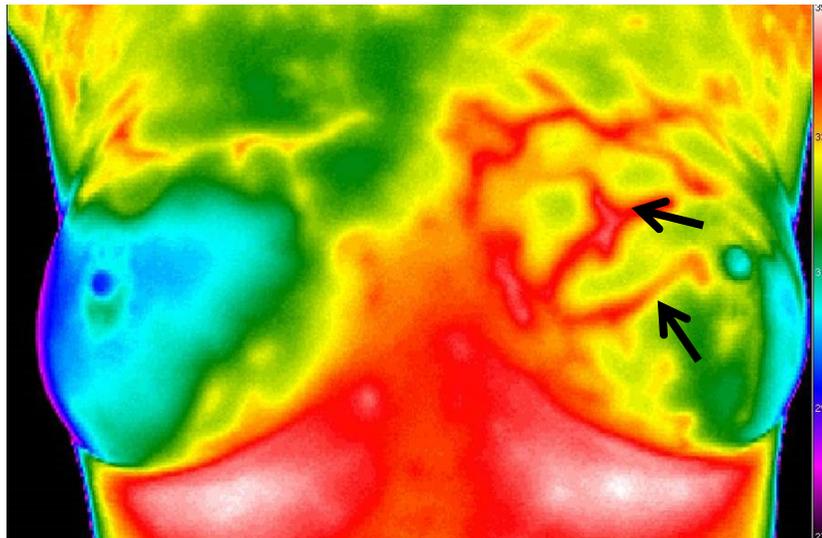
### **Testosterone improves memory in menopausal women**

Australian researchers have found that the ability of menopausal women to learn and remember is enhanced by testosterone. Menopause is associated with weakening memory in women as the body secretes progressively less estrogen. Menopause. 2013 Jun 26.

Progesterone, like testosterone, promotes tissue elasticity.

## Important remarks on therapy

Hormones are only one part of the whole. Nutrition and therefore cancer prevention, as well as the function of the intestines are equally important topics and a "big hormone status" provides insight into the hormonal situation as a basis for discussion. I assess breast activity by means of thermographic images (heat measurements). Sonography and mammography are static images. Thermography, which provides insight into breast dynamics, complements the above examinations in a valuable way.



**Chest left: Increased heat condition** = increased metabolic activity  
 = risk breast  
 = increased cancer risk

**Breast right: Inconspicuous heat pattern**

Arrows = vascular structures (no cancer)

### Progesterone and cancer

During pregnancy, the woman produces 400 mg of progesterone daily to maintain the pregnancy. In pregnancy, new cancer developments as well as inflammatory diseases are very rare. After 17 years of close experience in this field, I still believe that progesterone is effective against cancer, contrary to what some people think. Nature knows some quite effective cancer inhibitors, with which I always prophylactically support ANY hormone treatment. There would be much to say about these broad topics.

## Estrogens

## The body's own estrogens

### 3 types: Estradiol (E2) - Estriol (E3) - Estrone (E1)

Estrogens have a multifaceted effect on our body and on the general and comprehensive psychological condition, as they determine the first half of the extremely complicated female cycle. Another important effect of estrogens is the promotion of the growth of the sexual organs. It is responsible for the formation of secondary female sexual characteristics (high voice, female breast, female hair and fat distribution patterns), a significant part of which is produced by the distribution of body fat under the skin. That is why estradiol causes an increase in subcutaneous fat deposits.

### Sebaceous glands

Estrogens decrease sebum production and inhibit the growth of sebaceous glands.

### Bones

Estrogens increase the uptake of calcium and calcium storage in bone, slowing bone resorption. During puberty, it is responsible for completing the growth in length of the bones.

### Cholesterol

Estrogens lower cholesterol levels

### Menstrual cycle

Strong influence on the uterus. Stimulate the uterine mucosa to grow: Increase in muscle fibers in number and size. Stimulation of blood circulation. The cervical mucus becomes "spinnable". Cyclic influence on the vaginal mucosa.

### Cartilage formation in the joints

Adverse effect on cartilage formation unlike testosterone which supports cartilage.

### Pregnancy

Increase in blood levels 10- to 100-fold. Corpus luteum and placenta provide high levels of estrogen and progesterone during pregnancy. This prevents menstruation and promotes the growth of the uterus and fruit.

### Man

Increased estrogen levels can lead to enlargement of the prostate, growth of the breasts, and feminization in general.

**Beer bellies: beer contains a plant estrogen!**

### In old age - after menopause

When estrogen production in the ovaries decreases, estrogen production is shifted to the fat tissues. Weight gain during this time can be interpreted as an attempt by the body to produce as much estrogen-producing fat tissue as possible.

## Estrone (E1)

### Significance before menopause:

Forms estriol and estradiol, thus in a sense represents a store, a kind of "reservoir" for the other estrogens.

### Post-menopausal significance:

After menopause, the hormone estrone decreases less in relation to estradiol. It thus becomes an important estrogen (estrone) for women after menopause: it compensates for the loss of estradiol and estriol.

"In women in the so-called fertile years, only 45% of the estrone in the blood comes from the ovary and 5% from the adrenal gland, but 50% comes from other sources (extraglandular), especially subcutaneous adipose tissue. There it is chemically converted from a male hormone (the androstenedione). This explains why estrone does not have as pronounced an effect on the menstrual cycle as estradiol - except in PCO syndrome and obesity. In patients with PCO and/or obesity, higher estrone concentrations are found in the blood. The resulting negative effect on the pituitary gland disturbs the central secretion of LH and FSH, which also upsets the entire hormone control system. In post-menopausal women, 95% of the estrone is produced almost exclusively from the hormone DHEA and androstenedione of the ovary and adrenal cortex. This is then chemically converted in the fat cells. Direct estrone and estradiol production in the ovary, on the other hand, is very low at this age. Women in early menopause may have relatively higher estrone concentrations despite low estradiol levels in the blood. This may reduce the need for hormone replacement therapy (HRT), for example. However, it may also be an important finding in the context of bleeding disorders or breast pain. A special feature arises in connection with estrogen tablets (oral therapy): During intestinal and liver passage, the artificial "tablet estrogens" are converted by the liver to a large extent into estrone. This leads to unnaturally high estrone levels in the blood. Since estrone and estradiol are constantly converted into each other in the body, signs of both an estradiol overdose (e.g. breast tenderness or water retention) and an estradiol underdose (e.g. renewed menopausal symptoms: so-called escape phenomenon) can then occur. If very high estrone levels are found in a woman taking estrogen tablets, the therapy should be switched to natural estrogens administered through the skin (gels or patches). In men, blood concentrations of estrone are higher than those of estradiol because men have twice the blood levels of DHEA compared to women, which acts as a precursor to androstenedione and thus estrone. Particularly high estrone levels are to be expected in people with an overactivity of a certain enzyme (aromatase). This is mainly due to high alcohol consumption, obesity and fatty liver. The effects in men can then be potency disorders, breast enlargement and an increase in abdominal fat (visceral obesity)." Quote Wikipedia.

## Estradiol E2 (estrogen gel)

Estradiol belongs to the group of estrogens, is formed in the ovaries and is the most potent hormone in the class of natural estrogens. The starting material for estradiol synthesis is cholesterol. Estradiol promotes the formation of the secondary female sex organs and stimulates the uterine mucosa to grow. In association with progesterone, it plays a central regulatory role in the menstrual cycle.

Estradiol is the classic menopausal hormone in women. It is used primarily for menopausal symptoms, but also in younger women whose ovaries have been removed or when there is hypofunction. It is used to prevent osteoporosis.

## **Estriol (E3)**

Estriol (E3), also estriol, is a quantitatively important metabolic product of estradiol and estrone. It has a weak estrogenic effect, about 1/10 that of estradiol. Estriol is also formed in adipose tissue by aromatization of the A ring of androstenedione. Estriol is used to treat atrophic vaginitis and menopausal irritable bladder symptoms: Vaginal ointments and vaginal suppositories.

## **Estriol gel (tube)**

- With the natural estrogen 17-beta-estradiol through menopause. The gel for simple, skin-compatible and gentle percutaneous application.
- Infinitely adjustable dosage to suit individual symptoms is guaranteed.
- The invisible gel effectively combats heat flushes and sweating outbreaks and improves the skin structure.
- No "first-pass effect" (degradation in the liver). Higher blood concentrations are achieved with estrogen gel than with estrogen skin patches.
- Estrogens have a strengthening and dilating effect on blood vessels, thus counteracting arteriosclerosis.
- Estrogel significantly prevents the loss of bone mass (osteoporosis).
- Oestrogel improves blood lipids by increasing HDL cholesterol and decreases harmful LDL cholesterol.

(prescription required, paid by health insurance).

# Progesterone

Progesterone is produced almost exclusively in the corpus luteum and controls the transformation of the uterine mucosa in the 2nd half of the cycle. The highest levels are found in the middle luteal phase (5th - 8th day after ovulation). Progesterone promotes collagen formation, stabilizes bone formation and thus counteracts wrinkle formation or cellulite ('orange peel skin'). Clinical symptoms of a progesterone deficiency are fluid retention in the tissues with a feeling of tension in the breasts and mental imbalances with irritability, nervousness and insomnia. The causes of a deficiency can be ovulation disorders, hyperprolactinemia or age-related luteal insufficiency.

## "Natural" Progesterone"

"Natural" progesterone is found in human and animal organisms, but not in nature. However, a precursor of progesterone, diosgenin, does occur in nature. Diosgenin is found mainly in yam and fenugreek but also in soybean and fennel.

