Responding to Environmental Impacts on Fertility, Birthing and Infant Health ~ Margi Flint

Always consider your genes, environment & the power of what goes into your mouth.

Genetics, and specifically a lack of intrinsic factor, as well as exposure to environmental chemicals are important factors in determining whether the body manifests disease or imbalance in the reproductive organs, fertility and infant health. We will look at how both of these factors impact fertility issues and infant health as well as discuss indications and patterns of imbalance to look for in the body. We will discuss herbs and diet changes that can positively affect and reverse these imbalances. We will also wonder, based on the patterns that I have observed over decades of working with clients, whether exposure to environmental chemicals is altering our gene expression and affecting our ancestral lines.

~ Pathogenetics ~

~ Genetics ~ Low Intrinsic Factor Symptoms ~

Family history of mood disorders, OCD, Cancers, Autism, Asperger's, all neural tube deficiencies, Pyloric and ileocecal valve issues, dermoid and other cysts, Scoliosis, Spina bifida, Cleft palette, Lack of collagen, Clubfoot, Atherosclerosis, Low BP, Heart Murmur, diverticulitis, & other inflammatory digestive issues & auto-immune diseases; Diabetes – Metabolic syndrome, Lupus, Irritable Bowel Syndrome, Crohn's Disease, Fibromyalgia, Epstein Barr, Multiple Sclerosis, plus conditions with inflammation of nerves and connective tissue.

~ Symptoms at All Ages Currently ~

Over-production of scar tissue; keloids, endometriosis, thickened scars that feel like a snake under your fingers, Paleness of skin, gums, fingernail beds, sclera, tongue, upper lip, Other signs of Anemia – Megaloblastic & Pernicious, Retinal hemorrhages, Leg swelling, Jaundice, Swollen tongue, Webbing between second and third toes, Fibroids, clotting, Gum pain and swelling, Cancer, Low Hcl, gas, bloating, inflammation. Poor gut instincts. Dimples ~ Acne ~ scaring ~ Lack of I.F. B12 and folate issues MTHFR, Anemia

Epigenetics ~ the study of changes caused by modification of gene expression rather than alteration of the code itself.

Herbs and Nutrition to encourage Intrinsic Factor;

Gotu Kola *Centella asiatica* and Sweetleaf *monarda fistulosa*, will help unwind fibrin formation as will Castor Oil *Ricinus communis,* or "Palma Christi" the hand of Christ topically.

Yarrow *Achillia millefolium* is the great protector and creates healthy boundaries

Calendula *Calendula Off* for wound healing and healthy granulation of tissues.

Baical Skullcap *Scutellaria baicalensis* to assist with valves and the function of the heart.

Eleuthero *Eleutherococcus senticosus* as an immune tonic.
Horsetail *Equisetum Hymale* for strength in vibrancy of tissues, hair and nails.
Gut herbs listed in extra cellular matrix paragraph.

Supplements

Serrapeptase, Sublingual B12 Methyl cobalamin, (Pills? Make sure they contain Intrinsic factor plus B12), Folate (methylfolate 5-MTHF or L-5-MTHF). High doses of probiotics will also be necessary to restore the gut ecology.

Nutritional support

- Dark leafy greens- Spinach, Turnip Greens, Collard greens, Mustard greens, & Romaine lettuce
- Asparagus
- Broccoli
- Citrus fruits including Papaya, Grapefruits, Oranges, Berries and Strawberries
- Peas, Beans and Lentils- including Pinto, Black, Garbanzo, Navy, Lima Beans and Split and Green peas and Beans
- Avocado
- Okra
- Brussels Sprouts

Environmental Impacts on Fertility and Reproductive Health

Fertilizers and Pesticides Found in Water

Out of almost 50,000 utilities studied, 40,000 tested positive for contaminants linked to cancer and 19,000 tested positive for lead at levels known to be harmful to children. 1,2,3-trichloropropane, or TCP, is a contaminant in the drinking water of at least 21 states.

California produces two-thirds of America's fruits and nuts, and a third of its vegetables, with the lion's share grown in the 250-mile-long San Joaquin Valley. But the bounty comes with a price: widespread contamination of drinking water from agricultural chemicals. Every CA vineyard, even organic was tested for Glyphosate from Roundup all tested positive.

Fertilizers and pesticides in the soil

Among the most toxic is 1,2,3-TCP, an extremely potent carcinogen that was formerly an impurity in the pesticides & Telone, and D-D are fumigants – poisonous gases injected into the soil before planting crops, to kill microscopic worms called nematodes. Both were not made after 1984 later took TCP out of Telone – but not before it contaminated the tap water supplies of millions of Valley residents.

