

# Signs and Symptoms: Adrenal Fatigue vs. Low Thyroid Function

Key: - generally absent; +possibly present; ++ often present; +++ always or almost always present

Signs and Symptoms	Adrenal	Mixed <a href="#">(1)</a>	Thyroid
Body Type	Mild: Gains weight easily; Moderate: Can't lose weight; Severe: Thin, can't gain weight	Gains easily, goes to tummy/hips first, very hard to lose	Weight gain, generalized or global, extremely hard to lose
Face Shape	Eyes, cheeks sunken when severe	Normal	Full, puffy around eyes
Eyebrows	Tend to be full	Normal to sparse	Very sparse outer 1/3 to 1/2
Tissue Around eyes	Sunken appearance, may have dark circles	Normal or some "bags" under the eyes	Puffy around the eyes, often bags under the eyes
Facial Coloring <a href="#">(2)</a>	Tendency to pallor, especially around mouth. In dark skin, it darkens around mouth, forehead, sides of face	Pallor around mouth (more visible with light skin)	Ruddy or rosy complexion, including around the mouth
Hair quality	Thin and wispy. May become straw-like or straighter. Dry. Falls out easily. Sparse on forearms or lower legs.	Tendency to become sparse	Tends to be coarse, sparse, may become wavy or curly (rare) or change color. If severe enough, hair loss is common.
Nails	Thin, brittle	Break easily	May be thick
Skin Quality	Dry, Thin, Finger-prints often "smoothed out" or flat/shiny and may have longitudinal wrinkles over finger pads (probable cause is low collagen level)	May be thin, dry, bruise easily, poor healing.	May be oily or moist. Poor healing, May bruise easily. Skin thickness is normal (not thin). Typically good quality finger prints.
Fluids/Secretions	Dry skin, little secretions. Can't hold onto water.	Mixed, e.g. dry body and oily face	Good secretions. Skin may be oily. Tendency to fluid retention.
Connective Tissue Quality (ligaments, tendons, skin, hair, and nails)	Lax ligaments or flexible (e.g. flat feet, double jointed). Joint strains/sprains are common.	Mixed	Poor flexibility.

Pigment Distribution	Vitiligo (white spots or patches) in late stage. May tan too easily. In dark skin, darker on forehead, sides of face, around mouth and chin/jaw.	Milder version of vitiligo (small patches or tiny white spots on arms and/or legs) and dark patches if dark skin.	In pure hypothyroidism, vitiligo and hyperpigmentation are very rare.
Fluids/Secretions	Dry skin, little secretions. Can't hold on to water.	Mixed, e.g. and dry body and oily face	Good secretions. Skin may be oily. Tendency to fluid retention.
Light Sensitivity or Night Blindness	++	+	-
After Image (e.g. seeing the image of a flash bulb or bright light moving by longer than others)	++	+	+/-
Typical Pains	Headaches, migraines, muscles, carpal tunnel	Muscles, carpal tunnel	Occasionally joints, muscles, feet/lower legs
Temperature Pattern (see <a href="#">Metabolic Temperature Graph</a> )	Thermal chameleon (hot when it's warm and cold when it's cool). Poor thermoregulation. Tends to low body temperature around 97.8 or lower. Fluctuating pattern.	Fluctuating pattern, usually averaging 97.8 but can be lower	Stable, non-fluctuating pattern, average can be from low 90's to a little below 98.6
Cold Intolerance	+++	++	+/-
Heat Intolerance	+	++	+++
Cold Hands / Feet	+++	Happens often	-
Warm Hands / Feet (in spite of low body temperature)	-	Happens occasionally	++
Sweating	May be excessive in early phase. Poor sweating in late phase.	May appear normal	Normal to increased, more oily than 'wet'
General Reactivity: Emotional, physiological, immune, etc.	Hyper-reactive (over)	Moderate	Hypo-reactive (under)
Immune Function	Tendency to over-react results in allergies, sensitivities, autoimmune problems	Mixed	Tendency to under-respond results in infections (sinus, bladder, bowel, skin, etc.)
History of EBV or Mononucleosis	+++	++	+/-