USP progesterone is obtained from the natural starting material diosgenin in about 5 chemical synthesis steps. This seems to be the simplest and cheapest manufacturing process. However, where the diosgenin comes from, whether from wild yam or fenugreek seeds, is not prescribed by the pharmacopoeias. Fenugreek seeds are the cheapest plant source material and therefore it is most commonly used. So, in any so-called "progesterone cream", progesterone is included as a partially synthetic product. However, in terms of its chemical formula, this progesterone is the same as the one in our body: biochemically, both are identical!

"Wild Yam Extracts" contain diosgenin, but no progesterone. In the human organism, diosgenin cannot be converted into progesterone because the enzyme responsible for it is missing. Diosgenin itself appears to have a weak estrogenic but no progesterone effect.

Physiological progesterone shows no disadvantages in terms of weight, diabetes, blood lipids and hypertension. On the contrary, due to its sodium excreting effect it lowers (systolic=upper) blood pressure.

Physiological progesterone also acts as a so-called endorphin agonist, i.e. it promotes the body's own endorphins. Endorphins are the body's own opiates and are commonly known as happiness hormones. They regulate pain and hunger. They control the production of sex hormones and participate in euphoria. Progesterone has a pain-relieving effect via the endorphins, or it increases the pain threshold. Progesterone has an antidepressant effect and increases the feeling of happiness.

Progesterone in high doses can be converted (which would be undesirable in men) to estrogens (desirable in menopause).

Progesterone, like estrogen, is a fat-soluble substance and is derived from cholesterol. Because of its distribution in fat tissue, it sometimes takes 3 months for an effect to occur. In slender women, an effect can be expected sooner. Overdoses should be avoided. If the dosage is too high, side effects usually do not occur until the 2nd month of use and consist of water-induced weight gain, tension and swelling of the breasts, shortened cycle duration, occasionally also bloating = estrogen effects. Excess progesterone is converted into estrogens = secondary estrogen effect! Natural progesterone is absolutely free of side effects and the observed complaints are purely estrogen related. After the reduction or discontinuation of progesterone, these estrogen-related phenomena subside completely within 2-3 months. Progesterone absorbed via the intestine is largely inactivated in the liver. It is advisable to apply progesterone via the skin or vaginally to circumvent this "first-pass effect" of the liver.

# Woman and testosterone

Source: Al Ali / Tribulus terrestris / Institut Européen des Substances Vegetales, Paris

- Maintenance:** Fat-free mass  
Bone density  
Skin suppleness  
Libido: effect of estrogens alone not sufficient to maintain libido after menopause!
- Age:** Decrease of testosterone
- Bone loss:** Premenopausal bone loss at the level of the femur is significantly associated with testosterone levels
- Testosterone: Direct effect on bone  
Indirect effect by stimulating estrogen production in bone tissue (enzyme: aromatase)
- Ovariectomy:** Ovariectomy reduces testosterone levels by 40% in 20% of surgeries performed.

## Benefits and risks of hormone replacement therapy

**In an analysis of a total of 50 studies, it was shown that women with hormone deficiency symptoms can benefit significantly from therapy:**

Total cholesterol is lowered, sleep quality improves. It is believed that the dreaded Alzheimer's disease is delayed and the troublesome flushes are significantly reduced. In 150,000 women, it has been shown that 65 women out of 1,000 with hormone replacement treatment develop breast cancer, while 63 women do not. The increased risk of 2 per 1,000 women is offset by beneficial effects on the cardiovascular system, osteoporosis and the central nervous system. With regard to osteoporosis, numerous studies have shown that the risk of fracture (bone breakage) is significantly reduced.

**An increased risk of breast cancer with combined hormone therapy (estrogen plus progestin) only exists after long-term treatment of more than seven years.**

Progestogens are artificial progesterones and must not be confused with bioidentical progesterone in their effect! With the addition of progesterone (=bioidentical hormone therapy) a rather decreasing carcinoma risk was even observed. Estrogen therapy alone, even at the lowest dose, is only recommended for hysterectomized patients due to the risk of uterine carcinoma. The additional administration of natural progesterone is indispensable due to its very broad effect.

**According to new evaluations, the risk of breast cancer seems to be reduced by estrogen therapy alone. Hormones could also possibly protect against colorectal cancer, as women with hormone therapy developed the disease less frequently. Status 2012.**

In the much-discussed Women's Health Initiative, an increased cardiovascular disease risk had occurred in the patient group over 70 years of age (progestins!). In contrast, in patients under 60, hormone replacement therapy reduced all-cause mortality by 30%. Women who had received hormone replacement therapy in the early years of postmenopause, before age 60, had less atherosclerosis (hardening of the arteries).

Estrogen/progestin therapy increases the risk of thrombo-venous events by a factor of two to three. Trans-dermal estradiol application (estrogen cream - progesterone cream) is an alternative for patients with risk factors for thromboembolic events.

**The risk of arteriosclerosis and therefore of heart attack or stroke depends on the age of the woman at the beginning of treatment:**

There was no increased risk with early hormone initiation, i.e., in younger women. Case. In addition, the later hormone therapy was started after the last menstrual period, the greater the risk of stroke. Due to estrogen deficiency, older women already have calcium deposits in their blood vessels, so-called plaques. Estrogens soften these plaques, break them up and thus lead to a blockage of the vessels and thus to an increased risk of heart attack or stroke. The additional intake of at least 3 grams of fish oil, for example EPA Pro SevisanaLine, stabilizes the plaques and effectively prevents them from breaking up. EPA Pro SevisanaLine is made from wild-caught fish and is characterized by the highest purity, just like the krill oil SevisanaLine.

## Hormone decline promotes Alzheimer's dementia

Estrogen is fading - so is the mind (Medical Tribune 21- August 2020)

NEW YORK - Hormonal changes appear to play a large part in the genesis of Alzheimer's dementia in women. This is suggested by imaging results. 121 healthy individuals - 85 women, 36 men - with an average age of 52 underwent PET and MRI. Researchers then compared gray and white matter volumes, the extent of beta-amyloid plaques and cerebral glucose metabolism.

The women performed worse in all four areas, with menopausal status emerging as a predictor. In addition, gray matter loss showed an anatomical overlap with estrogen distribution. The results suggest that the window for possible preventive intervention in women is early in the endocrine aging process.

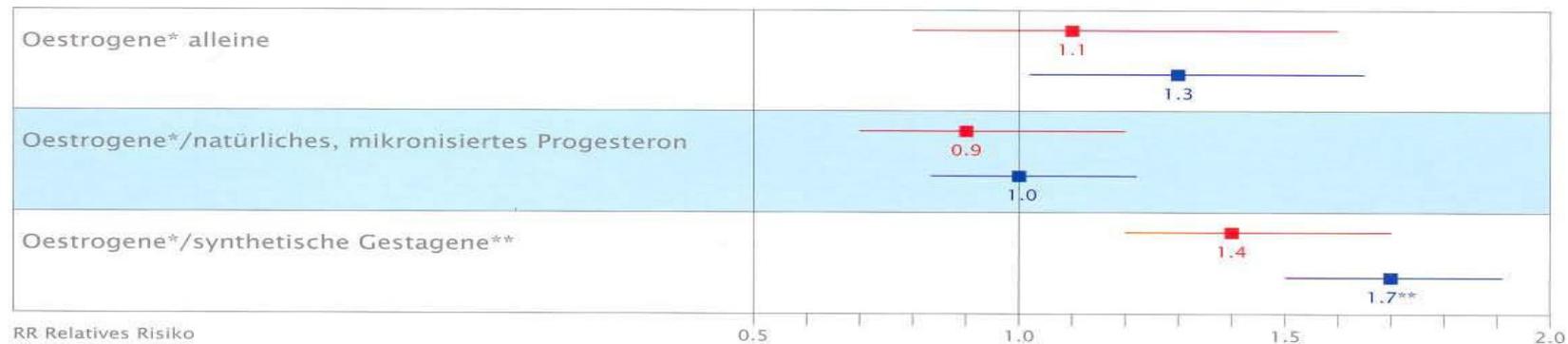
1. Rahman A et al. Neurology 2020; 95:e166- e178.

2. press release American Academy of Neurology.

## Study: Estrogens, progestins, natural progesterone

### Neue Daten aus der E3N-Studie: Kombination aus Oestrogen mit natürlichem, mikronisiertem Progesteron zeigt kein erhöhtes Mammakarzinomrisiko <sup>nach 1,2</sup>

Mammakarzinomrisiko postmenopausaler Frauen unter verschiedenen Hormontherapien (HT). Dargestellt ist das relative Risiko (RR; 95% CI), im Vergleich zu Frauen, welche nie eine HT erhalten haben.



