DERMOGRAPHICS & EDEMA TESTING

This quick and easy test procedure is a way to gather a tremendous amount of information on your patient's metabolic status, with only a fraction of the time invested compared to a complete NUTRI-SPEC metabolic test procedure.

Utilizing just these 3 tests, you can rule out many potential Metabolic Imbalances, thus zeroing in on which supplements will give all your patients the vitality boost they desire.

The skin is an ImmunoNeuroEndocrine organ. Thus, the skin gives us a window through which to view ImmunoNeuroEndocrine (INE) stress reactions throughout the body. Anything that happens in the hypothalamus is reflected in the skin via efferent cholinergic (mostly Sympathetic) nerves. Central hypothalamic stressors also indirectly influence the skin via efferent hypothalamic influences directly on immune cells, and indirectly on immune cells via the adrenal glands.

Afferent flow from the skin regarding peripheral "danger" reaches the hypothalamus both directly and indirectly via prostaglandins and Nitric Oxide, cytokines, and other neuropeptides. Thus, the "danger" signal induced by your Dermographics test elicits a clinically meaningful response.

Autonomic nerve fibers in the skin derive almost completely from sympathetic cholinergic neurons. (They constitute only a minority of cutaneous nerve fibers compared with sensory nerves.) ----- The nerves involved in the vascular Dermographics axon reflex are afferent nociceptive C-fibers.

Your Dermographics analysis must consider which one or more of these 3 you are seeing:

1. An increased or decreased sensitivity of nociceptive C-fibers

    - Tissue level Acid/Alkaline Imbalance (--- acidity = Anaerobic Imbalance or Acid Imbalance; alkalinity = Dysaerobic Imbalance, or Alkaline Imbalance)

    - Tissue level or cellular level imbalances associated with either interstitial or intracellular edema, or elevated nitric oxide

    - Nerve degeneration associated with neuropathy

2. An increase or decrease in Sympathetic or Parasympathetic vasoconstrictor and vasodilator influences on cutaneous blood vessels

3. An increased or decreased activation of Mast Cells, releasing excess:

    - Histamine
    - Prostaglandin D2 (PGD2)
    - Serotonin
    - Leukotriene B4 (LTB4)

The major consideration in a Red Dermo response is an explosion of hypersensitive Mast Cells in the skin --- with the release of Histamine, Prostaglandin D2, Tumor Necrosis Factor-alpha, Heparin, and Serotonin. -----

What causes mast cells to be hypersensitive? There are at least a dozen factors, but the most clinically significant from your NUTRI-SPEC point of view are:

- Endotoxin (LPS = putrid microbiota = desperate need for Immuno-Synbiotic)
- Parasympathetic Imbalance
- Alkalosis Imbalance
- Prostaglandin-Nitric Oxide Imbalance
- Tissue Acidosis (Anaerobic Imbalance)

Dermographics and Edema Analysis:

The patient is sitting, lower legs vertical.

A) **Dermographics Reflex**. "I am going to check your dermographics reflex. I am going to stroke your arm with a tongue depressor with enough pressure to be a little uncomfortable. If it starts to hurt a little, tell me and I'll lighten my pressure."

Your left hand supports the patient's right forearm, palm up. With the tongue depressor held at about a 45 degree angle, firmly and slowly stroke a line from 2" above the wrist to 2" below the elbow. Shift the grasp of your left hand to behind the upper arm as you stroke the bicep area from 1" above the elbow, up the arm 3-4". Then, stroke a horizontal line 2-3" long bisecting that vertical line. Finally, go back down to the forearm vertical line and stroke a 3" horizontal line at its midpoint.

While you are waiting 60 seconds for the arm test to complete its short-term reaction, do the test on the leg, stroking upward, beginning just a couple inches above the internal malleolus and posterior to the tibia in the area of the medial gastrocnemius. Stroke upward about 6 inches, then horizontally 2 inches at the midpoint of your upward stroke. While you are waiting for the arm and the leg to complete their short-term Dermographics reaction, do the Edema Test.

B) **Edema Test**.

Press firmly with your thumb just inferior to the starting point of your leg vertical Dermographics line for 5 seconds. Remove your thumb, and note if an indentation persists for more than 5 seconds.

Edema Check

0	=	indented area completely disappears immediately
+1	=	indentation persists for 1 to 5 seconds
+2	=	indentation persists longer than 5 seconds but less than 20 seconds
+3	=	indentation persists longer than 20 seconds but less than 60 seconds
+4	=	indentation persists longer than 60 seconds

C) **Begin Test Interpretation.**

- Check the 1-minute reading on both the arm and leg Dermographics, and either make a mental note what you see, or, if the reflex is completed, record the results.

- Record Edema Test result.

- You may need to wait as much as 2 to 4 minutes for your final determination of the Arm/Leg Dermographics.

D) **Arm & Leg Dermographics Reflex Check** --- Make your final reading and enter on your TRF as Arm/Leg. For example: R2/W1.

Arm Dermographics Check

R4	=	wide neurogenic flare, perhaps itching (or even welts) within 1 minute
R3	=	flare initially wider than tongue depressor contact width, or, red lines nearly that wide that last several minutes
R2	=	red lines on upper arm and forearm last several minutes
R1	=	red lines on upper arm last several minutes as forearm lines disappear
0	=	red persists 1 minute, but no red is apparent after several minutes, and there may be a white border around the red
W1	=	no red is apparent after 1 minute, and either there is initially red with white border, or there is a purely white line that persists no more than 1 minute
W2-W4	=	degrees of white width or duration

Leg Dermographics Check

0	=	no red nor white reaction that lasts more than a few seconds
W4	=	wide white line that lasts several minutes
W3	=	white line that lasts several minutes
W2	=	white line that lasts longer than a minute
W1	=	white line that lasts up to a minute (even if surrounded by red)
R4	=	wide red line that lasts several minutes
R3	=	red line that lasts several minutes
R2	=	red line that lasts longer than a minute
R1	=	red line that lasts up to a minute