



NeuroFascial Process (NFP)

A CenterIMT Program

Editor: Kimberly Burnham, PhD, I.M.T.C., LMT

Neurofascial Process (NFP) is easy to do, it just takes time.

Dr. Sharon W. Giammatteo developed NFP¹ in the early 1980's. It is an approach to self-healing. NFP can be performed on yourself at home as an adjunct to therapy and often referred to as "homework". "It has been used in clinical practice for more than 30 years. It is the single most powerful tool an individual can use to assist their healing process."²

NFP signifies: N for neural, F for fascial and P for process. The neural or nervous system transmits signals through the body. The fascial system is a thin layer of connective tissue that covers every organ, vessel and nerve in the body, like a body suit. NFP integrates the nervous system and the fascial system with sensory information and emotional health. This homework process makes the therapy at CenterIMT more efficient and can significantly change symptoms.

Sharon discovered that emotions stored in the body can interfere with health and vitality. Emotions can actually impair how well an organ can function. It can

also cloud thinking and impair vision and hearing. It can influence how you experience the world and people around you. We begin the process of storing feelings and thoughts when we are overwhelmed with events.

NFP involves placing your hands (no need to press) over specific parts of your body, called Process Centers (PC) for extended periods of time, and simply "being with" what comes to consciousness while doing so.

Perform NFP in a peaceful, relaxing environment. You can perform this process sitting up or lying down or in which ever position is most appealing to you. You can watch TV or listen to music. Drinking plenty of water is recommended.

How to Perform NFP

NFP is simple. To use NFP hold a hand on the problem area and place a second hand on one of the process centers. The problem area is any location that is not functioning well. There may be many symptoms at the location, for example; pain, swelling, inflammation, rash, insect bite, headache, excess sensation or diminished sensation.

This may be a location that your therapist is treating or wants you to improve the function. Your therapist can give you a body diagram detailing your

homework.

When you "take the liver to all the PC", you put one hand on the liver at the lower right rib cage in front and the other hand on the ureters at the low back for 20 or more minutes. Then you keep the hand on the liver and put the other hand on the forehead / frontals for 20 minutes. After finishing with the ureters and the frontals you move on to the limbic system at the bridge of the nose, then the liver with the top of the head / parietals and so on until you have had one hand on the liver and one hand on each of the other Process Centers for at least 20 minutes for each connection.

When To Do NFP

NFP can be done when you wake up in the morning. If you hit the snooze button you can keep track of how long it has been. You can do NFP while watching a movie or listening to books on tape, as a passenger on a long car ride, or before you go to sleep at night. Treating yourself before you go to bed at night will help ensure a more restful sleep.

NFP First Aid

You can also treat any newly injured area immediately with NFP. A powerful first aid treatment for virtually any problem would be holding one hand on the problem area or injury and the

¹ Weiselfish-Giammatteo, S. and T. Giammatteo (2002). Body wisdom: light touch for optimal health. Berkeley, Calif., North Atlantic Books.

² Weiselfish-Giammatteo, S (1997) Personal Communication

other hand placed across the low back or ureters. This will often reduce toxicity or eliminate symptoms.

The 20 Minute Rule

To be effective you must remain with your hands in place for a minimum of 20 minutes. The longer the hands remain in contact the more therapeutic the effect. Keep track on a chart. Record your times.

Severe, acute or longstanding problems may need 3 to 5 hours of NFP treatment to each PC. Intermediate conditions will need 2 hours per PC. Mild problems may resolve in 1 hour per PC or less.

NFP treatment can be done in any position.

It has to be human contact. Pets, magnets or books will not be effective.

If you need to remove your hands briefly it is not a problem, for example to sneeze, cough, or change the TV channel. However doing 5 minutes in the morning and 5 minutes at noon and 5 minutes at dinnertime will not be effective.

The Process Centers Location, Significance and Emotions

1. Ureters (across the low back, 1 inch on either side of spine, at waist level):. You can access the ureters with the back or front of your hand and forearm. The Ureters are the Center for toxic drainage. Take all the Process Centers to the ureters at least once for physical and emotional drainage. The ureters are great for first aid for physical trauma for example, a sprained ankle. Put one hand over the ureters and the other

hand over the ankles. This will decrease pain and swelling.

2. Frontals (forehead): Thought, Judgement, Behavior, Attention Deficit Disorder.

3. Limbic System (at the bridge of nose or frontonasal and eyes): the center for survival and has to do with rage responses. Think of a lion who has been attacked and wounded. There is no rational thoughts associated with rage.

4. Parietals (top of the Head): home of the sensory and motor cortex and associated with feelings and sensations (sight, sound, taste, smell, touch) as well as action and movement.

5. Thyroid (Front of the Neck / Throat): about expression or not expressing yourself (verbally, creatively, etc) because of fear or other emotions.

6. Heart (Center of the Chest a little to the Left): love, joy, hatred, loss of love / abandonment.

7. Lungs at the front: grief and deep sadness, despair, oxygen and your will to live life.

8. Lungs at the back (same)

9. Spleen (on the Left side of rib cage, between rib 8 and rib 10): disappointment in mankind A Vietnam veteran or an Israeli could have a lot of emotion locked in the spleen.

10. Liver (Lower Right Rib Cage): anger and detoxification.

11. Pancreas (just below Center and Left side of rib cage, in the Abdomen): major issues of significance (life or death). Consider your path and purpose in this life. "What am I supposed to do in life?"