\* Transdermale und orale Oestrogenpräparate

\*\* Exkl. Retroprogesteron (Dydrogesteron)

n = 54 548 postmenopausale Frauen; 5.8 Jahre Beobachtungszeit (SD 2.4), 2.8 Jahre Anwendungszeit (SD 1.9)

n = 80 377 postmenopausale Frauen; 8.1 Jahre Beobachtungszeit (SD 3.9), 7.0 Jahre Anwendungszeit (SD 5.2)



## Favorable and unfavorable estrogen effects (estradiol)

Favorable and unfavorable estrogen effects (estradiol)	Possible adverse effects of estrogens (in tablet form)
<ul style="list-style-type: none"> <li>• Climacteric complaints</li> <li>• Bladder problems / incontinence</li> <li>• Skin aging</li> <li>• Brain infarction / heart infarction</li> <li>• Osteoporosis / Bone Fractures</li> <li>• Colon Cancer</li> <li>• Alzheimer dementia</li> <li>• Mortality due to cancer</li> <li>• Total mortality</li> </ul>	<ul style="list-style-type: none"> <li>• Increases water and salt content in the cells and thus leads to water congestion</li> <li>• and blood pressure increase</li> <li>• Causes intracellular hypoxia (oxygen deficiency within cells)</li> <li>• Decreases the action of thyroid hormones</li> <li>• Releases histamine.</li> <li>• Increases blood clotting</li> <li>• Thickens bile, increasing the risk of gallbladder disease</li> <li>• Impairs libido</li> <li>• Increases the likelihood of cyst formations in the breast, of Fibromyomas in the uterus, of uterine and breast cancer</li> <li>• Adverse effect on joint cartilage</li> </ul>
<p>Estrogens as skin patches or skin creams are associated with significantly fewer risks than "oral" estrogen in tablet form.</p>	

## Adverse effects on body and mind observed with progestogen administration

Progestogens = synthetic (artificial) progesterone

Body	Psyche
<ul style="list-style-type: none"> <li>- Abdominal cramps</li> <li>- Increased risk of accidents</li> <li>- Acne</li> <li>- Chest tenderness</li> <li>- Clumsiness</li> <li>- Dizziness</li> <li>- Flatulence</li> <li>- Fluid retention in tissues</li> <li>- Generalized discomfort/pain</li> <li>- Oily skin</li> <li>- Head pain</li> <li>- Heat Flashes</li> <li>- Sleep disturbances</li> <li>- Weight gain</li> </ul>	<ul style="list-style-type: none"> <li>- Abdominal cramps</li> <li>- Anxiety</li> <li>- apathy</li> <li>- Depressive mood</li> <li>- Weakness in decision making</li> <li>- Emotional lability</li> <li>- Forgetfulness</li> <li>- Irrational behavior</li> <li>- Increased irritability</li> <li>- Panic attacks</li> <li>- Lack of concentration</li> <li>- Restlessness</li> <li>- Weepiness</li> <li>- Fatigue</li> </ul>

## The beneficial effects of natural progesterone (abstract)

- Preserves the endometrium and the embryo during pregnancy
  - Protects against cysts in the breast
  - Helps convert fat into energy
  - Natural promotion of water excretion
  - Natural remedy against depression
  - Anti-inflammatory, also in the brain (multiple sclerosis!!!)
  - Promotes the utilization of thyroid hormones
- Boosts thyroid underactivity
  - Reduction of metabolic inertia
- 
- Normalizes blood coagulation
  - Normalizes zinc and copper balance
  - Restores normal oxygen levels
  - Protects against uterine cancer
  - Protects against breast cancer
  - Stimulates the activity of bone-building cells
  - Produces endogenous cortisone
- Protects against osteoporosis
  - Relieves rheumatic pain (raises pain threshold)
  - Alleviates allergies

## The beneficial effects of natural progesterone (overview)

<b>Synthesis</b>	Woman: Formation in the ovaries, but only immediately after ovulation, but also in the placenta of the pregnant woman. In smaller quantities, progesterone is formed from cholesterol in the adrenal glands in both men and women, and also in the testes in men.
<b>Precursor</b>	Is significant precursor of other sex hormones (estrogens, testosterone) and of cortisone in the adrenal cortex. Increasing the body's own cortisone relieves rheumatism pain and allergies
<b>Pregnancy</b>	Promotes implantation of the fertilized egg in the uterine mucosa. Preserves the uterine mucosa and embryo during pregnancy.
<b>Female breast</b>	Protects against cysts in the breast.
<b>Antagonist to estrogen</b>	Inhibits cancer-promoting estrogen action (uterus, breast). Decreases estrogen dominance (estrogen dominance = motor for breast and uterine cancer): Inactivates estradiol to the less active estrone.
<b>Libido</b>	Promotes libido.
<b>Antagonist to aldosterone</b>	Promotes water excretion, especially water accumulated in tissues prior to menstruation (breast tenderness, gloom, weight gain prior to menstruation)
<b>Psyche</b>	Calming, anxiety relief, euphoria. Alleviates depression. In case of progesterone deficiency (also in men), there is often restlessness and hypersensitivity: "I have no more nerves".
<b>Sleep</b>	In a study of ten menopausal women, each taking 300 mg of natural progesterone or placebo in the evening for three weeks, progesterone resulted in significantly better sleep quality, waking times decreased and REM sleep phases increased.
<b>Nerves (brain pathways and body pathways)</b>	Promotes growth and regeneration. Has a strong anti-inflammatory effect in the brain. Improves the myelin layer (nerve insulation), especially important in multiple sclerosis (nerve insulation defect.)
<b>Pain</b>	Raises the pain threshold (endorphin effect).
<b>Body Temperature</b>	Raises body temperature (helpful in weight loss). Heat-forming, thermogenic effect Helps convert fat into energy
<b>Thyroid</b>	Promotes utilization of thyroid hormones, improves hypothyroidism while boosting metabolic sluggishness. Estrogens impair the activity of thyroid hormones, stimulating hypothyroidism. Such "hypothyroidism" may be expressed as fatigue, impaired libido and headaches. Progesterone, as the antagonist of estrogen, restores thyroid function to normal and thus also contributes to better weight control.
<b>Skin and connective tissue</b>	Inhibits protein-degrading enzymes and collagen breakdown and significantly reduces wrinkle formation. Counteracts connective tissue weakness and restores skin elasticity thanks to testosterone.
<b>Bone</b>	Promotes bone growth and consolidation (osteoblasts).
<b>Vascular protection</b>	Inhibits proliferation of vascular smooth muscle cells. Relaxes blood vessels (norepinephrine). Promotes blood circulation (NO effect).
<b>Blood lipids</b>	Improves blood lipids. Together with estrogen, it lowers bad LDL cholesterol and increases good HDL cholesterol.
<b>Zinc and Copper Levels</b>	Normalizes zinc and copper balance.
<b>Bowel</b>	There is a possible link between progesterone deficiency and flatulence.

## Progesterone - interesting facts about a natural thing

Dr. med. Jürg Eichhorn

**It is a fact that many women around the age of fifty who are tired of pills are no longer willing to undergo hormone replacement therapy without a care in the world. These women in particular are very open to a differentiated approach and are grateful for alternative healing options.**

Menopause is a disease, an estrogen-deficit disease, at least as defined by the WHO in 1981. The redefinition of menopause from a natural event to a disease coincides with the advent of synthetic hormones in the 1960s, a fact that should give pause for thought.

Since the 80's, menopause is no longer just a hormone-deficit disease, but also "risk", example osteoporosis. Both definitions are likely to suggest "disease and risk" to the woman. Hormone replacement therapy is by no means a priori reprehensible, on the contrary, used sensibly and critically it can be very helpful to the woman in her critical years.

The time before menopause is characterized by a progesterone deficit. Many complaints of women between the ages of 40 and 50 therefore do not correspond to an estrogen deficiency, but to a lack of progesterone, or the associated, relative estrogen surplus, estrogen dominance.

Tension, the feeling of bursting at the seams, weight gain, depression, restlessness, increased sensitivity and irritability, but also abdominal bloating and cravings for sweets are typical symptoms of this period. Later, heat flushes and sweating outbreaks join them. They are an expression of increased activity in the hypothalamus (vasomotor lability) as a result of low progesterone and estrogen levels (1). Progesterone deficiency is also ultimately responsible for some symptoms of premenstrual syndrome. When there is a relative estrogen excess in the second half of the cycle, the woman suffers from hormone fluctuations, which explains some PMS symptoms (1).

Based on these considerations, premenopausal symptoms should generally be treated with progesterone rather than estrogens. The drug of choice is "natural progesterone" obtained from wild Mexican yam or fenugreek seeds. Over 5`000 plants known so far produce phytohormones. Well-known phytohormone donors are, among many others, soy and fennel. Mistletoe plant is also rich in phytohormones. Gypsies used mistletoe decoction for the "morning after" to induce menstruation. Peoples whose diet is rich in fresh vegetables hardly know progesterone deficiency phenomena. During menopause, women are largely spared from menopausal symptoms and bone loss thanks to these plant hormones. "Progesterone dominant" women, it may be said, are more sexually active, suffer less from obesity, appear more balanced, hardly suffer from menopause symptoms or bone loss and "radiate" health.

Our denatured foods, literally denatured by chemical or mechanical processing, have significantly reduced levels of dietary fiber, vitamins, minerals, trace elements and plant hormones. With our modern diet, we hardly absorb any substances containing progesterone.

Ovulation inhibitors and menopause combination products all contain "synthetic progesterone," called progestins or progestins. The difference between progestins and "natural progesterone" is enormous (page 7).

The altered molecular structure leads to a potential of undesirable side effects and prevents certain metabolic and metabolic processes that make "natural progesterone", whether produced in our body or ingested as progesterone cream, so valuable.

Progesterone is derived from cholesterol and is therefore a fat-soluble substance. Because of its distribution in fatty tissue, it sometimes takes 3 months for it to take effect. Overdoses should be strictly avoided. Side effects of excessive dosage usually occur in the 2nd month of use and consist of water-induced weight gain, tension and swelling of the breasts, shortened cycle length, and occasionally bloating. According to Lee (1), natural progesterone is absolutely free of side effects and the observed complaints are purely secondary to estrogen.