Sensitivity to medications, supplements etc. Needs small doses	++	+	-
Intuitive (3). Picks up other peoples feelings (e.g. at malls, parties).	++	+	+/-
Personality Tendency: Humor	+/-	+	++
Personality Tendency: Serious	++/+++	++	+/-
Depression (10)	+	++	+++
Anxiety(11), panic attacks, worry, fear, insecurity, feelings of impending doom (any combination). "I thought I was dying..."	+++	++	+
Obsessive Compulsive Tendency (11) (12)	++	+	+/-
Startle Easily	++	+	-
Tolerance to Change/Stress	Poor	Poor/Moderate to good	Moderate
Sleep Patterns	Tendency to one or more: Insomnia, light sleeper, waking up at 2-4 AM, unrefreshing sleep	May or may not have sleep disturbance	Tendency to one or more: Sleepiness, narcolepsy, sleep apnea, unrefreshing sleep
Mental Abilities	Poor focus, clarity, concentration, short-term memory. 'Brain fog'	Poor focus, clarity, concentration, short-term memory.	Poor focus, clarity, concentration, short-term memory. 'Slow thinking'
Energy Pattern	Complains of fatigue or exhaustion, "wired and tired", can't persevere, low motivation	Variable energy that can be good or poor.	Complains of being tired, sluggish, low motivation
Exercise Tolerance	Causes fatigue. Can't persevere. If severe, body temperature drops after exercise.	Mixed	Can't exercise much. Tires easily.
Edema (swelling), non-pitting in lower legs	-	+/-	+
Standing still is difficult or causes discomfort. Walking is easier.	+	+/-	-

Fibromyalgia / chronic fatigue	++	++	++
Orthostatic Hypotension (light-headed when getting up to stand from laying or sometimes, even sitting)	++	+/-	-
Blood Pressure	Tends to run low, e.g., from 80/50 at the low end to 110/70 at the high end	Can be low, normal or high	Ranges from normal to very high and poorly controlled by medications
Heart Palpitations ("feels like my heart was about to jump out of my chest").	++	+/-	-
Mitral Valve Murmur or Prolapse <a href="#">(4)</a>	++	+	+/-
Dietary Habits	Often lean toward being vegetarian or avoids certain foods	Tends to have fewer dietary restrictions than the pure adrenal type	Tends to eat everything
Digestion	Often has difficulty digesting meat, or other proteins. Some foods troublesome <a href="#">(5)</a>	May be normal or difficulty with some foods.	Poor but they often think it's good.
Bowel Function	Tendency to be irritable, or hyperactive, transit time may be too fast (food exits stomach too fast causing poor [enzymatic] digestion)	Poor/mixed	Tendency to constipation, hypoactive, slow transit time (food leaves stomach too slowly) and poor mechanical digestion.
Malabsorption	+++	++	+
Cravings	Sweets, carbohydrates, salt (any combination), black licorice	Mixed	Fats
Blood sugar. (Hypoglycemia = low blood sugar. Hyperglycemia = elevated blood sugar)	Tendency to hypoglycemia. May need many small meals or "crash"	Can range from mild hypoglycemia to hyperglycemia	Normal to hyperglycemia
Problems with menses and /or fertility (females)	++	+	+/-

Typical Findings on Blood Tests

Blood Tests	Adrenal	Mixed <a href="#">(1)</a>	Thyroid
Chem: Total cholesterol <a href="#">(6)</a>	Usually low to low normal (e.g., under 160)	Mixed: Can be low, mid-range, or high	Usually over 200. Very hard to reduce.