12. Kidneys (lower rib cage at the back). You can use your hand and

forearm front or back.: fear, anxiety, depression, fluid regulation.

13. Prostate or Uterus (just above pubic bone in the front of the pelvis): sexuality, gender, reproduction.

14. Upper Arms (both): Control over self, self control.

15. Lower Arms (both): belief systems

16. Cecum (in front of the Right Hip): Digestion, Cell development, growth replication.

17. Emotional Body (2 to 3 inches above Right eye at the hairline slightly (½ inch) off the body): Emotional health.

18. Mental Body (2 to 3 inches above Left eye at the hairline, ½ inch off the body): Thoughts, Perseveration.

What to Reflect On

Each Process Center has a meaning. If we are repressing and holding onto a specific emotion in our body, it tends to get stored in specific organs. For example, if we have a lot of anger in our body, we will tend to hold it in our liver. Often, you can see that someone is a really angry person, because they will tend to sink into the right side of the ribs. When we do NFP from the liver to all the other Process Centers, it is good to reflect on any anger we may have felt in childhood.

You never want to judge yourself on what you find (feelings and memories). Know that the anger or feeling that will surface is hardly ever current. It is almost always from when you were a child. Therapists will often give you specific ages to focus on.

For example, we may ask you to

focus on the ages 13-19. When you are thinking of yourself at a certain age, it is good to try to think of what you looked like at that age, what grade you were in, the people that would have been in your life at the time, your family, friends, your environment, where you lived. Consider looking at a photograph if you have one. You can say to yourself, "I am 13 years old and I am looking inside my body, in my liver" or "I am 15 years old and I am looking inside my pancreas".

This focuses your attention, then you can relax and reflect on what comes up.

You can ask yourself, "When I was 13 years old, did I feel any anger? Did I feel any fear? Was I afraid of anything?"

You want to go through all of the ages with all of the Process Centers looking for all of the emotions.

How to Perform Reflection While Doing NFP

When you different emotions and experiences surface in your body during the specific ages, find some kind of a visual image for letting go of the emotion. For example, if you are looking for any feeling of anger in your liver at age 13, when you find the feeling, find an image for letting go (ie) steam coming out of your body, or hitting the anger out of your body like a home run baseball, or imaging healing light energy over it making it disappear.

You can tell yourself, "I am letting go of anger" (or other emotion) and start to feel lighter and lighter.

This will help you let go of any old fears or emotions that are

essentially holding you back from really experiencing life without any hang-ups. This will help you let go of any and all depression. This will help you enjoy life.

NFP Party

NFP is an effective treatment to use on yourself. It can also be done with multiple hands simultaneously. With family and friends the project of accumulating 3 hours per Process Center will go more quickly.

It is often a fun project to gather friends and family and watch a movie while doing NFP. The time passes quickly. Multiple hands simultaneously have the added bonus of giving the healing process a powerful boost. It can often help to significantly change chronic or acute conditions.

While your hands are contacting specific points you may experience a variety of sensations, warmth or cold, tingling, or magnetic pull. It is possible that the person being treated will have a brief increase of sensation in the area. Do not stop the contact. The sensations will dissipate.

Every client who uses NFP will recover more quickly, reducing the number of hours of treatment required in the clinic.

Further Reading

Consider reading [Body Wisdom: Light Touch for Optimal Health](#) for more information, including illustrations and photographs.

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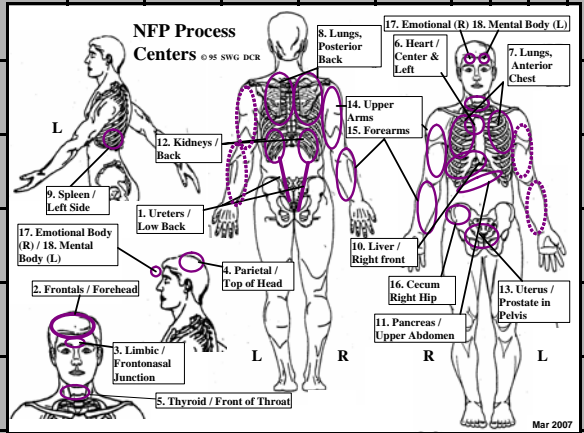
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14. Weiselfish-Giammatteo, S. and T. Giammatteo (2002). [Body wisdom : light touch for optimal health](#). Berkeley, Calif., North Atlantic Books. "This book gives a more complete look at Neurofascial Process and how it can help a variety of conditions."

NFP Centers Primary																			
Start with Ureters to all Process Centers	1. Ureters	2. Frontals	3. Limbic	4. Parietals	5. Thyroid	6. Heart	7. Lungs, Ant	8. Lungs, Pos	9. Spleen	10. Liver	11. Pancreas	12. Kidneys	13. Uterus / Prostate	14. Upper Arms	15. Fore- arms	16. Cecum Right Hip	17. Emotional (R) 18. Mental Body (L)	19. Heart / Center & Left	20. Lungs, Anterior Chest
1. Ureters / Low Back	■																		R L R L
2. Frontals / Forehead		■																	
3. Limbic / Frontonasal Jt			■																
4. Parietals/ Motor Cortex/Top of head				■															
5. Thyroid / Front of Throat					■														
6. Heart / Center and Left						■													
7. Lungs, Anterior / Front							■												
8. Lungs, Posterior / Back								■											
9. Spleen / Left side									■										
10. Liver / Right front										■									
11. Pancreas											■								
12. Kidneys												■							
13. Uterus / Prostate													■						
14. Upper Arms R Right and Left L																			■ ■
15. Forearms R Right and Left L																			■ ■
16. Cecum																			
Other as Assigned	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
A.																			
B.																			
C.																			