After reduction or discontinuation of progesterone, these phenomena subside completely within 2-3 months.

Via the endorphin mechanism, natural progesterone is an excellent antidepressant. Higher doses may be used for this indication: Cycle-appropriate from the 12th or 15th to 26th day of the cycle, 2 teaspoons of Progesterone Cream 1.5% SevisanaLine daily. Under this dosage, depression improves within a few days to weeks. Women report a significant increase in libido. Vaginal dryness and irritable bladder symptoms disappear. Dose reduction after 1 month depending on symptoms, obesity and progesterone level. The level of pregnandiol in urine is index for the body's progesterone production.

Progesterone is not end product but precursor of other hormones. "Natural progesterone" has distinctive biological properties in addition to its effect on the endometrium as a pregnancy-maintaining hormone. Progesterone strengthens the arterial and venous system while estrogens dilate the vessels. If a woman on ovulation inhibitors or hormone therapy suffers from vein problems, progesterone should be applied as a cream to the skin. Vein pain is thus relieved.

Progesterone increases the sensitivity of the estrogen receptors, thus increasing the estrogen effect. The supply of progesterone also increases the absorption of plant estrogen, so that additional estrogen substitution becomes unnecessary.

Progesterone is an antagonist of estrogen in many areas. It protects against their undesirable side effects (Tab.3).

Progesterone absorbed via the intestine is largely inactivated in the liver. It is advisable to apply progesterone via the skin or vaginally to circumvent this "first-pass effect" of the liver.

Natural progesterone is thus the agent of choice before menopause to balance the relative estrogen dominance. After menopause, estrogen levels drop to about 50-60% of baseline.

Progesterone production comes to a standstill. In this situation, "natural progesterone" is still indicated, but may no longer be sufficient. Heat flushes, which severely affect a woman's attitude to life, occasionally require the use of low-dose estrogens (0.625 mg of a herbal estrogen, e.g. Estrogen). Alternatively, agents such as Cimicifuga, vitamin-B6, vitamin-B complex, vitamin-C complex, and others are used.

Estrogens protect against osteoporosis. However, according to Lee (1), only degradation (osteoclast activity) is inhibited while progesterone promotes bone building, osteoblast activity. Lee observed that women who used a progesterone-containing moisturizer, freely available in the U.S. at the time, for years showed no osteoporosis. Even more, the skin showed less wrinkle formation and menopausal symptoms were almost nonexistent.

"The art of hormone therapy is to find the dose that nature gives us," writes Prof. Dr. med. Johannes Huber in his book "Hormones for Beauty" (2).

The Celts are credited with the custom of kissing a girl standing under a sprig of mistletoe. Mistletoe was well known to the Druids, their high priests. During the Druid festival, which always began on 22.12. and lasted a week, "mead" mixed with a shot of mistletoe berry juice flowed in streams. The Celts and Celtic women indulged not only in the sacred drink, but also quite dissolutely the physical sensual pleasures. After the feast, "peace" returned in every respect, the women went back to their domestic work and did not even get pregnant.

I wonder if the "magic hormone" of mistletoe is called "progesterone". Progesterone occurs naturally as diosgenin. According to current knowledge, diosgenin has no proven biological activity in our bodies. We also do not possess enzymes that can convert diosgenin into progesterone. Perhaps the Celts will teach us better! Apparently, diosgenin has a stronger effect than commonly assumed

Today, of course, we know that progesterone stimulates libido, but also that when progesterone is discontinued, period bleeding occurs. Thus, any conception that happened during that week of unimpeded sex was ruled out with the onset of menstruation.

Dr. John R. Lee, an American hormone researcher, found through a conversation with a local gypsy woman known for her "morning after" treatments, that her success was based in part on the use of mistletoe.

Progesterone is the natural counterpart to estrogen in the body. If estrogen attracts sodium and water in the body, increases blood pressure and promotes breast cancer risk, the opposite is true with progesterone.

Progesterone is the pregnancy-maintaining hormone.

"Menopause" begins with a progesterone deficit. Many symptoms are not so much due to an estrogen deficiency as a progesterone deficiency. Waterlogging, vein problems and depression are among them, whereas heat flushes are attributed to estrogen depletion.

Heat flushes can still be treated with natural progesterone, however, because progesterone stimulates estrogen synthesis within the body - progesterone is the precursor to estrogen - but also stimulates estrogen receptors. It makes sense to treat menopause symptoms for the time being only with "natural" progesterone, which, unlike "artificially produced progesterone", has no side effects. In some cases, estrogen supplementation is no longer necessary.

If one were to prescribe one of the common "menopausal mixtures" of estrogens and artificial progesterones to a woman who is only deficient in progesterone, one would be doing her a disservice. In addition to the old complaints, there would possibly be new disorders such as weight gain, breast tenderness and depressive moods.

Estrogens impair the activity of the thyroid hormones and thus stimulate hypothyroidism. Such "hypothyroidism" can manifest itself in fatigue, impaired libido and headaches. Progesterone, as the antagonist of estrogen, restores thyroid function to normal and thus contributes to better weight control.

In women, bone mass is highest in the mid-30s. Until menopause, bone mass slowly and gradually decreases and then accelerates again for several years. Estrogen therapy slows the progression of osteoporosis, but cannot prevent it or reverse the process. That is, estrogens reduce the rate of bone loss but do not usually stimulate new bone formation. Progesterone, on the other hand, stimulates the bone-building cells, the so-called "osteoblasts", and thus leads to the formation of new bone.

## **Adverse effects of estrogen**

- Increases blood clotting tendency: Risk of heart attack and embolism
- May decrease sexual desire feelings
- Deteriorates blood sugar levels
- Promotes zinc loss
- Increases copper in the blood
- Promotes loss of vitamin C and especially vitamin B6
- Reduces oxygen levels in cells
- Increases risk of breast cancer
- Increases risk of uterine cancer
- Inhibits excretion of salt and water: water stagnation, tightness
- Promotes depression and headaches
- Decreases the action of thyroid hormones: hypothyroidism and thus metabolic sluggishness
- Reduces the elasticity of the blood vessels: vein problems!

## **Observable symptoms of vitamin B6 deficiency**

- Water behavior
- Orange peel
- Hypoglycemia
- Sweet cravings, ravenous appetite
- Weight gain
- Liver swelling
- Nausea
- Head pain
- Skin problems
- Depression

It is mandatory for every woman on estrogen therapy to take at least an additional 40 mg of vitamin B6. Vitamin B6 in activated form is recommended.

### **Observable symptoms of zinc deficiency (symptoms initially non-specific and discrete)**

- Aversion to meat (typical)
- Wound healing disorder
- Decreased (cellular) immune defense
- Increase of infection frequency
- anemia
- Hair loss, nail brittleness
- Muscle degradation
- Weight loss
- Tongue and mouth mucous membrane inflammation
- Depression
- apathy
- Dementia
- Speech disorders
- Lack of convalescence in old age
- Fatigue without recovery and poor general condition
- Loss of appetite
- Impaired sense of smell and taste

Vegetables, fruits and fruits are low in zinc and additionally inhibit zinc absorption due to their phytin content. The most important zinc suppliers are fish, meat, eggs and oysters (=highest zinc content!).

### **High copper values in blood**

- Deposits In various organs (e.g. in brain, eye and liver)
- Eye Kayser-Fleischer corneal ring
- Liver Cirrhosis
- Brain The oxidizing copper deposits lead to the destruction of certain brain cells, especially in the basal ganglia:
  - Loss of control over movement.
  - Damage to other brain areas: neurological symptoms, mental abnormalities

## The estrogen dominance

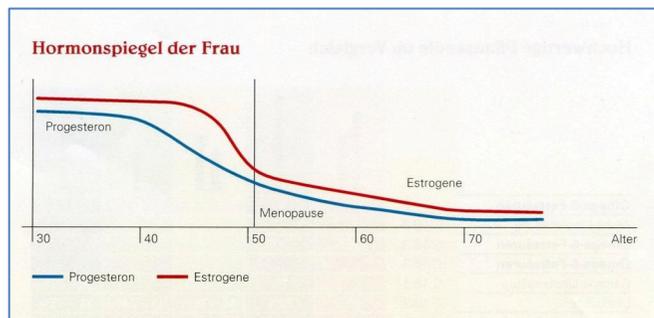
*Rubens figure! Too much estrogen, too little progesterone!*

The time before menopause is the time of estrogen dominance. Especially in the first years of menopause, estrogen dominance is widespread. The body produces less estrogens and progesterone, but usually much less progesterone in percentage terms, which can lead to the symptoms mentioned above.

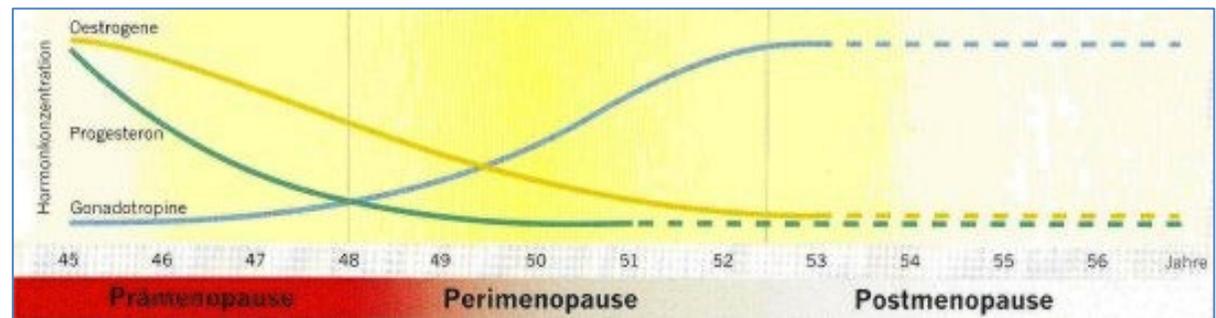
This relative excess of estrogens is called estrogen dominance. Estrogen is not really elevated in this situation; rather, it plays a dominant role in the body because the counter-regulating progesterone is no longer sufficiently present.