OEHHA 1993 study by the National Toxicology Program, or NTP, that found TCP caused stomach, liver, kidney damage and other cancers. Last year an OEHHA scientist told KQED-FM: "There is absolutely no question it is a genotoxic carcinogen.
The research above is from EWG.com. When you want my research notes email me margi@earthsongherbals.com.

Plastics ~ contain bisphenol. They to xenoestrogens, endocrine disruptors which stimulate mTOR.

Dairy ~ growth hormones plus amino acids, particularly leucine and arginine that are high in dairy, stimulate the mTOR

Sugar ~ high fructose corn syrup driving up the mTOR, or insulin. 1 out of 3 Americans are either pre-diabetic, or diabetic.
A proper balance of mTOR Mechanistic Target Of Rapamycin ~ cell rebuilding, and autophagy ~ cellular cleaning, is needed for homeostasis. mTOR is about "growth", using proteins and lipids to make new cells, while; Autophagy, is the "clean-up" crew, absorbing and "recycling" the old cell, and other "debris" (an equal "reaction" to mTOR). When mTOR is activated, Autophagy is reduced. An individual's unique genetic factors, along with epigenetic factors impact and can disrupt this delicate balance between mTOR and autophagy. Mold, autoimmune, mental disorders, over activity of the brain, xenoestrogens all stimulate mTOR.

Impacts on fertility

30 to 40 percent of all conceptions result in a pregnancy loss. Infections such as Lyme disease or Fifth disease, exposure to toxic chemicals (such as pesticides or bisphenol A) may increase risk of chromosomal abnormalities. Most important teratogens today are alcohol and smoking. They are among the leading preventable causes of birth defects and developmental disabilities.
Drugs - prescription, over-the-counter, or recreational drugs. Infectious agents - rubella, cytomegalovirus, varicella, herpes simplex, toxoplasma & syphilis.

The Neuro-endocrine & Endocannabinoid Connections to Fertility

More women experience an absence of embryo with heartbeat after a scan. This is a gestational sac with a yolk sac that keeps growing.

Possible Causes of Absence of Embryo

"Cell phones ~ electro magnetic fields are endocrine disruptors. Direct link to brain tumors.

Topical disruptors - antimicrobial and fabric-softening agents, or preservatives. 150 percent increase in the rate of neural tube defects- associated with nerve damage; muscle weakness; and walking, learning, bladder and bowel problems. A cause of Transgenerational effects – defects that persisted through subsequent generations.

Maternal health factors - diabetes, maternal PKU, etc.

Environmental chemicals - organic mercury compounds, polychlorinated biphenyl or PCB, herbicides and industrial solvents, etc.

Cleaners -chemicals commonly found in household and commercial cleaning products can lead to birth defects which can last for generations. Quaternary ammonium compounds, or quats, affect development of embryos or fetuses. The health impacts were found through ingestion & inhalation of the chemicals resulting in impaired fertility, and lower sperm concentration and mobility.

Borax and boric acid. The European Union considers them toxic to human reproductive systems (ECHA 2011). Men working in boric acid-producing factories have a greater risk of < sperm count and libido. Chronic exposure to high doses of borax or boric acid causes testicular atrophy in males. Female < ovulation and fertility at higher doses. borax and boric acid can cross the placenta, affecting fetal skeletal development and birth weight.

Iron stimulates mTOR. Pregnant women need iron to stimulate growth of the baby.

This solvent is also known as DEGME or methoxydiglycol damaging fertility or the developing fetus (ECHA 2011). The Glycol ether family have been linked to impaired fertility and reproductive and developmental toxicity. (EPA 2000; NTP 2000). Four are on California's Proposition 65 list of male developmental toxins. Occupational studies indicate that men exposed to glycol ethers on the job are more likely to have reduced sperm counts, and that pregnant women exposed on the job are more likely to give birth to children with birth defects (Cordier 1997; CDHS 2007). These solvents are readily absorbed through the skin or via inhalation and can reach toxic levels in the body.

Children born to women working as building custodians have a significantly increased risk of certain congenital deformities (Herdt-Losavio 2010). Other occupational studies have highlighted risks of solvent exposure for a group of children born to women working with organic solvents during pregnancy. Some of the children in this category had reduced IQ and language skills (Till 2001; Laslo-Baker 2004) and vision abnormalities (Till 2005).

There are epigenetic factors amplified by genetic weakness that stimulates the mTOR. The mTOR get's turned on and weakens autophagy (the natural, regulated, destructive mechanism of the cell that disassembles unnecessary or dysfunctional components.)

Intermittent fasting can help to re-regulate autophagy.

Extra-cellular matrix

That magical invisible inner layer in every cell.

Always consider your genes, environment & the power of what goes into your mouth.