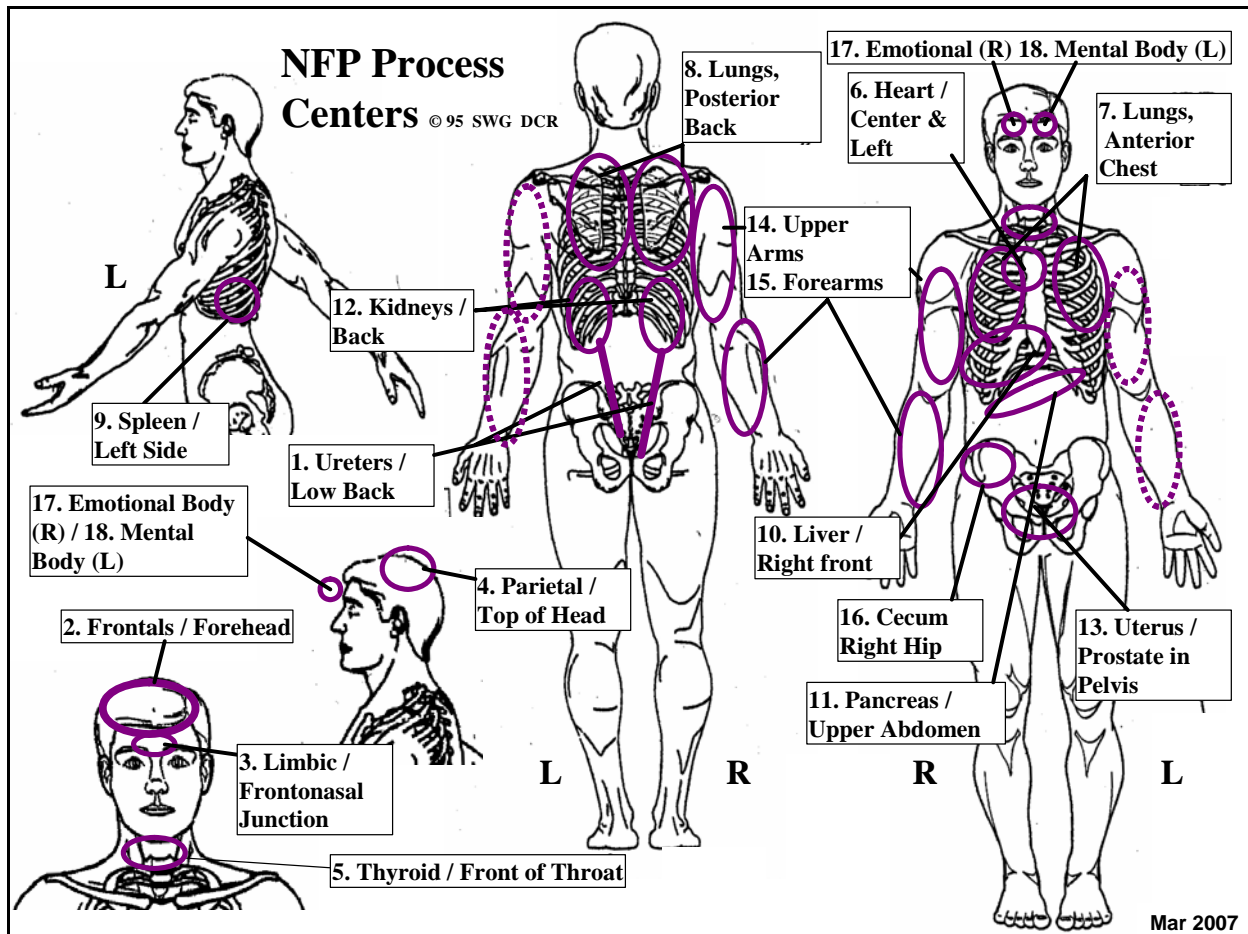
Neurofascial Process (NFP) General Direction and NFP Parties

1. All Process Centers to each other with one or two people: Place one hand on 1 and the other hand on 2 for 20 minutes. Then place one hand on 1 and one hand on 3 for 20 minutes. Connect 1 to each other number and then place one hand on 2 and one hand on 3. Then one hand on 2 and one hand on 4, until 2 has been connected to each other number. Then one hand on 3 and one handuntil each number has been connected to every other number for 20 minutes. Then repeat as needed to a total of 1 - 5 hours.

2. NFP Party – All Process Centers to All Process Centers: The client lays on a table and eight friends or family members each put one hand on each of the process centers so that all 16 spots are covered. Hold the points for a minimum of 20 minutes. This process can be done for 1 - 5 hours as recommended by your therapist. The people can change their hand placement every 20 minutes, if they wish.

3. Acute Pain – For A Specific Problem: Place one hand on A (assigned by therapist or based on symptoms) and the other hand on 1 for a minimum of 20 minutes. Next place one hand on A and the other hand on 2 for 20 minutes. Repeat until A has been connected to each number for 20 minutes and then repeat the sequence as needed. Then place a hand on B (if there is a second site) and one hand on 1, until the process is complete. For acute pain or injury, place one hand over A which is the area of headache, pain, injury and the other hand over the ureters for drainage. Connect for 20 min or until pain subsides.