Many animal foods contain an excess of estrogens because estrogens are added to the feed (fattening foods), which further increases estrogen dominance. For the treatment of menopausal symptoms, estrogen-containing drugs are often used. Without the counterpart, progesterone, the additional administration of estrogens increases estrogen dominance.

The phase of estrogen dominance sometimes begins as early as age 35, at a time when women are not yet thinking about menopause. In younger years, cycle disorders or premenstrual syndrome (PMS) may already be an expression of estrogen dominance.



Source: Alpinamed Flyer Pomegranate Seed Oil-12/14



Source: Vifor: Company brochure

### **Complaints to be observed with estrogen dominance**

- Decrease in libido
- Premenstrual mood swings
- Depression
- Irritability
- Headaches
- Tension and swelling of the breasts, mastopathy
- Water retention
- Swollen feet
- Weight gain, fat deposits on hips and thighs
- Sweet cravings
- Dry mucous membranes
- Insomnia
- Dizzy spells
- Heavy and irregular menstruation
- Uterine fibroids
- risk of cervical cancer and breast cancer
- Tendency to ovarian cysts

### **Therapy of estrogen dominance**

- Weight reduction (fat tissue produces estrogens!)
- Use animal products in which no estrogens have been added as fattening agents
- Phyto-estrogen rich diet, because plant estrogens are much weaker effective than the body's own estrogen: Thus we counteract the estrogen dominance!
- Pomegranate seed oil, rich in 17-alpha estradiol (closely related to 17-beta estradiol)
- Progesterone cream as an antagonist to estrogen
- Black cohosh phytotherapeutics (estrogen-like effect)
- Monk's pepper (various ingredients with estrogen-like effect. Progesterone-like effects are also described)

## Phyto-estrogens - plant substances with estrogen-like effects

- Phyto-estrogens are substances extracted from plants that are comparable to human estrogen and have a similar effect.
- Phyto-estrogens are found widely in many plants.
- They belong chemically to the polyphenols, of which more than 8'000 substances are known as secondary plant protective substances.
- Depending on animal feed/fattening, phyto-estrogens are also detected in animal products (milk, meat, fish).
- The effect of phyto-estrogens is a factor of 100-1000 times weaker than that of endogenous (bioidentical) 17-beta-estradiol.
- With an excess of plant-based, phyto-estrogen-rich food, high estrogen effects can still be achieved in the body.

### 3 phytoestrogen classes

<b>Isoflavones (flavonoids)</b>	Soy beans, soy products Vegetables, fruits
<b>Lignans</b>	Highest concentration: flaxseed Other sources: Pumpkin seeds, sunflower seeds, nuts, Cranberries Broccoli, garlic, cereals Drinks: green tea, black tea, coffee
<b>Coumestane</b>	Beans sprouts Clover

## Effect of endogenous and plant estrogens at the estrogen receptor alfa and beta

<b>Alfa receptors:</b>	Predominance in uterus and liver
<b>Mixed distributions:</b>	Breast, ovary, and central nervous system. Individual cells may have both receptors simultaneously.
<b>Beta receptors:</b>	Are more abundant in tissues than alfa receptors. More abundant in ovary, bone, Immune system, cardiovascular system, and central nervous system.
<b>17-beta-estradiol:</b>	Binds equally well to both receptors.
<b>Phyto-estrogens:</b>	Stronger binding to beta-receptors

## Described effects of phyto-estrogens

- competition with the body's own estrogens at the estrogen receptor in the tissue
- Competition/inhibition also in the area of hormone synthesis (aromatase, 17 beta-hydroxysteroid-DH, 5 alfa-reductase, thus significantly reducing the risk of prostate cancer). prostate cancer is significantly reduced)
- Inhibition of other enzyme systems (inhibition of cell division, anti-cancer effects)
- Antioxidant effects in tissues
- Effect on bones, central nervous system and cardiovascular system
- Little or weak effect on the uterus and vaginal mucosa
- Prolongation of the menstrual cycle and attenuation of bleeding is possible only with extreme phyto-estrogen diet
- Favorable effect on breast tenderness/mastopathy
- Phyto-estrogens appear to be of little benefit compared to endogenous estrogen with respect to osteoporosis prevention.
- Phyto-estrogens in normal diets are considered safe.
- In case of extreme accumulation, an enhancement of estrogen dominance is possible.

## Literature

1. LEE J.R.: „Natürliches Progesteron – Ein bemerkenswertes Hormon.“ AKSE-Verlag, Dr. med. W. Gerz, Sonnenlängstr. 2 D-81369-München. ISBN 3-9805706-0-6.
2. HUBER J.: „Hormone für die Schönheit“. Ariston Verlag Genf/München. ISBN 3-7205-7205-5.

## Phyto-Soy (Isoflavones)

Soy isoflavones have estrogen-like effects and significantly reduce menopausal symptoms within 3-4 weeks. Phyto-estrogens of soybean protect against the potential danger of typical female cancer types. As a dietary supplement, 2 capsules are taken per day. These are the soy isoflavones, which belong to the secondary plant protective substances and are also called phyto-estrogens. To these we owe health-protective properties. The estrogen effect of phyto-estrogens is 500 to 1000 times weaker than our body's own estrogen. Therefore, phyto-estrogens have a balancing effect when estrogen levels are low, such as during menopause. At the same time, phyto-estrogens can cushion the estrogen effects on cells and tissues when hormone levels are high, thereby reducing estrogen-dependent cancer risks in particular. The isoflavones and lignans are transformed in the intestine in the course of digestion by bacteria of the intestinal flora and only these processed isoflavones and lignans convey a positive effect in the body.

The soy isoflavones and lignans have an activating effect on the estrogen-beta receptor (contact point in the tissue) and thus enhance the positive estrogen properties. At the same time, the isoflavones shield the risk-mediating estrogen-alpha receptor from estrogen. The cancer risk of estrogen is thus reduced.

How is it that the isoflavones and lignans activated by the intestinal flora on the one hand act similar to estrogen in hormone deficiency and on the other hand shield threatening estrogen effects and act anti-estrogen? The exciting discovery of the different contact sites (receptors) for estrogen answers this question:

Estrogen, like other hormones, mediates its effects through receptors on the cell and induces certain responses: Estrogen-alpha receptor and Estrogen-beta receptor. The distribution of these contact sites in tissues and organs varies.

Thus, the health-promoting estrogen-beta receptors are found preferentially in blood vessels, lungs, prostate, bladder, bones and thymus. The estrogen-alpha receptor dominates in breast tissue, uterus (womb), ovaries, testes and liver, among others.

When estrogen production decreases during menopause, the hormones FSH and LH increase. As a result of the increased secretion of FSH and LH, there are then the little appreciated heat flushes and night sweats. The phytoestrogens make an estrogen-like contribution when estrogen levels are low and at the same time reduce the increase in the hormones LH and FSH. As a result, the classic symptoms of hot flushes and night sweats subside.

## Phyto-estrogens: new way of thinking: Soy is not harmless!

Lecture SSAAMP, Zurich, November 2011, lic. phil. dipl. Psych. Dr.med. Peter R. Müller: "Soy is not harmless".

-Phyto-estrogens: have different effects in the body.

-Good: Increased intake of lignans (flaxseed, cereals, vegetables) after menopause: lower risk of mortality, reduced formation of metastases or second metastases or second tumors (German Cancer Research Center, Heidelberg 2011).

-Good: Apples: Contain phloretin (dihydrochalcone): Strong estrogenic activity (Jungbauer A. et al. 2005).

-Daidzein and genistein, richly represented in soybeans and tofu, as well as

other ingredients are not harmless according to new studies:

- Gene damage

- Increased cancer risk

- Alteration of the immune system: Increases allergy susceptibility

Weakens the immune system

- Damage to repair mechanisms in the gastric mucosa

- Inhibition of protein digesting enzymes: trypsin and chymotrypsin

- Inhibition of copper, iron, zinc, magnesium and calcium uptake

- Decreases not only estrogen but also progesterone

## Soy: Increased cancer risk?

### A soy company's brochure states:

"The Japanese, who eat much more soy than the North American, have lower rates of breast, uterine and prostate cancer."

"This may be true, but perhaps not as a result of soy consumption, but for other reasons!"

"But: The fact that the Japanese, like almost all Asians, have a much higher rate of other cancers always goes unmentioned: esophageal cancer, stomach cancer, pancreatic cancer, liver cancer, as well as an exceptionally high incidence of thyroid cancer!"