Use demulcents

Marshmallow root *Althea* flower and leaf
Slippery elm *ulmus fulva* inner bark (endangered, plant a tree) to soothe the tissues
Plantain *Plantago* leaf to nourish and bind the tissues
Calendula *Calendula off* flowers for wound healing, granulation
Cinnamon *Cinnamomum zeylanicum, Cinnamomum cassia* balances blood sugar and improves cold digestion
Comfrey root or leaf used short term when no liver damage is present
Okra in cooking
Hibiscus especially in hot conditions
Chia & flax seeds soaked for hormone function and elimination
Fenugreek for kidney support and estrogen increase
Mullein flower demulcent and lung conditions
Violet gorgeous & breast conditions

Supplements Foods and Herbs to Consider

SAMe, incidental methionene ~ many people are low in. Have genetic variants in the GAMT or COMT genes? Possibly stimulates mTOR.
Resveritrol Japanese Knotweed *Polygonum cupidatum* ~ antioxidant rich
Turmeric *Curcumin* ~ antioxidant rich, pancreas and spleen, anti-inflammatory
Berberines
Chamomile *Matricaria recutita* flowers ~ anti-inflammatory for spasms
Pumpkin seeds and other zinc rich foods
Berries

Babies

The kids who are in college today have been exposed from the moment of conception and in the womb to toxins causing endocrine disruption. Birth defects affect one in every 33 babies (about 3% of all babies) born in the U.S. Birth defects are the leading cause of infant deaths, accounting for 20% of all infant deaths. MACDP defines major structural or genetic birth defects as conditions that 1) result from a malformation, deformation, or disruption in one or more parts of the body, a chromosomal abnormality, or a known clinical syndrome; 2) are present at birth; and 3) have a serious, adverse effect on health, development, or functional ability. These statistics *do not include* nonstructural or genetic disorders not detected in children aged <6 years).

The overall prevalence of major defects was stable from 1978 (2.8 per 100 live births) to 2005 (3.0 per 100) During this period, the number of births in the metropolitan Atlanta area more than doubled, from 24,396 in 1978 to 51,400 in 2005. Prevalence of defects generally was lower among births to black mothers (PR = 0.94, CI = 0.93--0.95) and Hispanic mothers (PR = 0.89, CI = 0.86--0.93) than to white mothers.

Births to women aged >35 years had a greater prevalence of defects with this excess prevalence increasing over time, > among infants with birthweight 5.4, and among infants with gestational age of 20--36 weeks, >among males than among females however, the higher prevalence among males decreased when defects that occur almost exclusively in males (e.g., hypospadias) were excluded

Indications for Babies

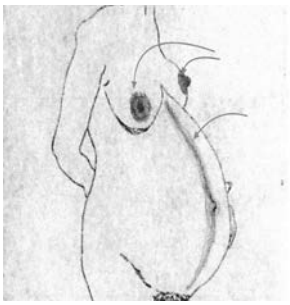
Babies with rosy red apple cheeks is a specific food allergy  —Crying after feeding, chronic constipation, mucous eye exudates, skin allergies, hives, and rashes, dry skin, over-reaction to insect bites, birth defects, mutations of the tiny tubes of the body; eustacian, ureters, urethra, fallopian, and all of the organs who can be misplaced... gills and more. Down syndrome and other autosomal trisomies among the offspring of mothers aged >35 years has increased. For example, the MACDP case definition does *not include developmental, functional, or other types of congenital disorders*. Do include ADD, ADHD, OCD and other issues of cognition and mood.

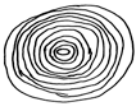
The findings in this report indicate that the overall prevalence of major birth defects in metropolitan Atlanta did not change significantly during 1978--2005. Doubling by 1978.

What to watch for

Pineal Gland Indications

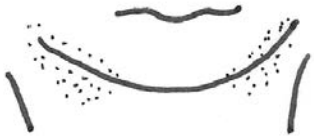
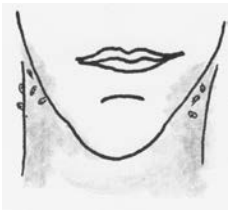
Begin with the first step of the endocrine dance- the Pineal Gland. The Sand Man creates Radioplaque calcium phosphate" and carbonate granules who gather on the edges of your eyelids. "Parathyroid functioning plays a role in the sand-layering process." Tammi Sweet. Pigmentation changes, circadian rhythms.