NOTE: Animals, books, etc do not work. This process requires human contact. There is no need to press, just contact the area for the specified amount of time. Any number of peoples hands can be used and the clients position does not matter. They should be comfortable on their back, side, sitting, etc. This process makes the IMT and nutritional programs more efficient and can significantly change symptoms.



Neurofascial Process (NFP) Elimination Homework

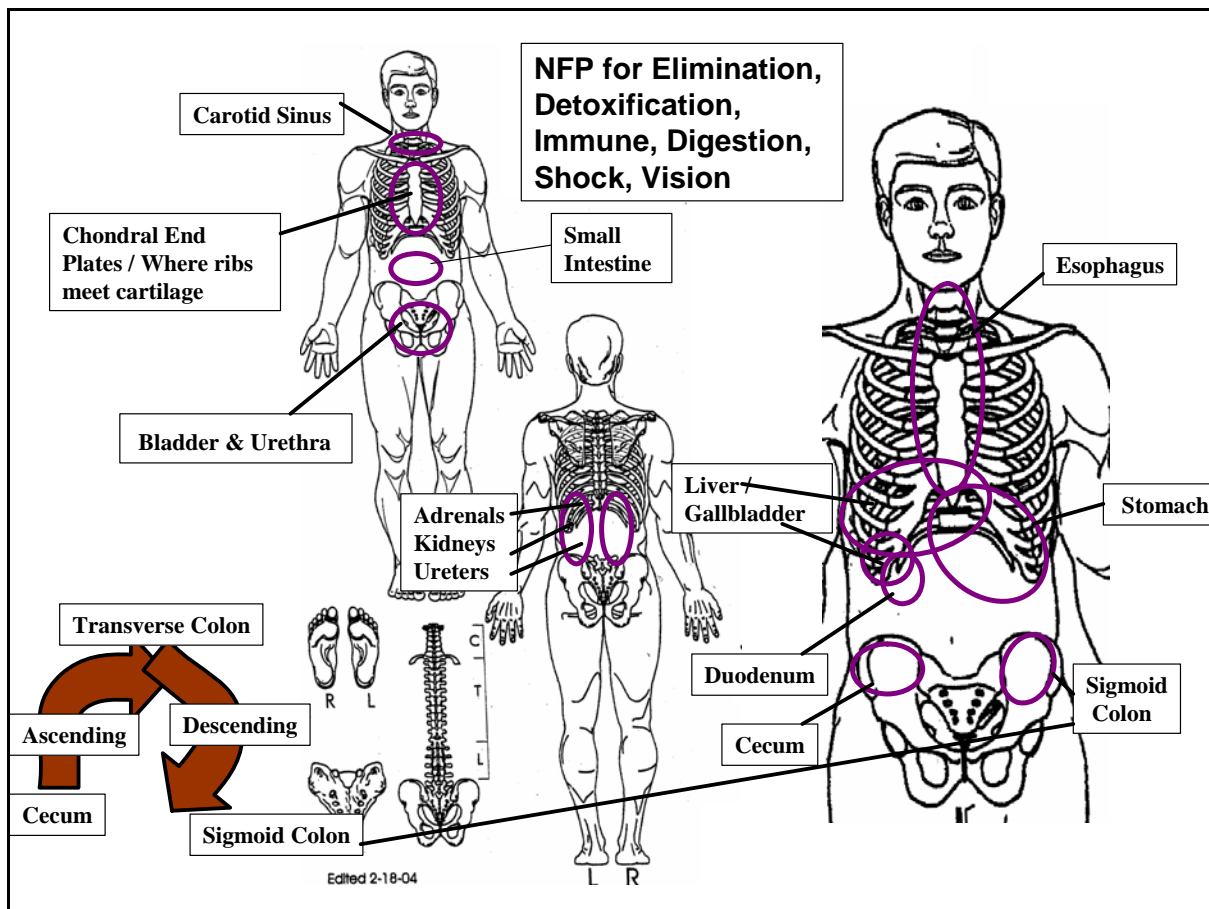
This process assists in the function of your elimination system and can be used for bowel and bladder conditions as well as any other toxicity problem. **Place one hand on each location listed (each pair) for 20 plus minutes each**

1. Kidneys → Limbic (Frontonasal Junction)
2. Kidneys → Heart (Anterior Inferior Aspect)
3. Hilum of Kidney → Limbic and Frontals (Forehead)
4. Ureters → Limbic and Frontals
5. Ureters → 1 cm above (hand just off the skin) Left side of forehead
6. Bladder → Limbic
7. Bladder → Heart, Anterior, Inferior Aspect)
8. Urethra → Limbic and Frontals

Neurofascial Process (NFP) Detoxification Homework

The process can significantly assist your detoxification system and can be used with food poisoning, allergies, and more. **Place one hand on each location listed (each pair) for 20 plus minutes each**

1. Lymph Nodes (lateral neck, arm pits, inside of elbow, wrists, groin, back of knees, back of heels, soles of feet) → Forearms,
2. Lymph Nodes → Eyes
3. Tongue (access from below on chin) → Forearms
4. Tongue → Heart, Anterior Inferior Aspect
5. Heart → Forearms
6. Heart → Frontals
7. Liver → Forearm
8. Liver → Ureters
9. Hilum of Kidneys → Forearms
10. Hilum of Kidneys → Ureters
11. Ureters → Forearms
12. Ureters → Mental Body / Left side of Forehead, just off the skin
13. Bladder → Forearms
14. Bladder → Frontals