### Soja und Brust Krebs: gefährlich!

- » Bei vorhandenem Brust Krebs ist das Wachstumsrisiko unter Genistein und Daidzein erhöht: Isoflavone haben eine proliferierende Wirkung beim Brust Gewebe. Die in Soja enthaltenen Phyto Östrogene, Genistein und Daidzein haben eine ähnliche hormonelle Wirkung wie Östrogen
- » In Tier Versuchen mit weiblichen Ratten hatte eine sojareiche Ernährung zum rasanten Wachstum vorhandener kleinerer Tumoren geführt
- » Die Wachstumsbeschleunigung ist unter Genistein Dosis abhängig
- » Absetzen von Genistein führte bei Brust Krebs zu einer Besserung
- » Die Einnahme von Soja bei Brust Krebs zurückhaltend erfolgen

### Soja: Hoher Glutamat Gehalt

- » Sojabohnen sollen im Vergleich mit anderen Pflanzen Produkten die höchsten Glutamat-Spiegel haben
- » Hohe Glutamat Spiegel können das Nerven System schädigen und u.a. Migräne auslösen
- » Genistein vermindert Glutamat-Schutzfaktoren

### Soja: Verminderte Testosteron-Wirkung: Weniger Lust auf Sex?

- » Verminderte Testosteron Bildung
- » Genistein hemmt wichtige Enzyme. (Whitehead SA. et al)
- » Stimuliert Sexualhormon-bindendes Globulin, SHBG-, welches die Verfügbarkeit des vorhandenen Testosterons herabsetzt
- » Die vermehrten SHBG-Konzentrationen wurden bei postmenopausalen Frauen unter Konsum von Nahrungs-Isoflanon nachgewiesen
- » Verminderung der Testosteron Empfindlichkeit im Gewebe unter Genistein
- » Isoflavone hemmen die Aromatase und damit die Umwandlung von Testosteron zu Estrogen

## **Soja: Schlecht für die männliche Fertilität**

- » Verminderte Spermien Bildung
- » Spermien Zahl unter Soja Konsum: Im Schnitt 41 Mio (Normalwerte: 80-120 Mio)
- » Um die Sperma Qualität derart zu schädigen, reichen schon geringe Mengen aus, beispielsweise eine Tasse Soja Milch oder eine halbe Portion Tofu

## **Soy and breast cancer: dangerous!**

"If breast cancer is present, the risk of growth is increased under genistein and daidzein: Isoflavones have a proliferating effect in the Breast tissue. The phytoestrogens, genistein and daidzein, contained in soy have a similar hormonal effect as estrogen.

"In animal experiments with female rats, a diet rich in soy led to the rapid growth of existing smaller tumors.

" The growth acceleration is dose dependent under genistein

" Discontinuation of genistein led to improvement in breast cancer

"Restraining the intake of soy in breast cancer

## **Soy: High glutamate content**

" Soybeans are said to have the highest glutamate levels compared to other plant products

"High glutamate levels can damage the nervous system and trigger migraines, among other things

"Genistein decreases glutamate protection factors

## **Soy: Decreased testosterone effect: less desire for sex?**

" Decreased testosterone formation

" Genistein inhibits key enzymes. (Whitehead SA. et al)

" Stimulates sex hormone-binding globulin, SHBG-, which decreases the availability of existing testosterone.

" Increased SHBG concentrations have been demonstrated in postmenopausal women consuming dietary isoflanone

" Reduction of testosterone sensitivity in tissues under genistein

" Isoflavones inhibit aromatase and thus the conversion of testosterone to estrogen

## **Soy: Bad for male fertility**

"Decreased sperm formation

"Sperm count under soy consumption: 41 million on average (normal values: 80-120 million)

"Small amounts are enough to damage sperm quality, for example one cup of soy milk or half a portion of tofu.

### **Pregnancy: soy isoflavones lead to permanent changes**

- " Phytoestrogens enter fetuses and infants via the placenta and breast milk
- "Soy flavone exposure in rats (pregnancy and lactation) later led to premature puberty, menstrual disorders and reduced fertility in the female sex.  
reduced fertility
- " Soy flavone exposure in rats (pregnancy and lactation) later resulted in altered testosterone concentrations in the male sex,  
larger prostate, smaller testes, permanent demasculinization, and decreased ejaculatory behavior.

### **Soy: Bad for the male brain**

- "Decreased levels of the protective brain chemical BDNF (in contrast to increased levels in females. BDNF is decreased under stress  
and in Alzheimer's disease)
- " Increased inflammation due to elevated COX-2 levels in male rats.
- " Poorer visuospatial abilities (inverse of females).
- " Accelerated decline in brain mass in older males
- " Increased stress, increased anxiety, and decreased social interaction in male rats
- " Higher blood sugar levels in Chinese males, but not in Chinese females

### **Soy: Bad for the environment**

- " Over 90% of the world's soybean crops are already genetically engineered, and the trend is rising
- " Monsanto's MON 89788 GM beans are resistant to the weedkiller Roundup and engineered for high yields
- " Rainforests, especially in South America, are being cleared for soy plantations

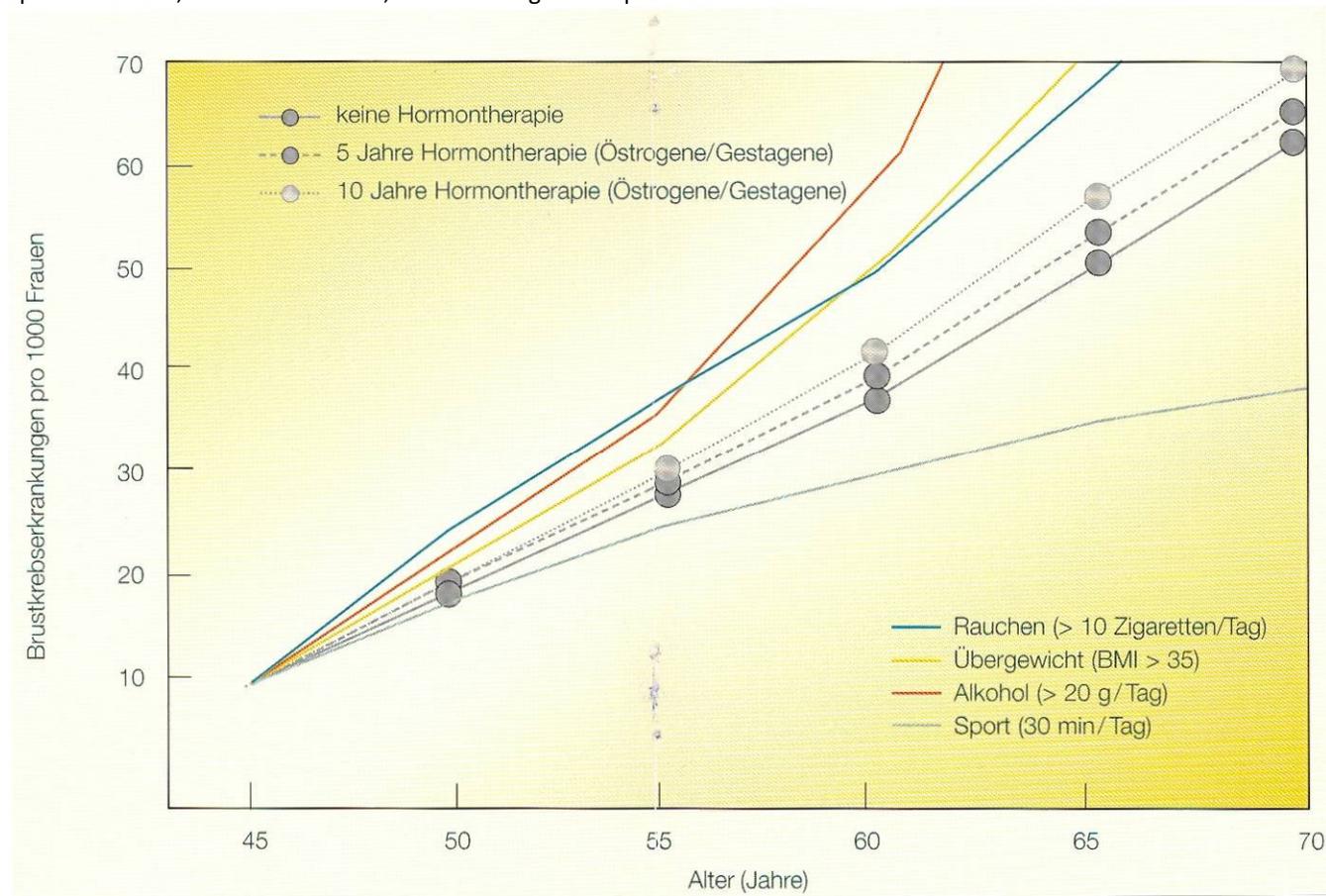
### **Soy: Specific side effects**

Source: Medical Tribune - 12.5.2017

- " Nausea, gastrointestinal disturbances, constipation, possible endometrial hyperplasia, increased risk of estrogen-dependent tumors, male infertility, thyroid disorders

## Influence of lifestyle on breast cancer risk

Alcohol, obesity (insulin resistance, fat liver) and smoking promote the development of breast cancer, with alcohol in particular having a significant cancer-promoting effect. Sports activities, on the other hand, have a strong cancer preventive effect.