Chem: HDL <a href="#">(6)</a> (the good cholesterol)	Tends to be relatively high	Mixed: can be high, low, or midrange	Tends to be relatively low
Chem: Cholesterol/HDL ratio	Usually 3.0 or less	Can be high, low or mid-range	Usually 3.5 or more
Chem: Serum Potassium	Tends toward high normal (typically 4.0 or higher)		Tends to be under 4.0
Chem: Serum Sodium	Tends toward low normal (typically 140 or lower)		Tends to be over 140
Chem: DHEAS	Low to low normal		
Sugar levels	Tend to be low, e.g. 60's to 80's	Tend to be normal or elevated	
CO2	Tends to be at the low end (23 or less) <a href="#">(13)</a>		
Chem: Testosterone	Tends to be low-normal to low		
CBC: WBC <a href="#">(7)</a>	Tends to be low normal (e.g. 3.5 to 5)	Normal to low normal	Often in the mid-normal range or high end (e.g. above 7)
CBC: Platelets <a href="#">(7)</a>	Tend to low normal	Normal to low normal	Normal to high normal
CBC: MCV <a href="#">(8)</a> (mean corpuscular volume)	Often 93 or higher. Taking vitamin B12 regularly may normalize it.	Tends to be high or high normal. Taking B12 regularly may normalize it.	Tends to be 90 or less
CBC: RDW <a href="#">(9)</a> (reticulocyte distribution of width)	Normal to high normal	Normal to high normal	Normal to high normal
Blood type	Most are type A		Often type O
Platelets	Typically under 200	Typically under 300	Typically over 300

Footnotes:

1. In working with thyroid and adrenal dysfunction, I have come to realize that most patients with low body temperatures have a mixture of low thyroid and low adrenal symptoms (also called [Wilson's Syndrome](#)).
2. [Facial Pallor](#): A pale color, especially around the mouth. Easiest to see in light skinned individuals. In olive skinned individuals it is much harder to see. In individuals of African decent, there is a tendency to have dark pigmentation around the mouth, symmetrically on areas of the face or sides of the neck and usually over the forehead. Since wrinkles stay in the pale area, puckering the lips artificially creates wrinkles for a moment and their location identifies the

pale zone. This technique is particularly helpful in dark skinned individuals. It is also easier to see in women than men (because of the beard hair which interfere with color identification and thicken the skin to make it more resistant to wrinkles).

3. Intuition is an interesting quality of early life adrenal fatigue. The later in life the development of adrenal fatigue, the less likely one is to spontaneously develop intuitive ability. People that develop adrenal fatigue early in life are often described as empaths and will tell their friends (but not their doctor) about their ability to pick up feelings. They often suffer because of their high sensitivity and are always looking for new ways to 'ground' themselves. This problem often clears by simply supporting the adrenals and getting them to function well again. Poor adrenal function is not essential for intuitive development. Strengthening the adrenals does not weaken the intuition once it is there. Individuals that develop adrenal fatigue later in life (because of high stress, virus etc.) tend not to claim this intuitive ability. Spiritual orientation is more common in those with early adrenal fatigue. It is less common in those with later onset of adrenal fatigue and those with strong, healthy adrenals. There seems to be a personality difference (archetype) between those with strong adrenals and those with weak adrenals.
4. Mitral valve problems seem to affect women with adrenal fatigue more often than others. Body proportions tend to be smaller at the top, heavier at the bottom where the weight gain, if any, tends to take place. The tendency to valve problems may be related to connective tissue quality since it sometimes improves with connective tissue support. Hawthorn Berry seems to help. Individuals with plain hypothyroidism don't appear to have a higher incidence of valvular problems compared to the rest of the population.
5. These individuals tend to digest meat poorly because of low gastric acidity. They often think they have high acidity because of occasional heartburn or heartburn when taking digestive enzymes containing digestive acid. The problem is usually not a problem of gastritis or gastric reflux caused not by excess acid but rather, it is a problem of inadequate acid production, but *less adequate* gastric protection not making enough gastric protective secretions. This could be helped by chewing or sucking on a specific type of licorice candy called DGL or by taking some Slippery Elm or trying both. Suck or chew on it about ½ hr before the meal. It produces increased secretion of gastric (stomach) mucous protective layer. This helps to prevent irritation by the acids in the stomach.
6. In adrenal fatigue, the total cholesterol tends to run low to low-normal while the HDL tends to run high-normal to high. In hypothyroidism, the opposite tends to occur with a high-normal to high cholesterol and normal-low HDL.
7. In low metabolic energy states of adrenal origin, it is common to see WBC (White Blood Cells are the front line soldiers against infection) and Platelets (they work to initiate a clotting response in areas of vascular injury) low relative to optimal. Typically, the WBC is under 5 and the platelets are under 200. It is also important to look at relative values. For example, if one has adrenal fatigue (we expect WBC to be <5) but if the wbc is >6, we can say that in a relative sense, the WBC is elevated (it is higher than we expect). We therefore suspect that something is elevating the WBC (white blood cell count) and that this is either a low thyroid function or an infection (sinus, a cold, bowel, bladder etc.) or both. A point of interest: I think it is interesting that with adrenal fatigue, we tend to see high end fibrinogen (increases clotting) and low end platelets (these also help clotting). Thus the higher fibrinogen (chemical) and lower platelet (cellular)