Neurofascial Process (NFP) Immune Homework

This process focuses on the immune system and can be used for allergies, flu-like symptoms, swelling and more. **Place one hand on each location listed (each pair) for 20 plus minutes each**

1. Carotid Sinuses (front of throat --> Parietals (top of head)
2. Carotid Sinuses --> Frontals (forehead)
3. Carotid Sinuses --> Ureters
4. Lymph Nodes (lateral neck, arm pits, inside of elbow, wrists, groin, back of knees, back of heels, soles of feet) --> Parietals
5. Lymph Nodes --> Left side of forehead, just off the skin)
6. Heart --> Parietals
7. Heart --> Frontals
8. All Long Bones --> Parietals
9. All Long Bones --> Frontals
10. All Long Bones --> Heart, Tricuspid Valve
11. Spleen --> Parietals
12. Spleen --> Frontal
13. Spleen --> Chondral End Plates (where ribs meet cartilage)
14. Small Intestines --> Frontals
15. Small Intestine --> Left side of forehead, just off the skin

Neurofascial Process (NFP) Digestion Homework

This process focuses on digestion and can be used to get relief from such diagnoses as Crohn's, ulcerative colitis, failure to thrive, bulimia, food poisoning, and more. **Place one hand on each location listed (each pair) for 20 plus minutes each**

1. Frontal (Forehead) and Limbic (Frontonasal Junction) --> Mouth thru Esophagus
2. Frontal and Limbic --> Stomach
3. Frontal and Limbic --> Gallbladder and Liver
4. Frontal and Limbic --> Duodenum
5. Frontal and Limbic --> Small Intestine (around belly button)
6. Uterus or Prostate --> Small Intestine
7. Forearms --> Small Intestine
8. Frontal and Limbic --> Cecum
9. Upper Arms --> Cecum
10. Frontal and Limbic --> Ascending Colon (from Cecum up right side)
11. Frontal and Limbic --> Transverse Colon (across top of abdomen)
12. Spleen --> Transverse Colon
13. Liver --> Transverse Colon
14. Frontal and Limbic --> Descending Colon (down left side towards the sigmoid colon)
15. Frontal and Limbic --> Sigmoid Colon
16. Liver --> Sigmoid Colon
17. Ureters --> Whole Digestive System

Neurofascial Process (NFP) Shock Homework

This process focuses on the adrenals and shock and can be used to get relief from such diagnoses as cold sweaty hands, headaches, back pain, poor circulation and more **Place one hand on each location listed (each pair) for 20 plus minutes each**

1. Adrenals (on top of kidneys) to Ureters
2. Spleen to Ureters
3. Forehead to Ureters
4. Mental and Emotional Body / Slightly off the Forehead to Adrenals
5. Kidneys to Ureters
6. Spleen to Kidneys
7. Kidneys to Heart

Neurofascial Process (NFP) for Vision Homework

1. Eyes to Ureters
2. Eyes to Heart
3. Eyes to Kidneys
4. Eyes to Vision Synchronizers (ask your therapist)

Neurofascial Process – Why Should You Try It?

By Kimberly Burnham, PhD, IMTC, LMT

From the field of Integrative Manual Therapy comes a remarkable self-care program that can alleviate pain, increase range of motion and improve function. Anyone who has used Neurofascial Process, knows the effectiveness of this hands-on technique.

There are plenty of testimonials on the benefits of Neurofascial Process (NFP)³ and case studies with before and after tests showing improvements following a few hours of NFP. For many Integrative Manual Therapy clients these suffice to motivate them to try Neurofascial Process for themselves.

For others they want to know more about how it works, before they spend time and effort using it on themselves and their family members.

So, is it reasonable to believe that a simple hands-on technique will decrease pain and increase function?

Lets start with a look at some of the components of the Integrative Manual Therapy theories on how NFP works and then look at the medical literature that supports those theories.

First, NFP is a process of connecting certain areas of the body, called Process Centers (PC), for example, the ureters and the liver to improve the neural connection between the two areas, to improve the fascial relationships and fluid flow in the body and to

normalize emotions content of the two areas. Sometimes it is referred to as the “one hand here and one hand there” self-care. Touch or contact with the two areas is all that is needed to make a shift.

“The experience of being touched, new research shows, has direct and crucial effects on the growth of the body as well as the mind.”⁴ The New York Times article goes on to say, “Touch is a means of communication so critical that its absence retards growth in infants, according to researchers who are for the first time determining the neurochemical effects of skin-to-skin contact. The new work focuses on the importance of touch itself, not merely as part of, say, a parent's loving presence. The findings may help explain the long-noted syndrome in which infants deprived of direct human contact grow slowly and even die.”