## Breast Cancer Prophylaxis - What You Can Do

- Quit smoking - you will not only reduce your risk of developing lung cancer, but also your risk of developing other types of cancer, such as cervical cancer.
- Drink alcohol in moderation (no more than a quart of wine a day).
- Exercise. Four hours of exercise a week reduces breast cancer risk by about 61 percent.
- Eat produce with free-radical scavenging properties (e.g., tomatoes, broccoli). They can significantly lower your risk of developing breast cancer.
- Consume at least 1 gram of calcium per day. This will protect you from osteoporosis and also from colon cancer. Calcium also prevents premenstrual syndrome. Don't forget vitamin D and magnesium!
- Eat enough salad or vegetables. Currently, folic acid is thought to protect against breast cancer.
- There are a number of fruits and vegetables, such as tomatoes, collard greens, and grapes, that have special ingredients that are beneficial to health. 1 kg of broccoli effectively protects against breast cancer. This is also true for green tea. Overall, it is now believed that antioxidants, including vitamin-C and vitamin-E gamma, have health-promoting effects. Of all the fruits currently known on earth, the pomegranate has by far the strongest cancer-inhibiting effect. The same statement applies, as far as vegetables are concerned, to broccoli and, among oils, to rapeseed oil, which has a high content of the cancer-inhibiting vitamin-E "gamma" and also the best omega-6 to omega-3 ratio.
- Prepare your food gently. There is evidence that grilling, deep-frying and over-frying leads to an increase in cancer risk.

Best rapeseed oil: [St.Galler rapeseed oil](#)

Best pomegranate product: [Pomegranate Elixir Dr. Jacobs](#)

Source: [drje49@gmail.com](mailto:drje49@gmail.com)

## The cancer preventive diet

More info: [www.ever.ch](http://www.ever.ch) (Medical knowledge)

More info: Member area: Password: ever



Just a few servings of broccoli a week protect men from prostate cancer and women from breast cancer. Researchers attribute the cancer-protective effect to isothiocyanates, which are also found in cauliflower, Brussels sprouts, other types of cabbage, watercress and arugula.

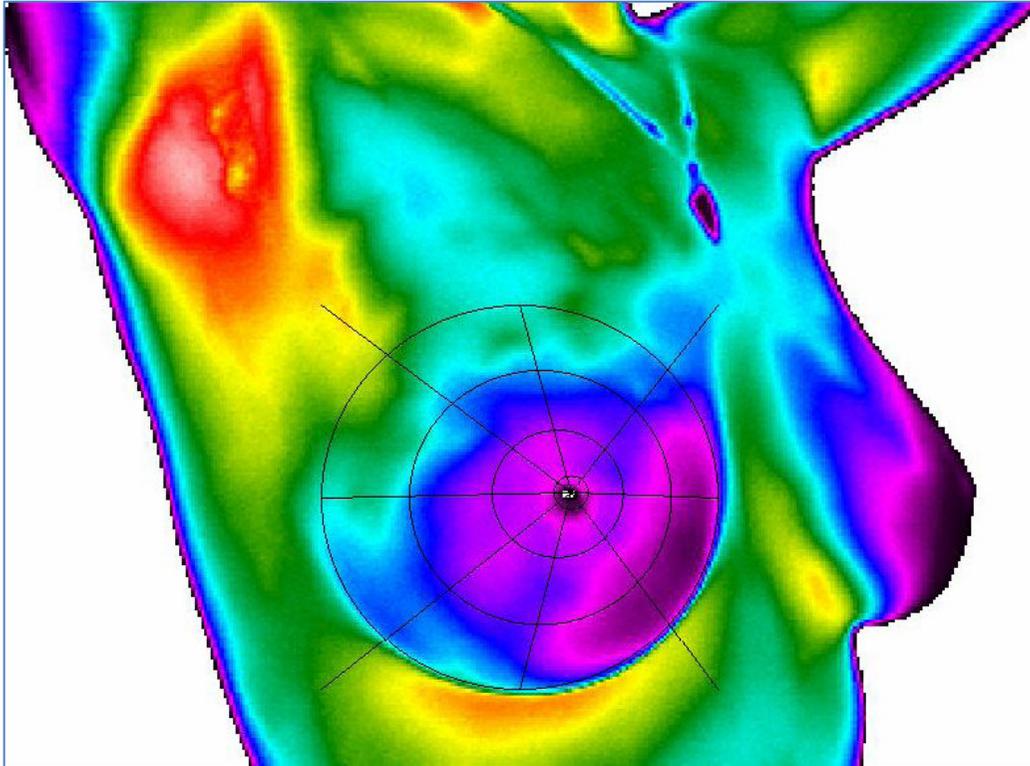
Omega-3 fatty acids (fish oil) improve the immune system in many ways and inhibit so-called "cytokines", which are significantly involved in cancer growth. On the other hand, omega-6 fatty acids (arachidonic acid in animal fats and linoleic acid in vegetable fats) promote these very cytokines and thus contribute to tumor growth.

Pomegranate juice has a high value in cancer prevention AND cancer therapy! It contains plant estrogens (phyto-estrogens) which bind to estrogen receptors and thus have an anti-estrogenic effect. High estrogen levels, known as estrogen dominance, promote cell growth. Especially in the case of hormonal tumors (breast, prostate), pomegranate has shown a clear protective effect. Naringin, an important phytoestrogen in the juice and bark, blocks the enzyme aromatase, a key enzyme for the synthesis of estrogens = protective effect on hormone-dependent cancers such as breast or prostate cancer. Pomegranate juice also contains aromatase. Aromatases inhibit the conversion of inactive testosterone into its active form and thus have a protective effect against prostate cancer.

Excessive consumption of rapidly absorbed carbohydrates (sweet drinks, sugar, white bread) leads to insulin elevation and over time to insulin resistance, which in turn promotes cancer suffering.

## Thermography - Heat measurement of the breast (MammoVision)

More info: [www.ever.ch](http://www.ever.ch) (Medical knowledge, Thermography)



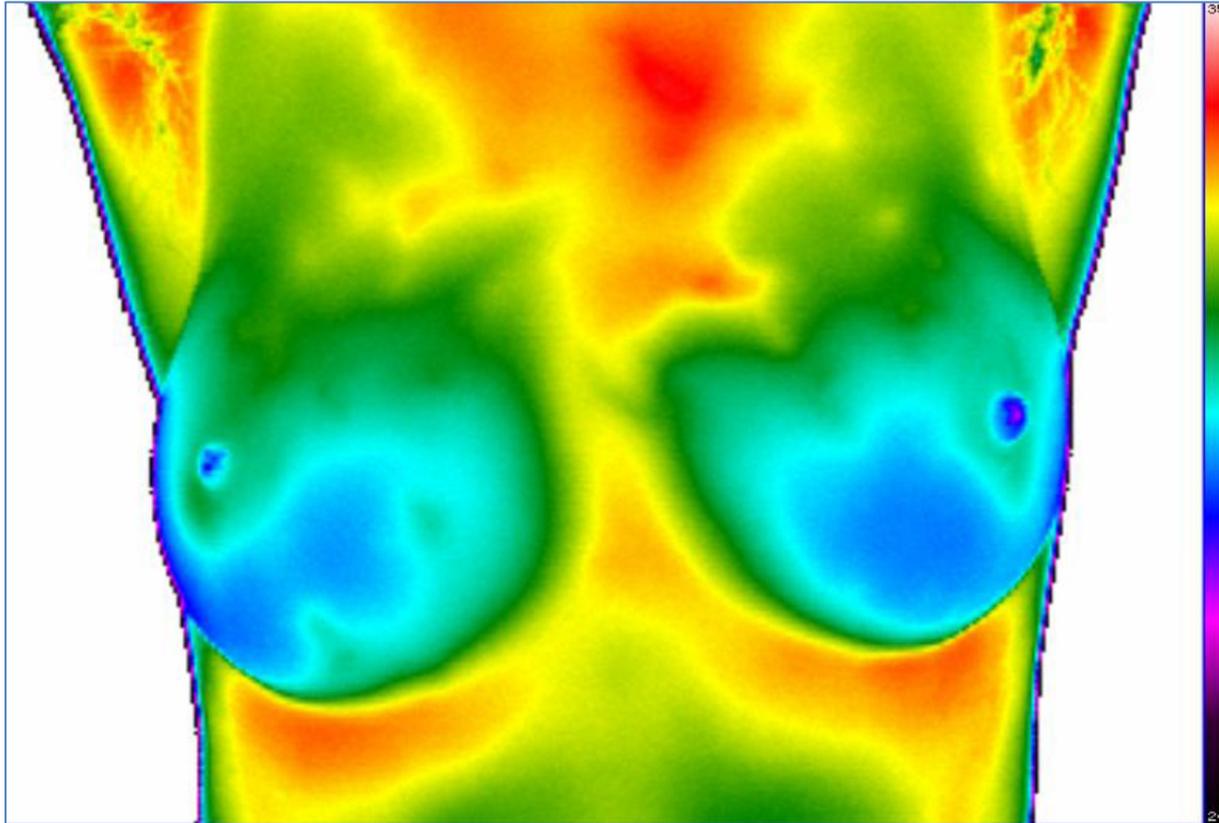
In my medical practice I use - and this is a Swiss novelty - medical thermography for diagnostic purposes with a focus on the female breast: detection of cancer risk.

Thermography tries to detect changes at an early stage by means of the heat radiation of the body, especially of the breast. These are caused by a change in blood flow and metabolism, but also by certain hormones. Thermography using a thermal imaging camera makes it possible to detect a cancer risk at an early stage - long before the onset of the disease - and to diagnose tumors more reliably at an early stage, while classical methods such as mammography only allow the already existing structural damage (calcifications, cancer) to be detected.