Visual Indications for the Ovaries

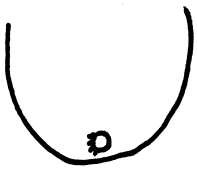
Remember, your grandmother carried your egg in her.
Hair growth around genitals and armpits, Non-healing cystic acne, Pale and bleeding gums (lack of progesterone to make Co Q10 ubiquinol), Wrist looks gray from blood stagnation (angelica) Matthew Wood, Whole area breaks out, Lymph system in pelvic floor , Polycystic Ovary syndrome, multiple follicular cysts

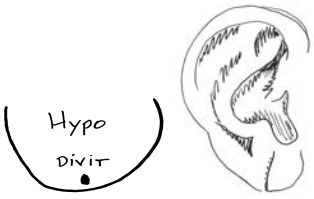

Auto-immune indicators ~ including thyroid and asthma

Thyroid

Hyperthyroid



Hypothyroid~



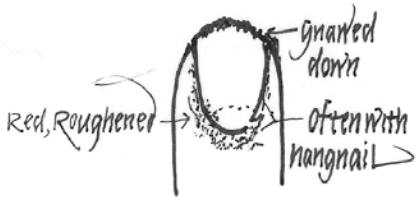
Diabetes and other autoimmune issues.

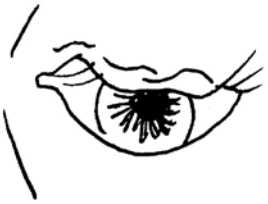
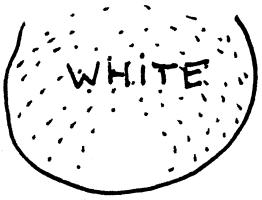
Uterine symptoms

Non-viable pregnancies, miscarriages, fibroids, clotting, tipped uterus, scar formation from IUDs

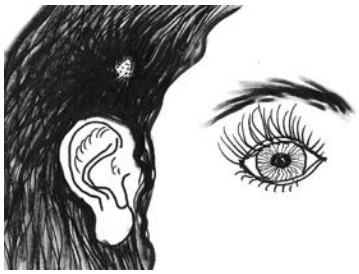
Dehydration affecting heart, uterus, endocrine system.

Foggy thinking, Headaches, Tired but can't sleep, Cholesterol & triglycerides may be high, Irregular periods and heavier bleeding during cycles, Infertility (lack of I.F.), Miscarriages (lack of I.F.), Apnea or shallow breathing, Hashimoto's Thyroiditis, Voice is deepened or gravelly, Constipation, Snoring may occur, Depression, Food allergies causing inflammation , Body temperature is cold, hands and feet are cold. A "big white pasty tongue" says Matt Wood.

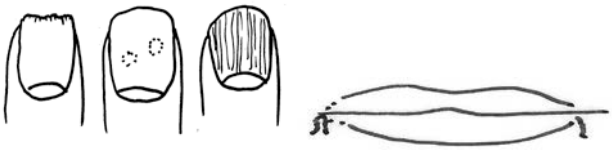


Pituitary related to gastric issues




Eat bland foods- still get reflux = hyperchlorhydria ~
Look to calcium deficiency symptoms; insomnia, grinding teeth, osteoporosis



Gastric issues

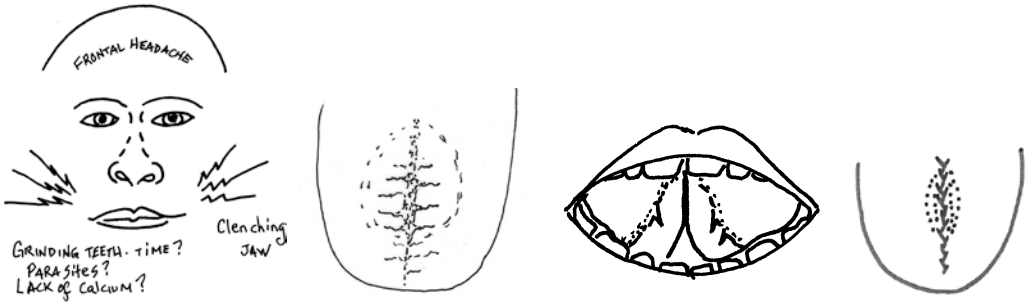
Antibodies are created because of Allergies to Soy, corn**,** Casein **,** Gluten in Wheat/Rye/Barley/Spelt/Avenin in Oats**,** Eggs**.** Lack of Intrinsic Factor, I.F. builds the stomach lining.Shots of B12 or sublingual B-12 methylcobalamin B12 is necessary for the development of red blood cells from the gastrointestinal tract. Need I.F

Right! Digestive issues! 

Gnawing belly pain, Mouth sores, Mouth ulcers, Lack of collagen in the skin; old before their time. Non-healing wound on large intestine/lung area of face/tongue.

Indicators

Neural Tube deficiencies, Dermoid and other cysts, Scoliosis, (Spina bifida, Cleft palette < due to folates in prenatal care), Clubfoot, Longer toe next to big toe.



Indicators for Adrenal issues

Skin tags (high Cortisol) undigested proteins, diabetes, Swelling abdomen L GB, Tongue White coating, Anemi, Gray colorations in skin, eyes and tongue, Muscle spasms, facial twitches, Diagonal line in the ear lobe.