Hands-on contact can shift brain chemistry, which certainly affects how we feel and function. “New research suggests that certain brain chemicals released by touch, or others released in its absence, may account for these infants' failure to thrive. The studies on the physiology of touch come against a backdrop of continuing research on the psychological benefits of touch for emotional

development.”⁵

One study looked at the influence of touch on the ability to feel that area. Researchers explain, “the mature mammalian nervous system alters its functional organization in a use-dependent manner.” This means the more you touch an area the better the sensation in that location. Continuing they said, “enhanced stimulation of a body part enlarges its cortical representational zones and may change its topographic order.” The brain is more tuned into an area that is touched. Researchers concluded, “thus, use-dependent cortical reorganization can be associated with functionally relevant changes in the perceptual and behavioral capacities of the individual.”⁶

Touch therapies like Neurofascial Process can save money as shown in these studies involving weight gain in babies. “The massaged infants did not eat more than the others,” said Tiffany Field, a psychologist at the University of Miami Medical School, who did the study. “Their weight gain seems due to the effect of contact on their metabolism.” The infants who were massaged were discharged from the hospital an average of six days earlier than premature infants who were not massaged, saving about \$3,000

³ Weiselfish-Giammatteo, S. and T. Giammatteo (2002). *Body wisdom : light touch for optimal health*. Berkeley, Calif., North Atlantic Books.

⁴ Goleman, D. (1988). “The Experience of Touch: Research Points to a Critical Role.” *New York Times* February 2. from: <http://query.nytimes.com/gst/fullpage.html?sec=health&res=940DE0D91F3EF931A35751C0A96E948260>

⁵ Goleman, D. (1988). “The Experience of Touch

⁶ Sterr, A., M. M. Muller, et al. (1998). “Perceptual correlates of changes in cortical representation of fingers in blind multifinger Braille readers.” *J Neurosci* 18(11): 4417-23.

each in hospital costs, Dr. Field said.⁷

A mother describes it this way, "The questions kept coming. How did you get such a happy baby? He's sleeping through the night already? You mean he doesn't cry for hours at a time? I give the same answer each time - it's the Neurofascial Processing!"

"The primacy of touch in infancy, experts say, is tied to touch's being the most mature sensory system for the first several months of life. "It's the first way an infant learns about the environment," said Kathryn Barnard, a professor of nursing at the University of Washington. "About 80 percent of a baby's communication is through its body movement. It's easier to read a baby's communication with skin-to-skin contact."⁸

The first part of Neurofascial Process, indicates that this technique affects the nervous system. Can hands-on contact change neural conductivity or fascial dysfunction?

Certainly, touch can cause pain as in the case of someone with dysreflexia, a dysfunction in which even a slight touch causes pain. This makes it reasonable to believe that touch influences the nervous system and can influence it in a positive or negative way.

The medical literature also discusses the connection between the nervous system and the fascia or connective tissue of the body. In this case they looked at an arterial

problem. They described a "a stenosis immediately distal to a transverse neurofascial band formed by the hypoglossal nerve, which arose with the vagus nerve in three patients...Isolated stenosis of the midcervical internal carotid artery unrelated to bifurcation disease may be the result of turbulence induced by tethering neural or myofascial bands."⁹

Another journal article also talks about the connections between different systems. "Dynamic parallelism of development in neural and fat tissue-fascial formations of the kidneys and pancreas have been studied in the human prenatal ontogenesis. The greatest concentration of the neural elements is noted in fat tissue at the level of the posterior surface of the pancreatic head, as well as in the facial-fat tissue formations of the inferior pole and the hilus renalis."¹⁰

A Reiki study measured the effect of an energy medicine based treatment on "autonomic nervous system function such as heart rate, cardiac vagal tone, blood pressure, cardiac sensitivity to baroreflex, and breathing activity." The results were "heart rate and diastolic blood pressure decreased significantly in the Reiki group compared to both placebo and

control groups." Researchers concluded, "the study indicates that Reiki has some effect on the autonomic nervous system."¹¹ Here we see a change in blood pressure with touch designed to have a positive influence.

Process, the way we process emotional energies and sensory information from our environment, is the third part of Neurofascial Process.

Just the effect of touching an area and bringing one's attention to it can change what is going on. "Emotions have been shown to alter pain perception, but the underlying mechanism is unclear since emotions also affect attention, which itself changes nociceptive [painful] transmission. We manipulated independently direction of attention and emotional state, using tasks involving heat pain and pleasant and unpleasant odors. Shifts in attention between the thermal and olfactory modalities did not alter mood or anxiety. These results show that emotion and attention differentially alter pain perception and thus invoke at least partially separable neural modulatory circuits."¹²

Another study compared the sensation of pain to the sensation of temperature, itch, hunger and thirst. "Pain is conventionally

⁷ Goleman, D. (1988). "The Experience of Touch

⁸ Goleman, D. (1988). "The Experience of Touch

⁹ Ranval, T. J., M. M. Solis, et al. (1994). "Isolated symptomatic midcervical stenosis of the internal carotid artery." *Am J Surg* 168(2): 171-4.

¹⁰ Maiboroda Iu, N., N. Mokin Iu, et al. (1982). "[Development of retroperitoneal connective tissue and its neural apparatus in the prenatal period of human ontogenesis]." *Arkh Anat Gistol Embriol* 82(2): 68-73

¹¹ Mackay, N., S. Hansen, et al. (2004). "Autonomic nervous system changes during Reiki treatment: a preliminary study." *J Altern Complement Med* 10(6): 1077-81.