balance each other out. Similarly, with immunity the antibodies tend to be high (overactive component) while the white blood cells tend to be low. Again, the (high) chemical component and (low) cellular component tend to balance each other out.

8. The MCV (mean corpuscular volume) is a measure of the size of the red blood cells. Their size tends to increase as vitamin B12 deficiency increases. Individuals with poor digestion / absorption tend to run low on vit. B12, so they tend to have larger blood cells, i.e., MCV tends to be at the high end of normal or high. This is more common in adrenal fatigue since these individuals tend to eat less meat, tend to digest it poorly if they do eat it and generally absorb poorly.
9. RDW measures the distribution or variability of the size of young red blood cells. Individuals with stable health tend to have little variability in cell size. An unstable or poor state of health generally shows up as higher variability in cell size.
10. Whenever a patient comes in with depression, I look for a suboptimal thyroid function. This is not the same as saying 'outside of the normal range'. Optimal is a zone within the 'normal' range which I've identified as the range at which I find my healthiest patients. If the thyroid function is near or at optimal and depression persists, I then look for other supports such as supporting neurotransmitter levels with the following:
  - For Serotonin (the 'calmer') support: Tryptophan or 5-Hydroxytryptophan (i.e., 5-HTP) if the patient is not on SSRI antidepressants (SSRI's can adversely interact with Tryptophan or 5HTP by promoting excessively high serotonin levels). The way I dose it is usually by starting low doses AM, mid day if needed, and evening for sleep support. I find this especially useful for obsessive compulsive disorder (OCD) if the patient is not taking prescription medications of the SSRI type. A typical dosage regimen (after gradual increase to check for any adverse responses) might look like this: AM 50mg-100mg 5-HTP; Noon 50mg-100mg 5-HTP; Bedtime or a little before, 200-300mg
  - For Dopamine and Norepinephrine (the 'stimulants') support: Tyrosine is usually the one item most needed. A typical dose might be 1-2 capsules (500mg size) in AM and 1 capsule at mid-day.
11. I find that most cases of anxiety are due to adrenal causes. The typical condition is not severe enough to be picked up with standard test which are designed only to pick up the most severe adrenal fatigue. As the individual is heading in that direction, the standard blood tests will not pick up this transition but the symptoms become quite noticeable with anxiety, cold hands or cold intolerance, poor and/or un-refreshing sleep heading the list of probable symptoms.
12. Obsessive compulsive tendency may look like a repetitive act such as washing hands too many times or going back several times to double or triple check to see the door is locked or oven turned off. As the adrenals improve and insecurity diminishes, this tendency also diminishes or clears.
13. Low CO2 is often associated with poor pancreatic production of bicarbonate. This as typically part of the poor digestion seen with adrenal fatigue. What probably happens is: adrenal fatigue -> low gastric production of hydrochloric acid (HCl) -> gastric contents when expelled from the stomach into the duodenum are not acidic enough to trigger an alkaline (bicarbonate) release from the pancreas used to neutralize the acid.