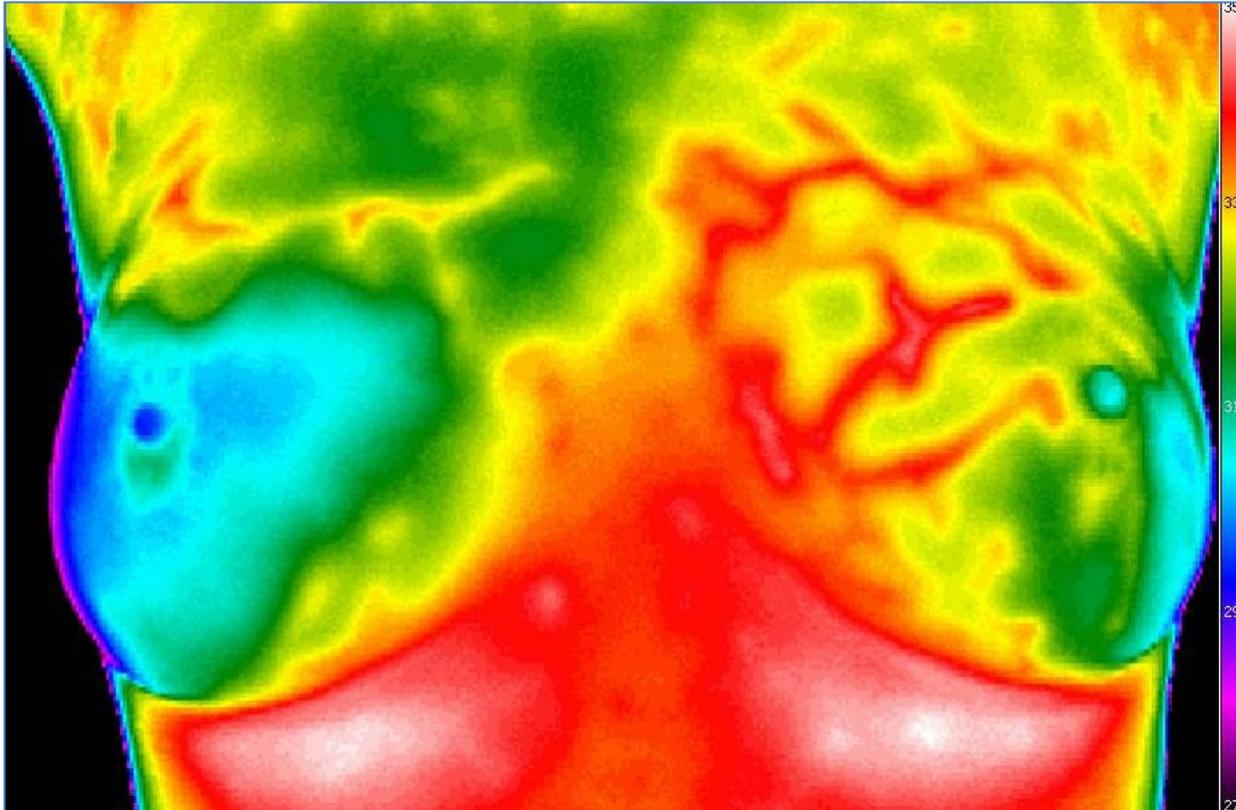
Thermographically, therefore, statements can be made about the relative cancer risk: more heat = increased metabolic activity = higher cancer risk. The faster a tumor grows, the higher the heat production.

Non-contact thermography offers the advantage of being able to record the heat behavior of the entire body over the entire surface at a glance and, in many cases, eliminating the need for other stressful procedures.

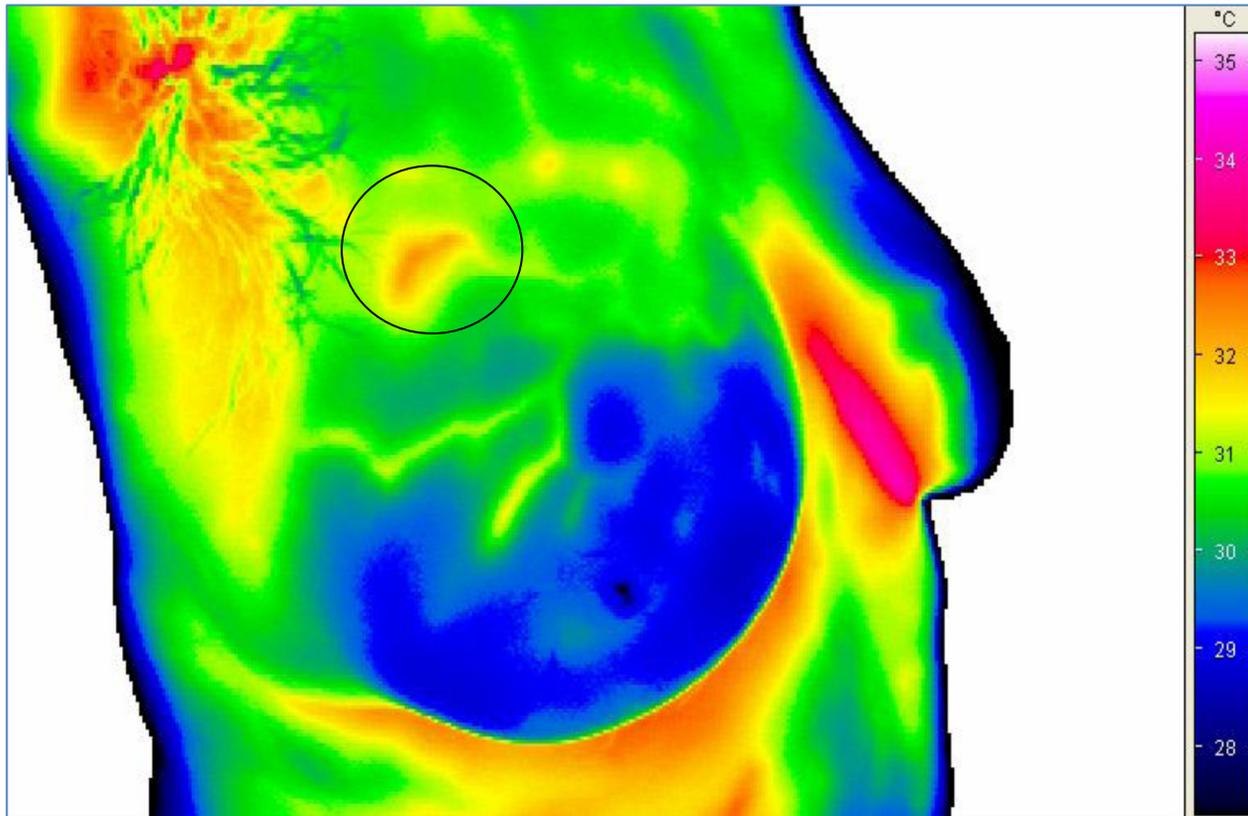
## Thermography - Healthy breast



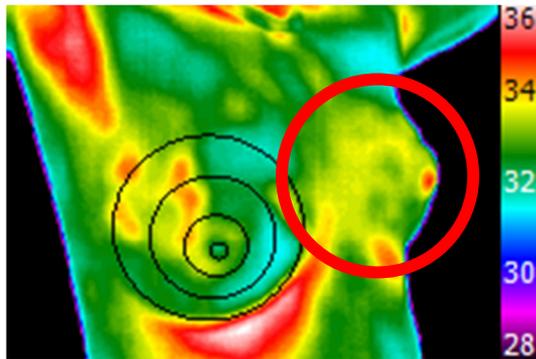
**Increased heat breast left = increased metabolic activity = increased cancer risk**



**Increased heat breast left = increased metabolic activity = increased cancer risk**

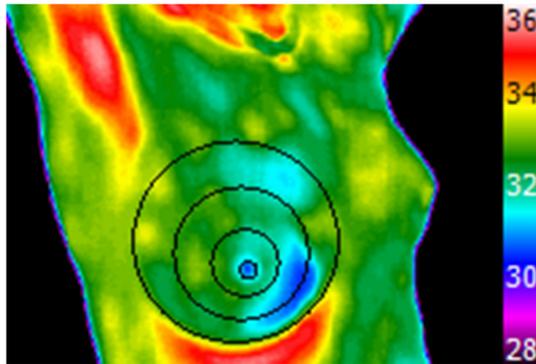


## Breast cancer left, advanced, treated according to above principles

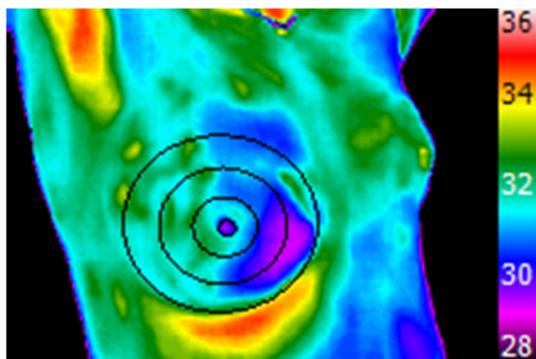


12.11.09 Before treatment (red circle)

yellow = very warm  
red = very hot (nipple (should be blue = cold))



16.3.10 Cancer area significantly colder - activity reduction



07.09.10 Further cooling - further activity reduction

## Breast cancer on both sides

- Breast cancer left side: Filling the left breast: Large circle
- Breast cancer right: Starting (central, dark area = high, thermal activity): Small circle
- Black arrows: Direction of spread. The opposite side is always sharply delimited!
- Illustration: Strong contrast