¹² Villemure, C., B. M. Slotnick, et al. (2003). "Effects of odors on pain perception: deciphering the roles of emotion and attention." *Pain* 106(1-2): 101-8.

viewed as a pattern of convergent activity within the somatosensory system that represents the exteroceptive sense of touch. These findings indicate that the human feeling of pain is both a distinct sensation and a motivation - that is, a specific emotion that reflects homeostatic behavioral drive, similar to temperature, itch, hunger and thirst."¹³

It is common for a person doing Neurofascial Process to notice changes in the temperature in the area of their hand contact, or a feeling of pulsation indicative of changes in the fascial tissue under their hands.

Just how important to overall health and recovery is it to balance emotional states? One researcher put it this way, "negative emotional states are the single most influential factor in determining quality of life after a successful kidney transplant"¹⁴

Another study describes, "with the aid of auditory or visual stimuli etc., the influence of emotional state upon parotid secretion [a gland near the mouth] was investigated in 12 subjects. It was found that the flow rate decreased significantly from an intense, passionate state to a relaxed, pleasant state, to a tense or uneasy state and was lowest in a passive, indifferent state, being almost the same as that during sleep. These findings suggest that secretion of

parotid saliva depends more on emotional state than circadian rhythm."¹⁵

Is it reasonable to believe that a therapist can palpate or feel areas of emotional "stuckness"? Many people can recognize how someone is feeling by their facial expression. In a study on schizophrenia and the recognition of facial expressions, researchers looked at emotion recognition from moving and static images. They concluded, "people with schizophrenia are sensitive to the motion patterns which underlie individual expressions of emotion and can use this information to accurately recognize emotions."¹⁶

In this study people were able to read emotions from images of facial expressions, in other words from visual information.

IMT practitioners are able to take in information about emotions from the movement and quality of the tissues under their hands.

Another study noted, "neuropsychological and neuroimaging evidence suggests that the human brain contains facial expression recognition detectors specialized for specific discrete emotions."¹⁷

In an earlier study, researchers

found that emotional states could be reliably read using assessment tools that look at brain waves and how the autonomic nervous system responds.

Most IMT therapists don't have access to the equipment used in this study, including an Electroencephalogram (EEG), Electrocardiogram (ECG), Galvanic Skin Response (GSR), Skin Temperature (SKT), and Respiration (RSP) monitors, but they can feel the quality of the tissue, the heat or sweatiness of the skin, and feel breathing patterns as well as other motilities or rhythms in the body that give information about brain waves and the autonomic nervous system.

In a study on the recognition of emotions from vocal expression, graduate students were able to "strongly identify" the vocal expression of emotion except in the case of fear"¹⁸

Neurofascial Process helps to balance emotional states and this helps to decrease pain and improve function. Pain and emotions are processed in similar areas of the brain. One study noted, "acute pain and emotion are processed in two forebrain networks, and the cingulate cortex is involved in both."¹⁹ Another study noted the similarity in how we process emotions and how we process pain, saying, "emotion and pain are psychological constructs that have

¹³ Craig, A. D. (2003). "A new view of pain as a homeostatic emotion." *Trends Neurosci* 26(6): 303-7.

¹⁴ Baines, L. S., J. T. Joseph, et al. (2002). "Emotional issues after kidney transplantation: a prospective psychotherapeutic study." *Clin Transplant* 16(6): 455-60.

¹⁵ Gemba, H., A. Teranaka, et al. (1996). "Influences of emotion upon parotid secretion in human." *Neurosci Lett* 211(3): 159-62.

¹⁶ Tomlinson, E. K., C. A. Jones, et al. (2006). "Facial emotion recognition from moving and static point-light images in schizophrenia." *Schizophr Res* 85(1-3): 96-105.

¹⁷ Susskind, J. M., G. Littlewort, et al. (2006). "Human and computer recognition of facial expressions of emotion." *Neuropsychologia*.

¹⁸ Shigeno, S. (2004). "[Recognition of vocal expression of emotion and its acoustic attributes]." *Shinrigaku Kenkyu* 74(6): 540-6.

¹⁹ Vogt, B. A. (2005). "Pain and emotion interactions in subregions of the cingulate gyrus." *Nat Rev Neurosci* 6(7): 533-44.

received extensive attention in neuropsychological research. . Due to similarities between emotion and pain, it is thought that emotional models can be applied to pain. Specific comparisons are made between pain and anger.”²⁰

One theory of emotional expression, dates back to 1906 and “holds that facial muscles act as ligatures on facial blood vessels and thereby regulate cerebral blood flow, which, in turn, influences subjective feeling. The theory, developed by Israel Waynbaum, a French physician, hypothesizes the subjective experience of emotions as following facial expression rather than preceding it.”²¹ Perhaps this explains why laughter is such a positive influence on health. It begs the question, “do we laugh because we are happy or do we laugh so our brains will get better blood flow and then feel happy?”

Touch is used in several medical areas, “touch can cause positive or negative neurophysiological responses. In the Operating Room (OR), nurses do a great deal of touching, and they need to be aware of the appropriateness of their touch. Touch can be an alternative mode of conveying empathy and caring for certain patients when it is difficult for the nurse to communicate verbal empathy. Touch assessments and interventions need to be included in perioperative nursing care plans

to promote the patient's comfort and avoid unwanted physiological responses from the patient.”²²

Traditional Chinese Medicine also uses touch to assess and treat many dysfunctions. “The hypothesis is made that a disturbance in blood flow at one place can be detected in the arterial pulse waves at a distant site. This hypothesis was motivated by the traditional Chinese medicine which uses arterial pulse waves as a principal means of diagnosis. We formulated a test by asking whether a disturbance to the blood flow in a leg can be detected by changes in the pulse waves in the radial arteries. In particular, we ask whether the radial artery can differentiate a disturbance in the right leg from that in the left leg. We put force transducers on the radial arteries, depressed them by a specific amount, and recorded the force waves in response to a 2-min occlusion of the blood flow in the right or left tibial artery. The results show that the radial artery force waves do change in response to the flow disturbance. For a given individual, the force varies with the location of the force transducer on the radial artery, the specific amount of initial depression, and the right or left leg occlusion. Generally, an occlusion in the right leg reduces the force level in both radial arteries, the more so in the right radial artery than in the left. Although the discrimination is not very strong, the phenomenon is novel, and

warrants further investigation.”²³

Given the frequently reported benefits of Neurofascial Process, it also warrants further investigation and wide spread use as a self-care tool for healing.

IMT Case Studies

Gil’ad, R. (2002). Treating Chronic Headaches with Basic Techniques of Integrative Manual Therapy, CenterIMT Website: from: <http://www.centerimt.com/e-journal/articles/ej170.asp>. "Headaches are one of the more common complaints of people all over the world. This case study is about a 38 year old female who has suffered from headaches since childhood, approximately 25 days out of every month. Indeed, only basic Integrative Manual Therapy techniques have been utilized to treat her. It was to her great satisfaction, although not with complete relief. This case study will show the great benefit of Integrative Manual Therapy techniques and Neurofascial Process in treating this common complaint of headaches."

Potter, B. (2002). Changes in Range of Motion After Neurofascial Process, CenterIMT Website: from: <http://www.centerimt.com/e-journal/articles/ej0001.html>. "Abstract: The purpose of this case study is to show the changes in Range of Motion in all joints after performing Neurofascial Process."

²⁰ Mollet, G. A. and D. W. Harrison (2006). "Emotion and pain: a functional cerebral systems integration." *Neuropsychol Rev* 16(3): 99-121.

²¹ Zajonc, R. B. (1985). "Emotion and facial efference: a theory reclaimed." *Science* 228(4695): 15-21.

²² Tovar, M. K. and V. L. Cassmeyer (1989). "Touch. The beneficial effects for the surgical patient." *Aorn J* 49(5): 1356-61.

²³ Dai, K., H. Xue, et al. (1985). "On the detection of messages carried in arterial pulse waves." *J Biomech Eng* 107(3): 268-73.

Testimonials

Mother of a baby boy with colic. (2002). "My husband and I adopted our son, J. on 2/13/02 when he was 2 days old. Our time with him has been the most rewarding, joyful thing we have ever done and our friends constantly ask "How did you get such a happy baby? He's sleeping through the night already? You mean he doesn't cry for hours at a time? I give the same answer each time - it's the neurofascial processing!!

An MD with Prostate Dysfunction and High Blood Pressure (2003). "Just a brief note to give you a progress report. I have within the last week started to do the NFP in earnest, about an hour a day when I watch TV, or when I am in the movies. My PSA is stable, BP is down 120-130, and I am considering taking a BP pill every other day. Cholesterol has dropped 30 points, and triglycerides and HDL and HDL also."

"He is a different child after the NFP," reported the foster mother of a boy who had been born with some of his organs outside his body. When she start doing NFP with him, he was a lethargic 5 year old on oxygen. She did over 100 hours of NFP in one month and he came into the clinic without the oxygen tank, was cracking jokes and driving a small car around on

the table. She changed his life with the NFP.

Stomachaches: "I have not had any stomach aches since our visit. I have within the last week started to do the NFP in earnest, about an hour a day when I watch TV, or when I am in the movies."

Earaches "K. feels great....the NFP did work but must have needed a little time after she woke up. I'm amazed and very happy! The work you guys do is incredible? I tell my friends and family the success stories and they think I'm crazy and.... I know they don't believe me. My pediatrician tries to understand but I know deep down she doesn't think I am doing the right thing. To me it was important to know K. had an ear infection and then treat it through your advice.

Changes in Range of Motion After Neurofascial Process Case Study — Brenda Potter PT

Abstract: The purpose of this case study is to show the changes in Range of Motion in all joints after performing NFP.

Introduction: The patient is a 55 year old woman with a medical diagnosis of Fibromyalgia, who has had extensive treatment with Integrative Manual Therapy™ (IMT) for all body systems. At the time of this study, the patient had just completed 4 days (21 hours) of

IMT treatment. The final portion of the program required 3 hours of NFP. For this process to be accomplished in the most efficient manner many hands were required.

CenterIMT Atlanta has set up a "Homework Helpers" Program which is a group of teenagers who are trained and monitored by the Center for helping the client complete their NFP homework.

Pre and Post testing was done by mobility testing and Range of Motion testing of the spine and peripheral joints. Pre and post testing was performed by a therapist at CenterIMT Atlanta. Due to circumstances of timing and treatment team location, the NFP team and testing therapist, pre-testing was performed in Hartford, CT in the late afternoon. The patient then traveled by plane and car to Georgia where the 3-hours of NFP was carried out the next afternoon. The post testing followed that next morning. No other treatment occurred during this time.

Outcome: The results of the treatment were significant increases in Range of Motion as follows: February 18 (Before) and February 20 (After).²⁴

²⁴ Potter, B. (2002). Changes in Range of Motion After Neurofascial Process, www.centerimt.com/e-journal/articles/ej0001.html